SUBURBAN RAIL LOOP EAST

SRL East Draft Structure Plan

Open Space Technical Report

More Homes For Victorians

VICTORIA State Government

Suburban Rail Loop

PREPARED FOR SUBURBAN RAIL LOOP AUTHORITY

SRL EAST DRAFT STRUCTURE PLAN – OPEN SPACE TECHNICAL REPORT

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Glossary and Abbreviations

Term	Definition
Access	Access is a proximity-based metric often applied to public open space in higher density urban environments. Access is measured using walkability and distance thresholds that take into consideration the physical barriers to movement in street networks and the location of entrances to public open space. Access metrics are often combined with a coverage percentage e.g. 95 per cent of all residents within a specific area have access to public open space within a 400-metre walk.
Active recreation	Recreational activities that require the use of special facilities, courses, fields, or equipment.
AJM JV	Aurecon, Jacobs, Mott MacDonald Joint Venture
Benchmarking	Benchmarking is a means or provision benchmark that represents the existing level of provision at a point in time. Such benchmarks of current provision can be used to compare existing provision within different areas or against a standard, target, or aspirational provision rate. It can be used when comparing levels of provision between different locations and different points in time. The term is sometimes used interchangeably with the term provision rate.
Diversity	Diversity refers to the different types of public open spaces that support different users and is considered in terms of the function and hierarchy catchment classifications of open space. There should be diversity across a public open space network, so that public open spaces collectively provide multiple benefits and choices to the surrounding community.
Function	The function classification groups public open space into their primary purpose, e.g. civic space, sports park, community park. Where there are multiple uses in a space, the function will reflect the dominant activity or characteristic associated with that space.
Hierarchy (catchment)	The public open space hierarchy groups public open spaces by their catchment of users (often measured by a walkable distance from the public open space) and the indicative size of the space to adequately cater to its catchment. Local, district and regional catchments are commonly used to define the hierarchy and geographic distribution of public open space. It is a guide for analysing the spatial distribution of public open space networks and can inform the development and maintenance levels required in different types of public open space.
Level of Service	Level of service determines appropriate provision of assets in public open spaces. A Level of Service can be determined with a combination of Function Category plus Use Category (generally representing its dominant use). This determines the expected function and use of each type of public open space, and the range of assets and services provided, reinforcing the experience that can be anticipated.
Open space	Open space is land that provides for a mixture of recreation, leisure, community, environmental and visual amenity benefits. It may include public open space, restricted open space or private open space.
Open space needs assessment	An open space needs assessment identifies the open space needed to support communities to grow from a wellbeing, social capital, and resilience perspective. It involves an assessment of the adequacy of current and forecast open space supply regarding population-driven demand.
Passive recreation	Recreational activities that do not require prepared facilities like sports fields or pavilions
Planned open space	Planned open space refers to land that has been intentionally designated and planned for recreational, leisure, community, environmental and visual amenity purposes.
Proposed public open space	Proposed open space refers to land that is being considered for rezoning or designation as open space. It is proposed as part of a planning proposal or planning process. The recommended public open spaces in this Technical Report are referred to as 'proposed'.
Public open space (POS)	Publicly owned land that is accessible to the community as open space that provides for a mixture of recreation, leisure, community, environmental and visual amenity benefits.
Private open space	Land that is open space but is privately-owned or leased on a long-term basis to private operators, and where public access is prohibited or significantly restricted. It may contribute environmental benefits and visual amenity benefits. Examples include private golf courses and private sports facilities.

Term	Definition
Provision rate	The application of provision ratios is a method of comparing provision of open space against levels of provision at a given point in time. The application of provision ratios is by way of a numeric formula that express a specific level of a provision of a specific infrastructure type across a specific population size and geographic catchment.
Quality	Quality of public open spaces considers if they are fit-for-purpose for their intended function and use, as well as resilient and adaptable. This includes quality of design as well as ongoing maintenance to provide public open spaces that are clean, safe, well maintained, shaded and visually appealing, all of which encourage and facilitate activation and use.
Restricted open space	Publicly owned land that is open space but where public access and/or use is restricted. It may comprise of land used for public services including transport, education, water, health or utilities.
SRLA	Suburban Rail Loop Authority
SRL	Suburban Rail Loop
SRL East	Approved rail and infrastructure project from Cheltenham Station to Box Hill Station. SRL East was previously referred to as SRL Stage One.
SRL East Urban Design Strategy	The strategy developed for the SRL Environment Effects Statement (EES) that establishes the Victorian Government's urban design requirements for SRL East. The Urban Design Strategy provides a performance-based design brief and a design quality assessment and evaluation tool.
Structure Plan	A Structure Plan is a framework to guide the development or redevelopment of an area by defining the future development and land use patterns, areas of open space, the layout and nature of infrastructure (including transportation links), and other key features and constraints that influence how the effects of development are to be managed.
Structure Plan Area	The extent of the land to which the Structure Plan applies. The Structure Plan will focus on areas near SRL stations and locations with more significant future change. This area is smaller than the 1-6 km radius around each SR station (the precinct).
Vision	A statement of future intent that describes the preferred outcomes for the SRL East Structure Plan Areas consistent with the objectives of SRL. Each Vision has a time horizon of around 30 years and guides the SRL East Structure Plans.
Walkability	The degree to which an environment supports walking as a transport mode, for instance by providing frequents, safe and attractive paths that connect common trip origins and destinations.

Executive summary

As part of the Suburban Rail Loop (SRL) East project, Draft Structure Plans (Structure Plans) are being prepared for the areas surrounding the new underground stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill.

The Structure Plans will set a Vision and framework to guide growth and change in each area, while protecting and preserving the features that people love about them now.

This open space assessment has been prepared to inform the development of the Structure Plans and aims to:

- Analyse the current open space networks within each SRL East Structure Plan Area and wider 1.6-kilometre radius around each SRL station
- Assess the need to improve the open space networks to support the future population growth to 2041
- Evaluate potential changes and
- Make recommendations to increase and enhance open space and pedestrian links to open spaces within the SRL East Structure Plan Areas.

The assessment includes an analysis of the existing open space within each SRL East Structure Plan Area, as well as a wider 1.6-kilometre radius around each SRL station. Given the established network of district and regional open spaces across the various municipalities and relatively small scale of the Structure Plan Areas, the focus of the assessment is on the provision of local open space.

Findings and recommendations

There are currently 67 public open spaces in the six SRL East Structure Plan Areas, with variable levels of distribution and diversity. The population is projected to increase significantly across the Structure Plan Areas by 2041. This will increase demands on the public open space network.

The open space assessment identified that to provide an appropriate open space network in each Structure Plan Area in 2041 that meets the demand of a larger population living in higher-density housing, new and enhanced open spaces are needed, along with new links. These changes are needed to:

- Improve 400-metre walkable access to public open space against a target of 95 per cent coverage
- Improve 200-metre walkable access to public open space in the highest projected density areas, where possible
- Improve the overall quality of open spaces to maximise and optimise their use
- Provide greater diversity of spaces for a range of recreational experiences
- Increase the overall all public open space provision
- Identify opportunities to further resolve quantum gaps in public open space provision in per person ratios
- Optimise use and access to existing public open spaces within the wider 1.6-kilometre station radius.

New public open spaces planned by SRLA (around SRL stations), local councils and private developers are identified (where known). Alongside these planned new public open spaces, a number of sites for new public open space are proposed, with the primary purpose of addressing gaps in 400-metre walkable access to public open space. Priority quality improvements are proposed for existing open spaces with low-quality ratings and potential to optimise use. New pedestrian links are proposed to improve connectivity and access to existing public open spaces. Opportunities for potential shared use agreements for private and restricted open space are

also identified. Some of the temporary offset open spaces being provided by SRLA during construction of SRL East are also proposed as opportunities to be permanently retained.

Future open space provision can be increased, and access and quality needs can be met, with the following changes to the SRL East Structure Plan Areas:

- 17 planned new public open spaces delivered by SRLA, local councils and private developers
- 27 proposed new public open spaces to address a gap in 400 metre walkable access to public open space
- 17 prioritised quality enhancements of existing public open spaces to improve their quality and enable greater use to meet demand
- 22 pedestrian links to improve permeability and access to public open space
- Future opportunity for five temporary open spaces provided by SRLA to be permanently retained (in addition to the planned new public open spaces listed above). The temporary open spaces are offsets for construction impacts as part of SRL East
- 11 potential new shared use access agreements to increase access to restricted open space.

In addition, innovative open space opportunities are identified in each Structure Plan Area.

Planned new public open spaces (delivered by SRLA, local councils and private developers) will add a combined 150,940 m^2 to the SRL East Structure Plan Areas. The proposed new public open spaces (from this open space assessment) will add a combined 77,340 m^2. These planned and proposed new open spaces will add a 228,280 m^2 (22.8 hectares) of open space to the existing networks. This excludes temporary open spaces used to offset impacts to existing public space during construction of SRL East.

Implementing the planned and proposed new public open spaces, and improving the links to open space will mean that close to the target of 95 per cent of the population in the SRL East Structure Plan Areas will have access to public open space within 400 metres. This is a significant increase from the existing conditions where the average across the six Structure Plan Areas is 68.5 per cent (see the table below).

Projected public open space provision ratios, considered against the wider 1.6-kilometre station radius, will meet or exceed 9 m^2/person for all areas. However, there are gaps in meeting this ratio within the Structure Plan Areas for Clayton, Monash and Glen Waverley. Addressing these shortfalls requires the pursuit of additional opportunities such as opening private and restricted open space for public use, encouraging private developers to deliver communal open spaces for the public and unlocking underutilised land for recreational use.

The table on the following page summarises the potential changes and recommendations to open space for each Structure Plan Area.

SUMMARY OF CHANGES AND RECOMMENDATIONS

CHANGES TO OPEN SPACE NETWORKS WITHIN THE STRUCTURE PLAN AREAS	CHELTENHAM	CLAYTON	MONASH	GLEN WAVERLEY	BURWOOD	BOX HILL
Anticipated total population in Structure Plan Area by 2041	20,800 (121% increase from 2021)	26,900 (89% increase from 2021)	17,900 (79% increase from 2021)	11,700 (65% increase from 2021)	11,100 (109% increase from 2021)	29,100 (119% increase from 2021)
Public open spaces already planned for future delivery (by SRLA, local councils, private developers)	4	3	2	3	3	2
This assessment's proposed new public open spaces (to address gaps in public open space provision)	4	6	9	3	3	0
Total area of existing public open space in SRL East Structure Plan Area	112,890 m^2	112,879 m^2	53,252 m^2	59,256 m^2	301,413 m^2	351,863 m^2
Total area of new public open space to be added to the SRL East Structure Plan Area*	135,650 m^2	20,930 m^2	29,180 m^2	8,660m^2	17,780 m^2	16,080 m^2
OPEN SPACE METRICS						
ACCESS						
Existing proportion of SRL East Structure Plan Area within 400m walkable access to public open space	60%	60%	47%	67%	86%	91%
Projected proportion of SRL East Structure Plan Area within 400m walkable access to public open space (once potential changes are implemented)	94%**	95%**	93%**	95%	96%	96%
Number of proposed pedestrian links to improve access to existing public open spaces	7	3	5	0	2	4
QUALITY						
Number of proposed quality enhancements of existing public open spaces	1	2	3	2	2	5
PROVISION						
Projected open space provision ratio (per person) for SRL East Structure Plan Areas	11.9 m^2	5 m^2	4.6 m^2	5.8 m^2	28.8 m^2	12.6 m^2
Projected open space provision ratio (per person) for 1.6-km station radius surrounding the SRL East Structure Plan Area* **	12.3 m^2	15.5 m^2	9.2 m^2	13.1 m^2	31.9 m^2	14.2 m^2

DIVERSITY						
Diversity rating of public open spaces once proposed changes are implemented (above average / average / below average) ****	Above average	Above average	Above average	Above average	Above average	Above average
FUTURE OPPORTUNITIES						
Number of temporary public open spaces to make permanent	0	2	0	0	1	2
Number of private and restricted open spaces to potentially open for public access	1	0	2	3	2	3

*Excludes temporary public open spaces as they are identified as opportunities.

**Excludes large land parcels where public open space cannot be delivered. See report for further details on 400m walkable access coverage.

***Assumes no change in quantum of public open space within the 1.6km station radius. Public open space changes only applied to Structure Plan Area projections.

****Refer to Diversity of Open Space sections within each Structure Plan Area in the body of this technical report for diversity ratings and criteria information.

1 Introduction

Suburban Rail Loop (SRL) is a transformational project that will help shape Melbourne's growth in the decades ahead. It will better connect Victorians to jobs, retail, education, health services and each other – and help Melbourne evolve into a 'city of centres'.

SRL will deliver a 90-kilometre rail line linking every major train service from the Frankston Line to the Werribee Line via Melbourne Airport.

SRL East from Cheltenham to Box Hill will connect major employment, health, education and retail destinations in Melbourne's east and south-east. Twin 26-kilometre tunnels will link priority growth suburbs in the municipalities of Bayside, Kingston, Monash and Whitehorse.

SRL East Draft Structure Plan (Structure Plan) Areas will surround the six new underground stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill.

1.1 Purpose of this report

This open space assessment will inform the development of the Structure Plans to guide land use planning and development in each SRL East Structure Plan Area.

The report describes the existing open space in each Structure Plan Area and within a 1.6-kilometre radius of each SRL station.

Issues and opportunities that impact planning for open space and the development of each Structure Plan Area are identified.

Recommendations to consider when developing the Structure Plans are made, with the objective to avoid, minimise or manage potential negative impacts of change, and to maximise potential for positive change.

1.2 Project context

Construction of the SRL East underground stations is underway at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill. This provides an opportunity to enhance the surrounding neighbourhoods. Each neighbourhood has its own distinct character, offering different opportunities to investigate through the structure planning process. SRL East will support thriving and sustainable neighbourhoods and communities that offer diverse and affordable housing options, with easy access to jobs, transport networks, open space, and community facilities and services.

A Vision has been developed in consultation with the community and stakeholders for each Structure Plan Area and surrounds. The visions set out the long-term aspirations for these areas, ensuring they are ready to meet the needs of the growing population.

Figure 1.1 shows SRL East in the context of the entire SRL project and Melbourne's rail network.

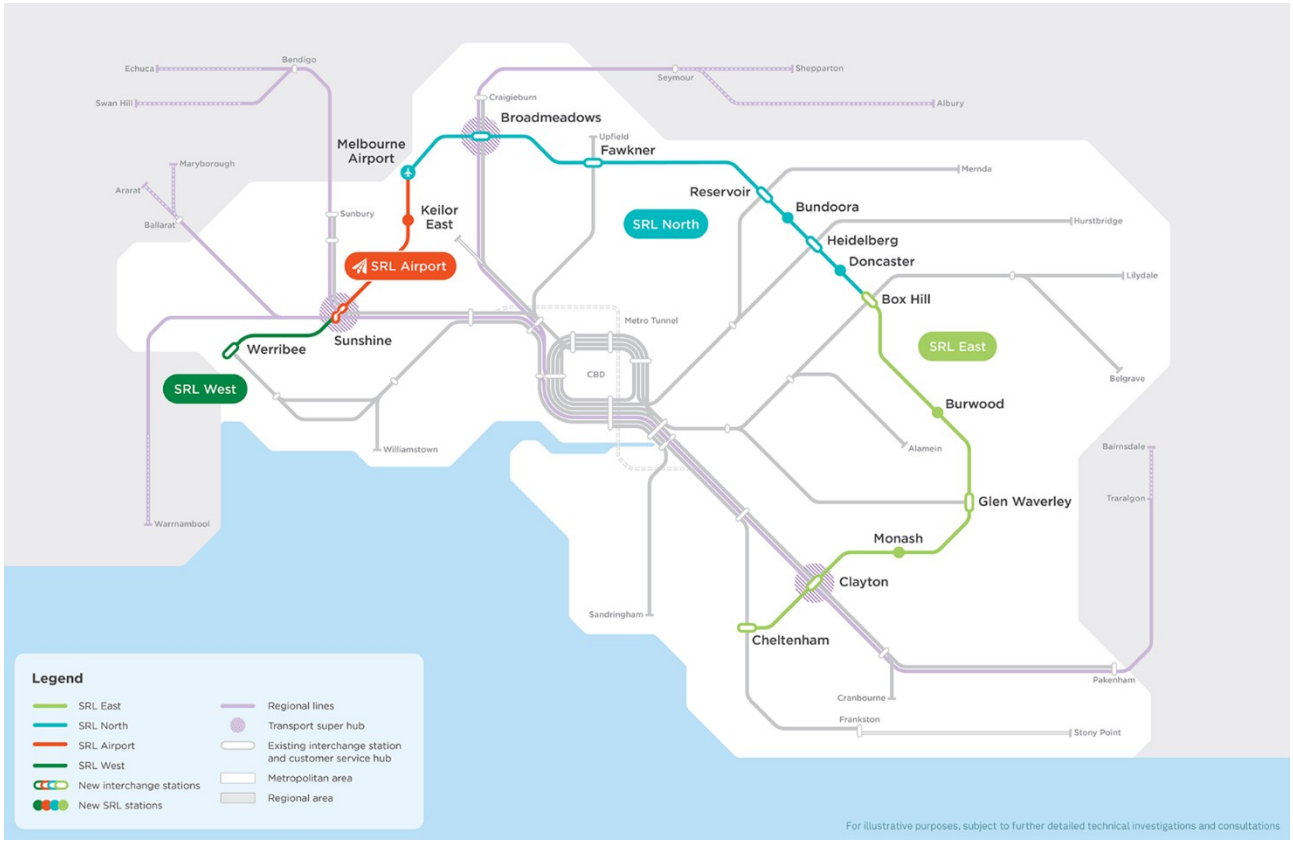


FIGURE 1.1 SRL EAST CONTEXT IN MELBOURNE'S RAIL NETWORK

1.3 Structure Planning

Structure Plans are being prepared for defined areas surrounding the SRL East stations to help deliver the Vision developed for each SRL East neighbourhood.

A Structure Plan is a blueprint to guide how an area develops and changes over a period of time. Structure Plans describe how future growth within the area will be managed in an appropriate and sustainable way to achieve social, economic, and environmental objectives. The plans cover a wide range of matters, such as transport connections and car parking, housing and commercial development, community infrastructure, urban design, open space, water and energy management, climate resilience and sustainability.

By tailoring planning decisions to reflect the needs of a defined area, Structure Plans give effect to the policies and objectives set for these areas and cater for changing community needs. They also provide certainty for residents, businesses, and developers by identifying the preferred locations and timing of future land uses, development and infrastructure provision.

Structure Plans take a flexible and responsive approach that enables places to evolve over time.

Planning scheme amendments will be required to implement the Structure Plans into the planning schemes of the cities of Bayside, Kingston, Monash and Whitehorse.

1.4 Structure of this report

- **Section 1** provides the background and context of the technical assessment
- **Section 2** explains the methodology for the technical assessment

- **Section 3** defines the six Structure Plan Areas
- **Section 4** summarises legislation, policies, and other documents relevant to this technical assessment
- **Section 5** describes the drivers for change, guiding principles and metrics
- **Sections 6 to 11** provide the open space assessments for the Structure Plan Areas, including recommendations to inform the development of the Structure Plans
- **Appendix A** summarises the open space recommendations
- **Appendix B** provides the open space definitions and classifications
- **Appendix C** details case studies of previous urban renewals projects relevant to SRL East
- **Appendix D** sets out the quality assurance framework adopted for the technical assessment
- **Appendix E** provides the legislative and policy context of SRL East relating to open space
- **Appendix F** sets out the principles and criteria that informed the identification of proposed new open space
- **Appendix G** provides the references for documents that informed this technical assessment
- **Appendix H** provides diversity assessment maps incorporate the performance indicator of diversity with the walkable catchments of public open spaces by hierarchy across the Structure Plan Area and 1.6-kilometre station radius
- **Appendix I** provides maps incorporating the function of existing public open spaces with the walkable catchments across the Structure Plan Area and 1.6-kilometre station radius
- **Appendix J** provides a peer review report undertaken by Cred.

2 Methodology

2.1 Introduction

The methodology for this technical assessment was divided into five stages (outlined in section 2.2 below). Reviewing the open space strategic policy context, case studies and best practice approaches guided the development of a range of open space metrics and performance indicators that assess the existing and future open space networks in the Structure Plan Areas. A multi-dimensional analysis was applied to understand the overall performance of the existing open space networks and how future open space needs should be met as the Structure Plan Areas change and grow.

2.2 Project methodology

The project methodology has been divided into five stages as follows:

2.2.1 STAGE 1: BACKGROUND CONTEXT AND ANALYSIS

The background context and analysis critiqued and reviewed the strategic policy context. A desktop review was conducted to understand key open space drivers, trends and best practice approaches that would inform the open space assessment and recommendations for the six SRL East Structure Plan Areas.

Key steps:

- Critique of existing open space work that had been undertaken for SRL East
- Review of open space policy frameworks, strategies, and local and the State Government documents.

Refer to Section 4 of the report.

2.2.2 STAGE 2: CASE STUDIES, PRINCIPLES, METRICS

In the second stage, analysis of comparable urban renewal context case studies was undertaken, identifying best practice approaches relevant to the SRL East project. This stage assessed drivers for change, drawing on the case studies, population projections, and established guiding principles, metrics and classifications.

Key steps:

- Building on the review of existing work and policy review, case studies of comparable urban contexts were analysed, with leading practice on open space provision identified (including relevant state, national and international examples). Refer to Section 5.2 of the report.
- Identify the Study Areas which comprised of the Structure Plan Areas and a 1.6-kilometre radius around each SRL station. Refer to section 3 of the report.
- Source appropriate population data for each Structure Plan Area and 1.6-kilometre station radius, including current and projected population figures. Refer to Section 3.8 of the report.
- Establish guiding principles for a high performing open space network in a higher density urban environment, based on industry best practice. Refer to Section 5.3 of the report.
- Establish open space definitions and classifications, based on industry best practice. Refer to Section 2.2 of the report.

- Establish open space metrics and performance indicators to measure and assess open space networks, including key outcomes in meeting future open space needs, based on industry best practice. Refer to Section 2.3 of the report.

2.2.3 STAGE 3: EXISTING OPEN SPACE NETWORK

This stage evaluates the existing open space network, employing the metrics established in Stage 2.

Key steps:

- Analyse public open space in the Structure Plan Area and 1.6-kilometre station radius
- Analyse private and restricted open space in the Structure Plan Area and 1.6-kilometre station radius
- Analyse the committed and proposed projects for the SRL East Project (rail and infrastructure), where there are requirements to manage and mitigate impacts on public open space and recreational infrastructure
- Capture requirements that include temporarily offsetting open space impacted by construction and the relocation of infrastructure in proximity to existing sites prior to works commencing on the SRL East Project
- Assess the performance (qualitative and quantitative) of the existing public open space network within each Structure Plan Area, against the metrics and performance indicators. Undertake site visits and consider the Gehl report (SRL East Public Space and Public Life Study 2023), which acts as an Urban Baseline Study to inform the assessment.

Refer to Sections 6-11 of the report.

2.2.4 STAGE 4: FUTURE OPEN SPACE NEEDS

This stage assessed the future open space needs for each Structure Plan Area, and the changes required to meet those needs.

Key steps:

- Review and assess published council plans and open space strategies, identify where there is an intention or plan to acquire new open space, improve the capacity of existing open space, and form partnerships to unlock restricted open space. Capture planned new open spaces into the assessment
- Engagement with local and the State Government to understand priorities, opportunities, and challenges for public open space provision
- Analyse local government feedback captured as part of engagement sessions led by SRLA
- Analyse projected population densities for each Structure Plan Area
- Identify changes needed to the open space network and access to it, to support the transition to higher density urban environments
- Assess future open space needs against the metrics and performance indicators, including spatial mapping
- Assess and identify the changes to the open space network, including potential innovative solutions for open space provision.

Refer to Sections 6-11 of the report.

2.2.5 STAGE 5: FINDINGS AND RECOMMENDATIONS

The final stage of the technical assessment is the development and assessment of findings and recommendations.

Key steps:

- Assess the findings in relation to the metrics and performance indicators
- Develop recommendations to inform the Structure Planning process
- Record Future opportunities for general consideration.

Refer to Sections 6-11 of the report.

2.3 Open space definitions and classifications

2.3.1 OPEN SPACE DEFINITIONS

The following definition applies to the open space referred to within this technical assessment:

> *Open space is land that provides for a mixture of recreation, leisure, community, environmental and visual amenity benefits. It may include public open space, restricted open space or private open space.*

Melbourne's open spaces provide opportunities for residents, workers and visitors to be active, spend time outdoors in nature and take a break from highly urban environments. The benefits of accessing open space are wide ranging and well recognised as cities expand and land becomes scarce. Open spaces support critical large and small scale functions including providing a sense of place, identity and character, urban cooling, habitats, biodiversity and passive water retention. The Victorian Government's *Plan Melbourne 2017–2050* (Plan Melbourne) (former Department of Environment, Land, Water and Planning, 2017) recognises the importance of open space and greening of the city. Open spaces also enhance amenity, build resilience to climate change as well as provide opportunities for people to connect with nature, foster social connectivity and improve mental health. These benefits are provided in a range of different open spaces, including informal natural environments or structured recreation spaces. Public, restricted and private open spaces are identified within this technical assessment and defined in section 2.3.1. This assessment's focus is *public* open space within the Structure Plan Areas and the 1.6-kilometre station radius. Restricted and private open spaces can offer opportunities to supplement the public open space networks, however they are not relied upon for open space provision. Provision of sport and recreation infrastructure including tennis courts, other outdoor courts and outdoor fields are addressed separately in the SRL East Structure Plan Community Infrastructure Needs Assessment Reports.

For the purpose of this technical assessment, existing public open spaces identified in each Structure Plan Area and 1.6-kilometre station radius must be publicly accessible (e.g. not fenced at all times or fee paying), not be dominated in site coverage by car parking and / or buildings, if located within a road corridor must provide amenities beyond roadside planting and paths, and could provide one or more benefit identified in the open space definition above (recreation, leisure, community, environmental, visual amenity).

Relevant policy documents were reviewed to ensure this technical assessment has general alignment with commonly used open space definitions and classifications. Appendix B summarises the documents reviewed and their definitions. Table 2.1 provides definitions for different types of open spaces referred to in this report.

TABLE 2.1 OPEN SPACE DEFINITIONS

OPEN SPACE	DEFINITION	EXAMPLES
PUBLIC OPEN SPACE	Publicly owned land that is accessible to the community as open space that provides for a mixture of recreation, leisure, community, environmental and visual amenity benefits.	Examples are community public open spaces, linear public open spaces, sports public open spaces.
RESTRICTED OPEN SPACE	Publicly owned land that is open space but where public access and/or use is restricted. It may comprise of land primarily used for public services including transport, education, water, health or utilities; but also provides outdoor recreation, leisure, environmental benefits and/or visual amenity.	Examples are service and utility reserves, government schools, tertiary education facilities, public golf courses, transport reservations, cemeteries.
PRIVATE OPEN SPACE	Land that is open space but is privately-owned or leased on a long-term basis to private operators, and where public access is prohibited or significantly restricted. It may contribute environmental benefits and visual amenity benefits.	Examples are non-government school grounds, private sports facilities, private golf courses, private outdoor shopping centre forecourts / plazas / malls, private and communal green spaces for residents and workers.

2.3.2 OPEN SPACE CLASSIFICATIONS

Open space classifications are typically defined by *catchment* and *function*. Local, district and regional catchments are commonly used to define the hierarchy and geographic distribution of open space. To ensure general alignment with existing approaches, a review of catchments and functions adopted in a range of strategies and policy documents relevant to SRL East Structure Plan Areas were reviewed and are recorded in Appendix B.

Given the established network of district and regional open spaces across the various municipalities and the relatively small scale of the Structure Plan Areas, the technical assessment focused on the provision of local public open space. As the Structure Plan Areas are all located within established urban contexts, the delivery of new local public open spaces would generally be more practical and incur less disruption to existing land uses than a district or regional open space. Spatial analysis of existing hierarchies provide a visual representation of the distribution of public open space by catchment (see diversity assessments under each Structure Plan Area section).

For this assessment, the adopted methodology categorised local open spaces as pocket, neighbourhood and community public open spaces. This enabled consideration of the quality, functionality and connectivity of the different types of local open spaces in each Structure Plan Area. This has greater relevance in higher density urban areas, where public open space needs to be high quality and serve multiple purposes. Table 2.2 defines the catchment hierarchies, including their indicative size and walkable catchment, aligning with similar walkable targets applied for local public open space access across Victorian, national and international examples.

TABLE 2.2 OPEN SPACE CLASSIFICATIONS BY HIERARCHY AND CATCHMENT

CATCHMENT HIERARCHY	SUB-CATEGORY	INDICATIVE AREA	WALKABLE CATCHMENT	DESCRIPTION
LOCAL	Pocket	Less than 0.2 ha	200 to 400 m, 2 to 3-minute walk	Spaces that serve a small urban area (e.g. high density area)
	Neighbourhood	0.2 to 1 ha	400 m, 5-minute walk	Spaces that serve an immediate local catchment
	Community	1 to 5 ha	800 m, 10-minute walk	Spaces that generally serve a suburb or group of suburbs
DISTRICT		5 to 10 ha	1200 m, 15-minute walk	Spaces that serve a wider catchment across suburbs or beyond one municipality
REGIONAL		>10 ha	Typically 30+-minute travel time	Large spaces that serve regional / citywide catchments

Determining the function classification of open space can assist in assessing existing open space, diversity across networks, and the type of experience that can be anticipated at each space. It also guides the types of assets and maintenance required.

The function classifications in Table 2.3 were reviewed against state and local examples and represent a common and best practice approach. Several words and themes with the same or similar meaning to describe a function of public open space are used across state and local documents as detailed in Appendix B. For this technical assessment, these words were grouped together, and adopted commonly used classifications were identified to provide a consistent approach. Where there are multiple uses of one public open space, the most dominant use associated with that space has been applied as the function classification.

TABLE 2.3 OPEN SPACE CLASSIFICATIONS BY FUNCTION

FUNCTION CLASSIFICATION	DESCRIPTION
COMMUNITY PARK	Generally open grassy areas that provide for a range of casual and informal activities, such as playgrounds and barbecues. These areas can also have natural values and provide pedestrian and/or bicycle links between streets to connect the open space network.
LANDSCAPE PARK	Informal areas that provide landscape and amenity values (grass, shrubs, and trees). Generally have low level of asset provision (may include benches and shelter) and informal or formal accessways and paths.
NATURE PARK	Areas set aside for the conservation and protection of natural ecosystems, landscape character and/or historical and scenic features. The focus of nature public open spaces is to experience and protect the natural environment. May include facilities for walking, cycling, viewing conservation areas.
LINEAR PARK	Corridors that facilitate the movement of people into and through the open space network, can be associated with waterways. Predominantly catering for walking and cycling activities and linking open spaces. Includes green/blue space, green corridors, paths, trails and links.
SPORTS PARK	Areas primarily used for playing organised / competition sport in an outdoor setting. These places can accommodate multiple uses including informal recreational activities, picnic areas, playgrounds, grassed areas and hard-scaped surfaces.
CIVIC SPACE	Generally sealed or paved areas used for recreation, formal and informal activities, such as community gatherings or markets.

2.4 Open space metrics and performance indicators

This section explains how the open space metrics were developed and adopted, and why this approach is appropriate for the open space assessment, drawing on the policy and best practice review discussed in Sections 4 and 5, and outlined in more detail in Appendix C.

2.4.1 ESTABLISHMENT OF OPEN SPACE METRICS

Metrics and performance indicators were adopted to shape the provision of future open space in each SRL East Structure Plan Area. These were developed with reference to state and local government policies and strategies (see Section 4), relevant case studies of international cities and national and local urban renewal projects that anticipated high growth (see Section 5). The following metrics and performance indicators are considered a best practice approach for the context of Melbourne and SRL East Structure Plan Areas, where a shift from suburban to high density urban environments will occur.

A layered approach is applied:

- Primary metrics – access and quality of open space
- Secondary metrics – provision of open space per capita
- Performance indicators – diversity of open space (hierarchy and function).

Further information on metrics and performance indicators is provided below.

Access

The review of state, national and international case studies of comparable urban renewal contexts demonstrated that 'access' is a useful proximity-based metric to apply to public open space in higher density urban environments. In the case studies reviewed, walkable access to all types of public open space is typically measured at 400 metres which equates to a 5-minute walk for the average person. As it is assumed that higher density areas generally have less private open space, walkable access to public open space is particularly important (for both residents and workers). A local pocket park in a higher density area may be expected to serve a 200-metre walkable catchment, and a local neighbourhood park would be expected to serve a 400-metre walkable catchment. Community, district and regional parks would serve much larger catchments.

Accessibility metrics are often combined with a coverage percentage. For the SRL East project context, 400-metre walkable access for 95 per cent of all residents and workers is deemed an appropriate and comparable metric, with greater access in the higher density areas (200 metres walkable access) to be achieved where possible. This aligns with guidance from the Victorian Planning Authority (VPA) and within Victorian planning schemes which use the target of a 400-metre safe walking distance to at least 95 per cent of all dwellings for subdivision. Similar walkable targets are applied for local public open spaces access across local government policy. Measuring walkable distances to open space provides spatial interpretation of gaps in the public open space networks, identifying areas that can be prioritised for more equitable access.

Quality connections are integral for access to public open space. A public open space within a short walk might not be easily accessible if it lacks safe crossing points, uninterrupted pathways, adequate lighting and a comfortable journey. Quality connectivity should be considered in conjunction with the delivery of public open spaces to provide a cohesive and integrated network.

Regional public open spaces typically serve a broad city-wide population, where a catchment between 1200m up to a 30-minute plus travel time may be expected. Access to regional catchment public open space is not specifically considered in this technical assessment given the focus on local open spaces, the limited size of each Structure Plan Area and the established network of regional open spaces in the municipalities. Therefore, any public open spaces that may be classified as regional are assessed at the district level to ensure they meet the needs of the immediate surrounding community.

Quality

In high density urban environments, public open spaces need to be high quality to support higher levels of use, and to meet the demands and expectations of resident and worker populations. Therefore, quality of open space is an important primary metric for this technical assessment. Public open spaces should be fit-for-purpose for their intended function and use, as well as resilient and adaptable. This includes quality of design,

appropriate size to enable diverse uses to serve growing populations as well as ongoing maintenance to provide public open spaces that are clean, safe, well maintained, shaded and visually appealing, all of which encourage and facilitate activation and use.

A Level of Service can be determined with a combination of Function Category plus Use Category (generally representing its dominant use). This determines the expected use and function of each type of open space, and the range of assets and services provided, reinforcing the experience that can be anticipated.

For this technical assessment, a quality-based level of service assessment was used to determine quality ratings of existing public open spaces, highlighting where enhancements could be applied first in the Structure Plan Areas. The criteria are outlined in Appendix D.

Provision per capita

When evaluating the performance of public open space networks, provision of public open space is a significant factor. Provision of open space measures the quantity of open space, usually per capita, in a specific area. Contemporary open space planning recognises the challenges of accurately comparing public open space provision ratios across different geographic, development and cultural contexts, with inconsistent and wide-ranging approaches to defining and measuring public open space. Examples include whether the ratios consider street reserves, waterways and paths as public open space in the provision calculations.

This assessment acknowledges that public open space provision ratios per person are projected to decline as the population increases. This assessment further acknowledges the challenges of delivering new public open spaces in existing and densifying urban settings. While important to assess, provision metrics are not a reliable or effective measure of a high-performing open space network in higher density urban environments.

Noting the shortfalls of provision per capita metrics, there is still merit in monitoring the provision per capita of open space within an area, particularly as it changes over time. Provision of open space per capita is therefore used as a secondary metric in this technical assessment with potential opportunities to meet any shortfalls included.

Provision of 9 m^2 (minimum) per person of public open space was adopted as a suitable indicator for this assessment. This is based on the World Health Organisation informal recommendation for public open space provision, it broadly sits in the range of other global cities (Barcelona and New York 10 m^2 per person, Istanbul 7 m^2 per person)[1], and is the same indicator adopted for the Fishermans Bend urban renewal project.[2] Review of other open space assessments for similar contexts are discussed in Section 5.

Provision per capita is assessed across the 1.6-kilometre station radius, as well as the overall Structure Plan Area to enable a more targeted assessment of the local open space network with regard to the increasing population. This assessment also recognises that many of the large existing open spaces located outside the Structure Plan Areas will serve the populations located within the Structure Plan Areas.

Diversity

There should be a diverse range of public open spaces by catchment and primary function across the SRL East Structure Plan Areas and the wider 1.6-kilometre station radius. The diversity and distribution of the public open space network can be assessed through a spatial analysis that applies the walkable catchments for the open space hierarchy identified in section 2.3.2.

There should be functional diversity across the public open space network in each Structure Plan Area, so that open spaces collectively provide multiple benefits, including versatile and flexible spaces, diversity of user experience, connectivity between open spaces, and environmental functionality (urban heat reduction, biodiversity, water, climate change resilience). The function of a public open space may be changed over time

[1] Yeliz Ilgar, European Scientific Journal August 2016, Investigation of Open Green Recreation Spaces In Urban Environment with the Context Of Healthy City Planning: Case Of Turkey
[2] Planisphere, 2017, Fishermans Bend Public Space Strategy

depending on community needs and trends, whereas the hierarchy type is less flexible due to the areas required.

A high-performing public open space network in a higher density environment should be well distributed geographically, so there is a suitable spread of public open spaces by hierarchy. The geographic distribution of public open space is a key access and equity issue for residents and workers. This may include smaller open spaces in higher density areas, supported by larger open spaces across the broader public open space network.

For this technical assessment, diversity is used as a performance indicator that considers the hierarchy and function of public open space in the existing open space networks. It assesses whether the changes to the open space network (planned and proposed) will improve diversity in the Structure Plan Areas. As there is no standard measure for an optimal outcome of diversity, this report has applied criteria that identifies above average, average or below average diversity in each Structure Plan Area.

Summary

The existing and future open space networks within the Structure Plan Areas and 1.6-kilometre station radius are assessed against the metrics and performance indicators summarised in Table 2.4. The layered approach of applying multiple metrics and indicators ensures a holistic assessment of public open space requirements, informed by local, national and international examples.

TABLE 2.4 OPEN SPACE METRICS AND PERFORMANCE INDICATOR

	MEASURE / STANDARD	OUTCOME
PRIMARY METRICS		
ACCESS	400 metre walkable distance to public open space for 95% of residents and workers, with greater access in higher density areas.	95% of all residents and workers within each Structure Plan Area will have access to public open space within a 400-metre walkable distance. In the higher density areas around each SRL station core, there will be greater access to public open space where possible, assessed against a 200-metre walkable distance.
QUALITY	Quality is determined by how fit-for-purpose the public open space is, measuring appropriateness of design, response to the context and landscape elements and ongoing maintenance. The Level of Service quality assessment applies the following criteria: • Function and Use Category (quality standard) to determine appropriateness of the public open space's amenities and assets • Performance assessment of asset provision, ease of access, safety and comfort, functionality (geography and design suitable for purpose), sense of place, site or activation potential. All public open spaces are assessed for a quality rating and a site potential rating (scored between 1 – very poor and 5 – very good), to identify existing performance and locations for enhancements and quality improvements.	All public open spaces within each Structure Plan Area are targeted to be high quality spaces. The quality assessment identifies existing performance and locations for enhancements and quality improvements. This can guide prioritisation of future asset provision requirements.
SECONDARY METRICS		
PROVISION PER CAPITA	9 m^2 public open space per capita for resident populations is used as a comparative indicator, based on similar urban contexts. This metric can monitor the change in provision of public open space within the 1.6-kilometre station radius and Structure Plan Areas as the population changes.	Existing and future public open space provision is monitored against the anticipated change in population within the 1.6-kilometre station radius and Structure Plan Areas. Identify quantum of public open space needed to meet 9m^2 indicator.
PERFORMANCE INDICATOR		
DIVERSITY	There should be a diverse range of public open spaces by catchment (local pocket, neighbourhood, community, district) and primary function. Existing and future public open space networks are assessed against criteria to identify above average, average or below average diversity of catchment and function. A spatial analysis of the public open space hierarchy (by catchment) assesses geographic distribution across the Strucutre Plan Areas and 1.6-kilometre station radius.	A diverse range of public open spaces by catchment and primary function. Diversity of landscape settings providing for a range of recreational opportunities and activities accessible to residents and workers in the Structure Plan Areas.

2.5 Stakeholder engagement

The open space assessment builds on previous consultation undertaken for the feasibility, design development and environmental and planning approval phases of SRL East. The structure planning process has involved comprehensive and robust conversations with the community, councils, key institutions and other stakeholders to develop a Vision for each Structure Plan Area and surrounds. More information on consultation undertaken

for the structure planning is provided in the SRL Structure Planning Engagement Reports available on the SRL website.[3]

SRLA undertook a series of listening sessions and technical engagement meetings with key stakeholders throughout 2023 and 2024 that informed this open space assessment.

In 2024, SRLA consulted with key stakeholders on the draft SRL East Structure Plan Area Vision documents and key directions for structure planning, seeking feedback on several aspects, including open space. Key stakeholders included:

- Bayside City Council
- Deakin University
- Kingston City Council
- Monash City Council
- Monash University
- Whitehorse City Council.

SRLA held technical engagement meetings with these councils from March to May 2024. Key questions and engagement points about open space included:

- Plans for new open space (including preferred locations and locational attributes) provided by each council
- Plans for any private provision of public open space
- Thoughts, comments and plans on alternative ways to provide open space and greening, such as green roofs and walls in commercial and industrial areas
- Plans for open space upgrades and quality improvements
- Plans for any partnerships or agreements to unlock access to restricted and private open space.

Summaries of feedback from councils is provided in the 'Future open space needs' sections of this report (in each Structure Plan Area section).

Limitations to the information received during engagement to date could be resolved through future consultation and testing of proposed open space recommendations with key stakeholders.

Table 2.5 summarises stakeholder engagement to date and the matters and or issues raised and discussed relating to open space.

[3] SRL engagement website: https://bigbuild.vic.gov.au/library/suburban-rail-loop/reports/engagement-reports.

TABLE 2.5 STAKEHOLDER ENGAGEMENT SUMMARY

STAKEHOLDER	MATTERS DISCUSSED / ISSUES RAISED
Cheltenham Structure Plan Area	
Kingston City Council	SRLA met with officers from the City of Kingston to discuss the Vision for the Cheltenham Structure Plan Area, including open space. Feedback included the need for more play spaces in Cheltenham and surrounds as demand will increase due to SRL East. Connectivity across the Cheltenham Structure Plan Area to open spaces should be addressed, particularly due to the barriers of the Frankston Line and Nepean Highway. Sir William Fry Reserve should be reinforced as a regional standard youth precinct and other existing open spaces requiring upgrades.
Bayside City Council	SRLA met with officers from the City of Bayside to discuss the Vision for the Cheltenham Structure Plan Area, including open space. Feedback included the need to expand cycling routes and wayfinding to connect open spaces and facilities across the Cheltenham Structure Plan Area, consider the need for Sir William Fry Reserve and its offset public open space to serve the Bayside community as well as the Kingston community. Increased greenery and connectivity are required across the Bayside Business District and Pennydale.
Clayton Structure Plan Area	
Monash City Council	SRLA met with officers from the City of Monash to discuss the Vision for the Clayton Structure Plan Area, including open space. Feedback raised by the City of Monash included the need for more public open space in the central Clayton area to support healthy living, providing walking and active transport opportunities and affordable or free leisure activities across the open space network. Clayton Community Centre was identified as a good location for public open space and a public plaza.
Kingston City Council	SRLA met with officers from the City of Kingston to discuss the Vision for the Clayton Structure Plan Area, including open space. Feedback included the need for equitable access to public open space for residents of Clayton South as a priority and the opportunity for community access to private or restricted open space to supplement public open space provision.
Monash Structure Plan Area	
Monash City Council	SRLA met with officers from the City of Monash to discuss the Vision for the Monash Structure Plan Area, including open space. Feedback raised included the need to look for sites in Monash to deliver open space and improve linkages and connectivity across the Structure Plan Area. While there are existing agreements as well as potential opportunities for private and restricted open space to be open to the community, these arrangements cannot be relied upon to meet demands of public open space provision. The City of Monash supports open space alongside the drainage corridor in Monash and recommends that connections are provided north and west to improve connectivity into residential, Monash University and employment areas.
Glen Waverley Structure Plan Area	
Monash City Council	SRLA met with officers from the City of Monash to discuss the Vision for the Glen Waverley Structure Plan Area, including open space. Feedback raised included the need for more passive open space, shading (including on transport corridors) and connectivity across the open space network. Bogong Reserve was identified as a highly valued public open space that could be carefully upgraded (remnant vegetation must be protected).
Burwood Structure Plan Area	
Whitehorse City Council	SRLA met officers from City of Whitehorse to discuss the Vision for the Burwood Structure Plan Area, including open space. Feedback included recommendations of continued naturalisation of Gardiners Creek (beyond the approved SRL East rail scope), consideration of how built form will transition and interface with open spaces and the potential for future partnerships to open up private or restricted open space and improve Lundgren Chain Reserve (important local connection).
Monash City Council	SRLA met the City of Monash to discuss the Vision for the Burwood Structure Plan Area, including open space. Feedback included recommendations for multi-use open space – quantum, quality and experience are critical to open space. Other discussion points included the need for continued naturalisation of Gardiners Creek (beyond the approved SRL East rail scope) and opportunities for habitat and community connections with the wetlands along the Gardiners Creek corridor.

STAKEHOLDER	MATTERS DISCUSSED / ISSUES RAISED
Box Hill Structure Plan Area	
Whitehorse City Council	SRLA met with officers from the City of Whitehorse to discuss the Vision for the Box Hill Structure Plan Area, including open space. Feedback included the need to create links across Box Hill, opportunities for enhancement of existing open space and identification of oversupply of play spaces and increasing demand on passive recreation spaces.

2.6 Map development and analysis

The following assumptions and limitations apply to the development of maps for the open space assessment.

Walkability analysis

Distance-based walkable access polygons were generated with *ArcGIS Network Analyst* tools using a simplified pedestrian network line dataset and were manually digitised entrance point dataset as inputs.

Pedestrian network

A base linear network dataset provided by SRLA was modified to include proposed new pedestrian links identified in the SRL East Structure Plan – Urban Design Report and SRL East Structure Plan – Transport Technical Report. The network is a simplified representation of walkable pathways across the Study Area and surrounds. Neighbourhood streets that are assumed to have a footpath on both sides and can be safely crossed at any point are represented by a single line. Arterial roads and highways that may only be crossed at designated pedestrian crossings are represented with multiple lines. Although this is the best available data, there may be instances where fences, gates, stairways and other obstacles are not accounted for.

Entrance points

Entrance point data were manually digitised at appropriate indicative points along the pedestrian network to account for the proposed layout and configuration of future open space sites, noting that detailed design of these sites is not available at this time and may be subject to change in future.

Polygon outputs

Polygon outputs representing the walkable catchments around each open space were manually modified and, in some cases, generalised to account for property boundaries, uncertainty in the position and configuration of future open space site inputs, and excess precision in the automated tool output.

Exclusions

As noted in the 'Findings' sections of this report (subsection 'Outcomes in relation to access'), the sites listed below were excluded from walkability calculations.

All the sites listed below occupy large land parcels which include their own or restricted open space. These sites were excluded from calculations of 400-metre walkable access to public open space, as their inclusion would infer the gaps in walkable access to public open space within the Structure Plan Areas were much greater.

For example, the Monash University campus covers a significant portion of the Monash Structure Plan Area. These sites remain key considerations for improving public access to private or restricted open space.

- Cheltenham Memorial Park cemetery (Cheltenham Structure Plan Area)
- Monash Health Precinct (Clayton Structure Plan Area)
- Monash University (Monash Structure Plan Area)

- CSIRO Clayton (Monash Structure Plan Area)
- Australian Synchrotron (Monash Structure Plan Area).

Population and employment density

Population and employment density calculations for 2041 for different parts of the SRL East Structure Plan Areas assist in identifying the likely highest areas of density. The calculations are indicative and based on assumptions about the distribution of the total population / employment for each SRL East Structure Plan Area. The density ranges are indicative and should not be relied upon for any other purpose or assessment.

Addresses

Address data is sourced from the Department of Energy, Environment and Climate Action (VicMap July 2024). The location of an address is represented by a single central point within a property. All spatial calculations based on these data should be considered approximate only.

Monash C157 Amendment

Monash C157 Amendment corrects anomalies relating to parcels of public land across the City of Monash, some of which are relevant to the Monash Structure Plan Area. The technical assessment and mapping for the Open Space Technical Report (AJM, 2025) was completed prior the amendment being gazetted on 30 January 2025. Although the amendment involves changes to the existing conditions shown in the report for the Monash, Clayton, Glen Waverley and Burwood Structure Plan Areas, it does not alter the recommendations for public open space provision and access that will be required as a result of SRL East

2.7 Interactions with other reports

This open space assessment has inter-relationships with other technical reports that inform the Structure Plans.

Table 2.6 provides an overview of the inter-relationships with the open space assessment.

TABLE 2.6 INTER-RELATIONSHIPS WITH OTHER TECHNICAL REPORTS

TECHNICAL REPORT	KEY AREAS OF INTER-RELATIONSHIP
• SRL East Draft Structure Plan – Urban Design Report	• Alignment with proposed new open spaces, and pedestrian links that improve access to open space and consideration of areas of future taller built form/density.
• SRL East Draft Structure Plan – Transport Technical Report	• Strategic pedestrian links to help encourage walkable neighbourhoods and access to open space • Integration / enhancement of off-road pedestrian and cycle paths with open spaces • Enabling active transport routes across precincts that include key open spaces.
• SRL East Draft Structure Plan – Climate Response Plan	• Integrated Water Management – proposed strategy to embed sustainable water management practices in precinct planning and design • Environmental Enhancement and Protection – proposed strategy to protect natural habitats and improve biodiversity in green spaces and waterways • Urban Heat Island Strategy – proposed strategy to mitigate climate risks and hazards to create climate resilient and adaptive places.
• SRL East Draft Structure Plan – Community Infrastructure Needs Assessment	• Potential co-location of community facilities on open space and its assessment of future sports field provision • Public open spaces classified as sports parks are included in this Technical Report as part of the overall evaluations of public open space (including open space metrics of access, quality, provision, diversity), however, the identified needs and recommendations for sport and recreation infrastructure including tennis courts, other outdoor courts and outdoor fields are addressed in the SRL East Structure Plan - Community Infrastructure Needs Assessment Reports.
• SRL East Draft Structure Plan – Arboriculture and Ecology Technical Report	• Biodiversity links, protecting/enhancing biodiversity habitats • Opportunities for Pollinator Pathways (habitat corridors) • Increasing biodiversity for wetlands / lakes and expanding naturalisation of Gardiners Creek in Burwood • Increasing urban tree canopy cover, and species diversity, particularly for native trees and understory plantings • Implementation of integrated water management interventions to improve growing conditions for trees.
• SRL East Draft Structure Plan – Flooding Technical Report • SRL East Draft Structure Plan – Integrated Water Management Strategy	• Incorporation of Water Sensitive Urban Design (WSUD) opportunities in new or enhanced open spaces to deliver on Integrated Water Management (IWM) outcomes • Potential for stormwater harvesting systems for suitable open space areas • Optimising functional outcomes for wetlands, storm water detention, overland flow paths, flood storage, drainage reserves, catering for extreme weather events • The role of Gardiners Creek and associated open space areas as an open waterway and floodplain, and the naturalisation of sections of Gardiners Creek adjacent to the SRL station at Burwood.

2.8 Peer review

This technical report has been independently peer reviewed by Sarah Reilly of Cred Consulting. The peer review report is attached as Appendix J of this report, which sets out the peer reviewer's opinion on the Open Space Technical Report.

3 SRL East Structure Plan Areas

This section defines the Structure Plan Area in each SRL East neighbourhood.

3.1 Study Areas

Study Areas were established for the open space assessment.

The Study Areas are based on the Structure Plan Areas established around each SRL East station. The Study Areas extend for a radius of 1.6 kilometres around each SLR East station.

Open space requirements should be considered as part of a wider network. For this technical assessment, while the primary focus is within each SRL East Structure Plan Area, it is necessary to consider the open space network across each SRL East Structure Plan Area and a 1.6-kilometre radius around each SRL station to understand the network of spaces available to serve current and future communities.

This includes population projections and open space provision. It is particularly relevant for capturing the logical inclusion of existing public open spaces located just outside each SRL East Structure Plan Area and how those spaces may be used by residents and workers within the Structure Plan Areas (where they are accessible by a 400-metre walk).

Figure 3.1 shows an example of the difference between the SRL East Structure Plan Area and the 1.6-kilometre station radius.

Figure 3.2 shows the context of SRL East in greater Melbourne.

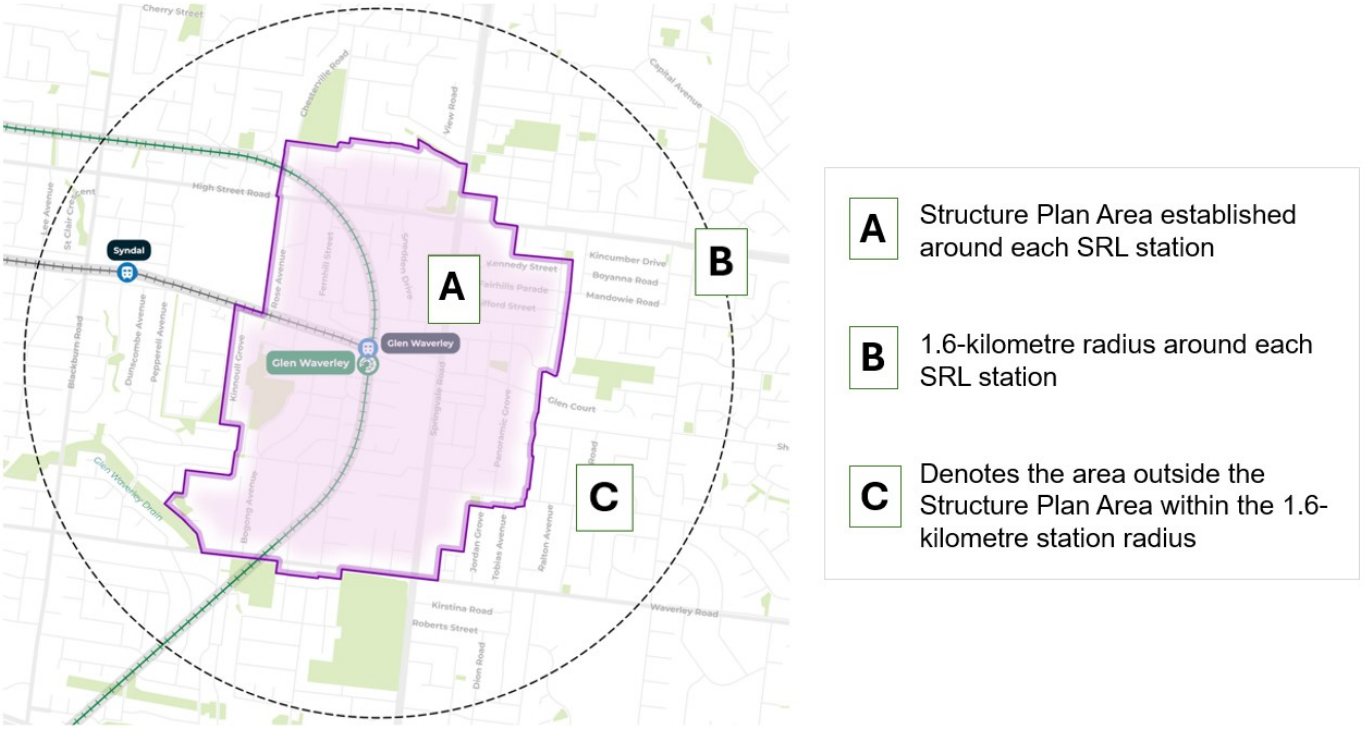


FIGURE 3.1 GEOGRAPHICAL REPRESENTATION OF STRUCTURE PLAN AREAS AND 1.6 KILOMETRE STATION RADIUS

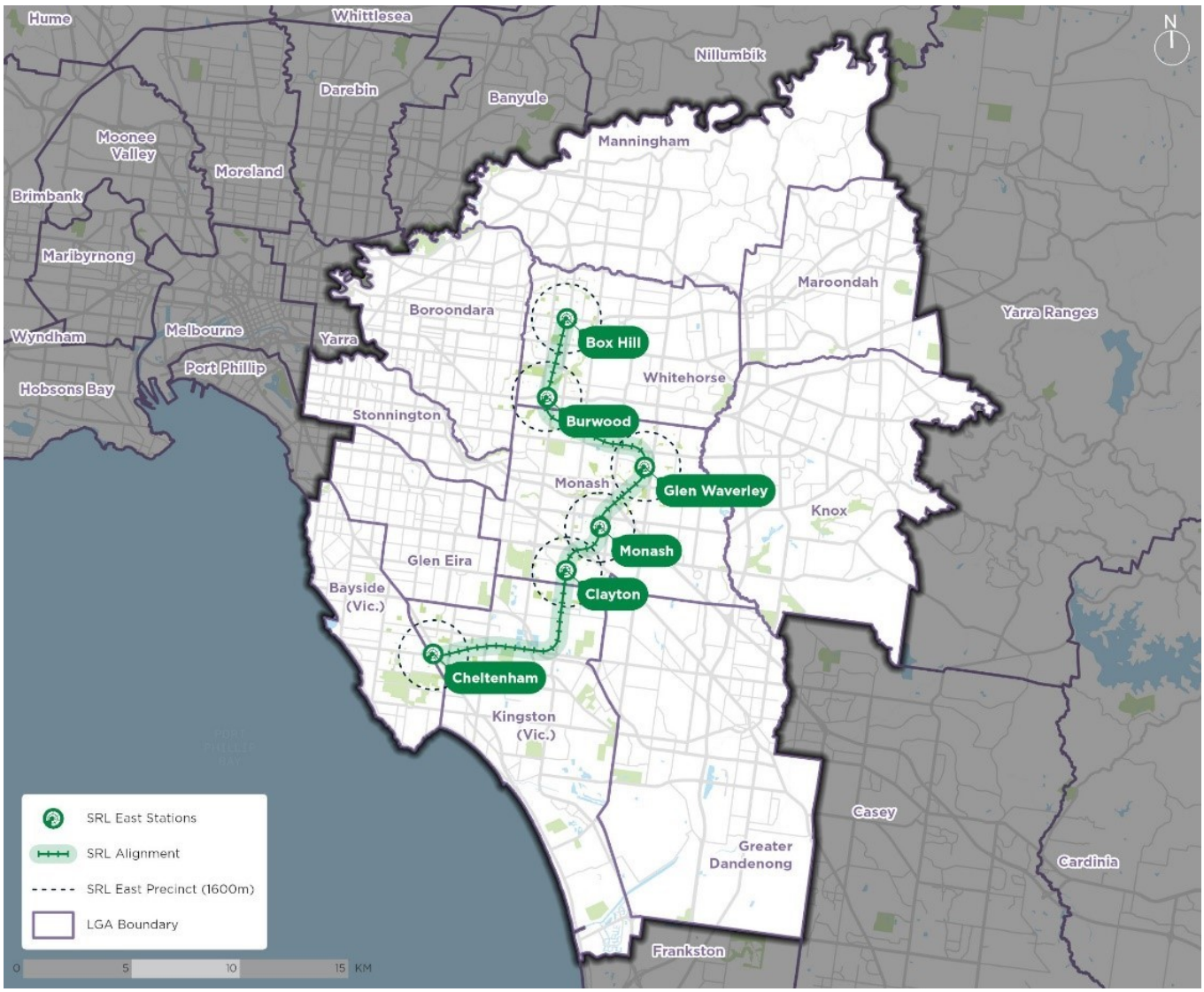


FIGURE 3.2 SRL EAST CONTEXT IN GREATER MELBOURNE

3.2 Cheltenham Structure Plan Area

The Cheltenham Structure Plan Area surrounds the SRL station at Cheltenham in the cities of Kingston and Bayside.

The Structure Plan Area is generally bordered by residential land north of Stayner Grove and Alison Street to the north, residential land east of Chesterville Road to the east, Park Road to the south and Middleton Street and Worthing Road to the west.

The Structure Plan Area is intersected by Nepean Highway and the Frankston Line.

The Cheltenham Structure Plan Area is shown in Figure 3.3.

FIGURE 3.3 CHELTENHAM STRUCTURE PLAN AREA

3.3 Clayton Structure Plan Area

The Clayton Structure Plan Area surrounds the SRL station at Clayton in the cities of Monash and Kingston.

The Structure Plan Area is generally bordered by North Road / Wellington Road to the north, Ormond Road to the west, residential lots between Alward Avenue and Murdock Street, and parts of the Cranbourne / Pakenham Line to the south, and Kombi Road and Buckland Street to the east.

Dandenong Road is a major road, running in a north-west to south-east alignment through the edge of the Structure Plan Area. The existing Cranbourne / Pakenham Line intersects the Structure Plan Area in an east-west alignment.

The Clayton Structure Plan Area is shown in Figure 3.4.

FIGURE 3.4 CLAYTON STRUCTURE PLAN AREA

3.4 Monash Structure Plan Area

The Monash Structure Plan Area surrounds the SRL station at Monash in the City of Monash.

It is generally bordered by Wellington Road and Princes Highway to the south, Gardiner Road and residential properties between Clayton Road and Dover Street to the west, land north of Ferntree Gully Road to the north and a reservation for a future road, which forms a natural barrier to properties to the east.

Monash University Clayton campus is located in the Monash Structure Plan Area.

The Monash Structure Plan Area is shown in Figure 3.5.

FIGURE 3.5 MONASH STRUCTURE PLAN AREA

3.5 Glen Waverley Structure Plan Area

The Glen Waverley Structure Plan Area surrounds the SRL station at Glen Waverley in the City of Monash.

It is generally bordered by residential properties along Madeline Street to the north, Danien Street and The Outlook to the east, Waverley Road to the south and Kinnoull Grove and Rose Avenue to the west.

Coleman Parade and the existing Glen Waverley Line intersect the centre of the Structure Plan Area in an east-west alignment.

Key arterial roads include Springvale Road which intersects the Structure Plan Area in a north-south alignment, and High Street Road and Waverley Road.

The Glen Waverley Structure Plan Area is shown in Figure 3.6.

FIGURE 3.6 GLEN WAVERLEY STRUCTURE PLAN AREA

3.6 Burwood Structure Plan Area

The Burwood Structure Plan Area surrounds the SRL station at Burwood. The Structure Plan Area is mainly located in the City of Whitehorse, with the southern portion south of Highbury Road extending into the City of Monash.

The Structure Plan Area is generally bounded by Uganda Street, Deakin University, Inverness Avenue, Bronte Avenue and Yarra Bing Crescent to the north, Andrews Street, Wridgway Avenue, Prospect Street and Huntingdale Road to the east, Zodiac Street, Ashwood Drive, Carmody Street and Barlyn Road to the south and Sixth Avenue, Evans Street, Warrigal Road, Parer Street and Meldan Street to the west.

Burwood Highway intersects the centre of the Structure Plan Area in an east-west alignment.

Deakin University Burwood campus is located in the Structure Plan Area.

The Burwood Structure Plan Area is shown in Figure 3.7.

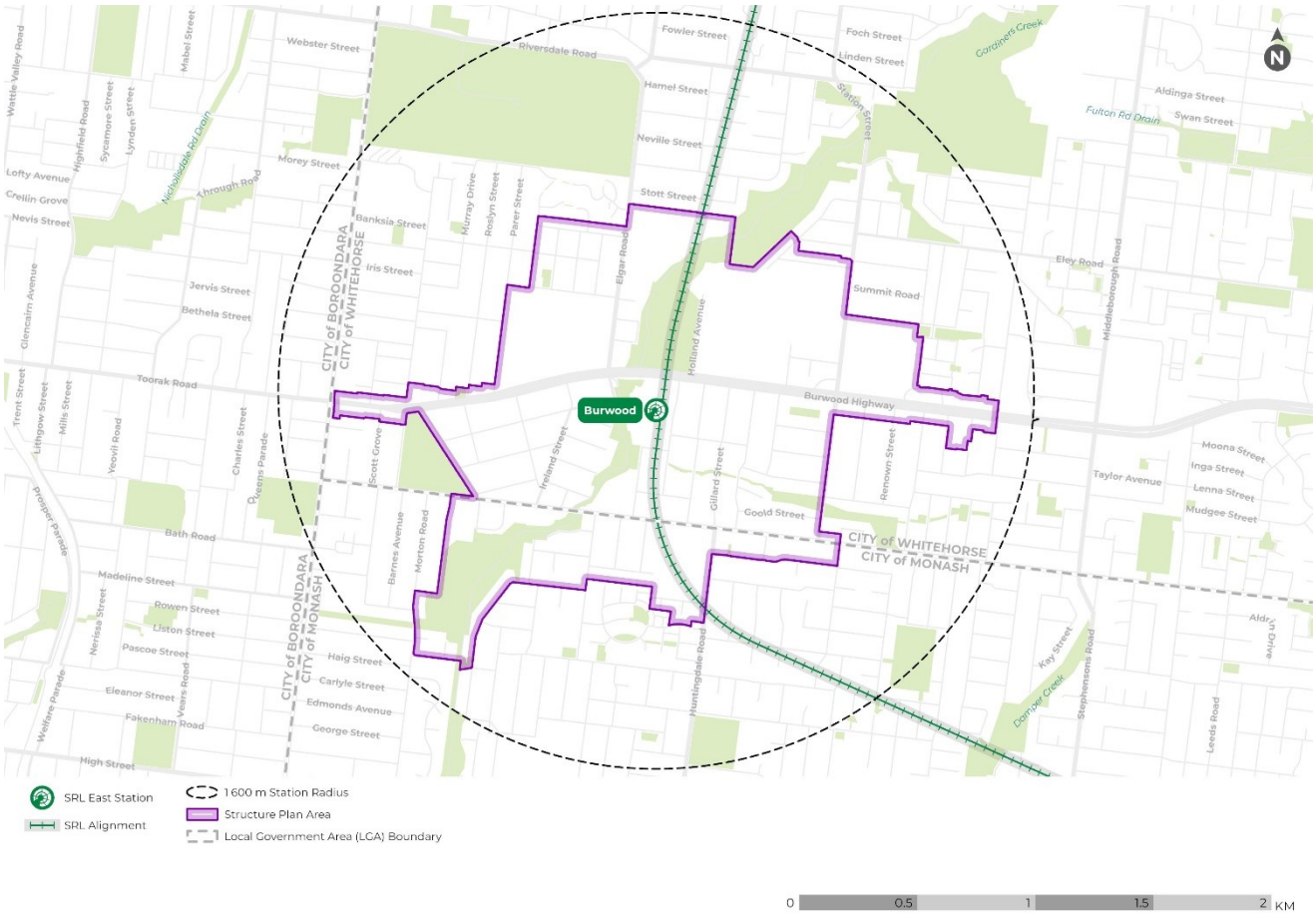


FIGURE 3.7 BURWOOD STRUCTURE PLAN AREA

3.7 Box Hill Structure Plan Area

The Box Hill Structure Plan Area surrounds the SRL station at Box Hill in the City of Whitehorse.

It is generally bordered by Severn Street and McKean Street to the north, Clota Avenue and Laburnum Street to the east, slightly west of Elgar Road to the west and Canterbury Road to the south.

Whitehorse Road / Maroondah Highway and the existing Belgrave / Lilydale Line intersect the centre of the Structure Plan Area in an east-west alignment. The main road corridors include Whitehorse Road, Elgar Road and Station Street.

The Box Hill Structure Plan Area is shown in Figure 3.8.

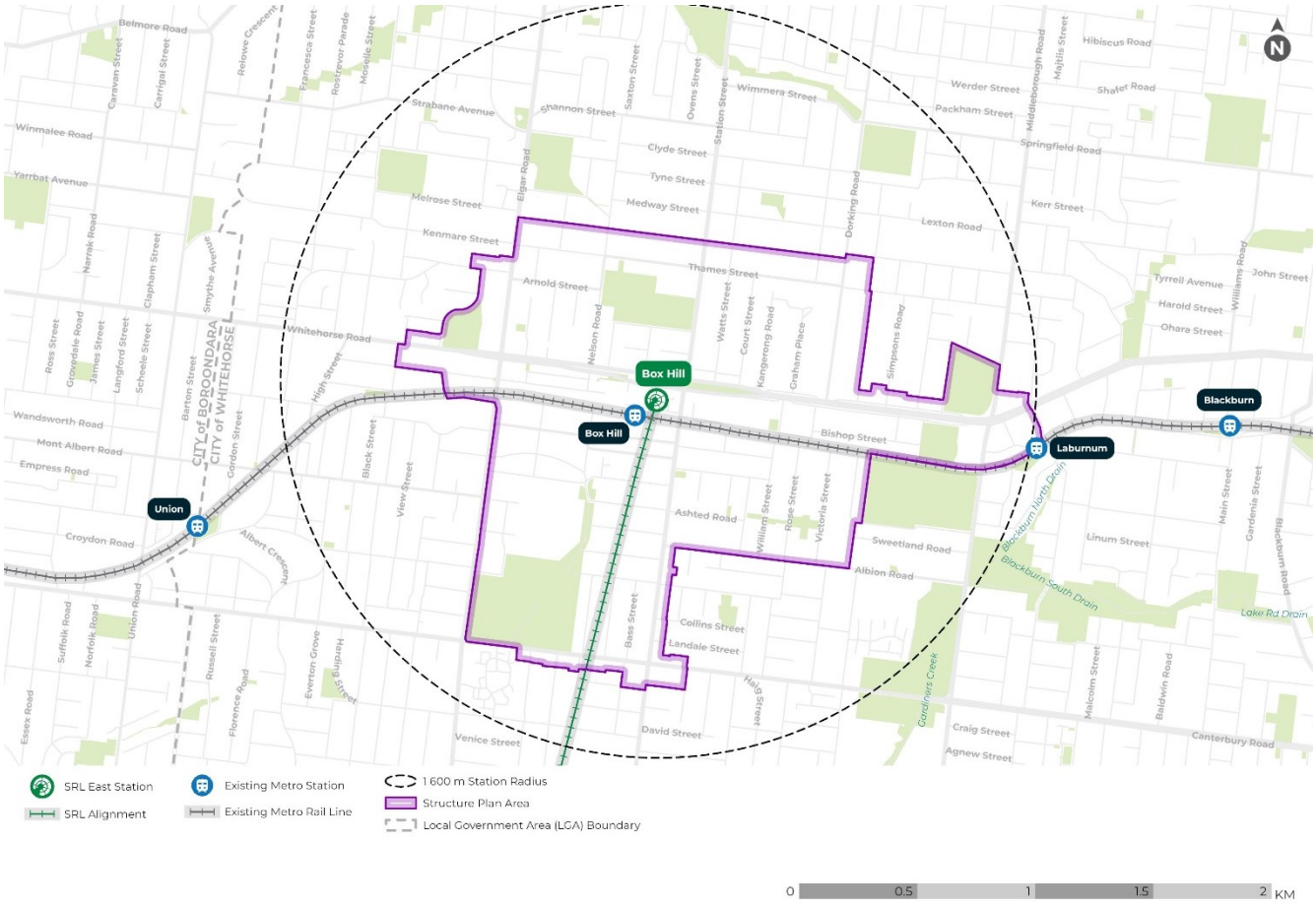


FIGURE 3.8 BOX HILL STRUCTURE PLAN AREA

3.8 Population projections

As future economic and demographic outcomes are inherently uncertain, population projections should not be relied upon as a completely accurate representation of how growth will occur.

Population data and growth forecasts developed for each Structure Plan Area are based on the following:

- Current population derived from the Australian Bureau of Statistics Estimated Resident Population (ABS ERP 2021)

- Population projections for each 1.6- kilometre radius around each SRL station for 2041 are based on CityPlan modelling outlined in the SRL Business Investment Case (BIC) (2021). Population projections for each Structure Plan Area were derived from these CityPlan projections published in the BIC [4]

- Non-overlap data is used for the Clayton and Monash 1.6-kilometre station radius, to avoid double counting where these catchments overlap.

The BIC land use projections (including demographic and employment estimates) derived from the CityPlan model account for the expected overall growth of Melbourne. The transport interventions and precinct initiatives of SRL influence the distribution of population. That is, population growth isn't solely driven by SRL; rather SRL influences the distribution of growth. The BIC projections are strategic and should be considered indicative, particularly at the small area level. Since the projections were prepared, some material events have occurred, impacting population and employment growth and to some extent, typical behaviours of households and businesses. These include COVID-19, lower population growth, more people working from home, and updates to the progress of competing and complementary projects.

The indicative distribution of population and employment data in 2041 should be considered work in progress and subject to refinement. The data clipped to the Structure Plan Area is a first approximation of the distribution of growth guided by draft planning controls in the Structure Plan, and accordingly this data is used as a preliminary estimate.

For this open space assessment, only residential populations, and not employment populations, were considered in the future provision ratios (*provision per capita* metric). As a secondary metric for understanding open space provision, the *provision per capita* metric focused on the likely needs of future residential populations. The primary *access* metric considers whether all land within an area has access to public open space, regardless of whether it contains residences or places employment. It is important to recognise this report only identifies future open space needs for the SRL East Structure Plan Areas.

Table 3.1 and Table 3.2 outline the resident population in each SRL East Structure Plan Area and 1.6-kilometre station radius.

TABLE 3.1 POPULATION PROJECTIONS – SRL EAST STRUCTURE PLAN AREAS

SRL EAST STRUCTURE PLAN AREA	POPULATION		
	2021 ABS ERP	2041 BIC	% INCREASE
Box Hill	13,300	29,100	119
Burwood	5300	11,100	109
Glen Waverley	7100	11,700	65
Monash	10,000	17,900	79
Clayton	14,200	26,900	89
Cheltenham	9400	20,800	121
Total	59,300	117,500	98

TABLE 3.2 POPULATION PROJECTIONS – 1.6 KM STATION RADIUS

SRL EAST 1.6 KM STATION RADIUS	POPULATION		
	2021 ABS ERP	2041 BIC	% INCREASE
Box Hill	29,400	52,000	77
Burwood	21,100	33,000	56
Glen Waverley	23,000	33,500	46
Monash	12,400	21,000	69
Clayton	22,500	40,500	80
Cheltenham	20,200	34,000	68
Total	128,600	214,000	66

[4] Updated to July 2024

4 Legislative and policy context

This section summarises legislation, polices and other documents relevant to the open space assessment, and to land use planning and development in the SRL East Structure Plan Areas.

4.1 Open space context

The role of public open space in metropolitan Melbourne is embedded in various policy documents. At the state level, Plan Melbourne provides guidance on public open space planning for the city's future growth and development.

Open Space for Everyone – Open Space Strategy for Metropolitan Melbourne 2021 (Open Space for Everyone) (former Department of Environment, Land, Water and Planning, 2021) is a metropolitan-wide open space strategy to guide the planning, acquisition, design, management, use and maintenance of Melbourne's open space network. Locally, individual councils have open space strategies to assess the performance of their open space networks and guide future provision of these networks.

These documents highlight the role of open space in community health, wellbeing and liveability. Good physical and mental health are regularly linked to access to green spaces and their ability to provide a natural break or retreat from the urban environment.[5] Diversity of open space types (open space classification) is also increasingly important. The greater diversity of landscape elements and/or character within open space relates to a greater aesthetic and play value, restorative qualities, and psychological interest for users of the space.[6]

Open space is recognised for its environmental benefits in state and local open space strategies. Open space assists with reducing climate change impacts and supports biodiversity. Trees and vegetation in open space contribute to the urban tree canopy which helps to reduce the urban heat island effect, provides visual amenity, and helps to create a sense of place. Larger trees generally provide greater environmental benefits, including carbon sequestration, biodiversity and urban cooling. Public open space has a significant role in providing spaces for larger trees in metropolitan Melbourne, particularly in dense areas where space is limited.

The SRL East Structure Plan Areas are within constrained urban contexts where density is planned to increase, so creative approaches to new open space provision are required. Open Space for Everyone and local government open space strategies highlight the importance of access to private or restricted open space and other innovations for improving open space networks in constrained areas. Various private and restricted open spaces are identified in this Technical Report that could assist with providing access to public open space within the SRL East Structure Plan Areas.

SRL East and the anticipated population growth in the SRL East Structure Plan Areas was unknown when some strategies and plans were developed (such as the City of Bayside in 2012, City of Whitehorse in 2007). This Technical Report helps to recognise the impacts and gaps in these plans.

The application of open space classifications and how open space provision and performance is measured is inconsistent across state and local governments. For this report, the methodology detailed in Section 2 has been consistently applied across all the SRL East Structure Plan Areas to assess the current performance and future need of open space networks consistently. The results of these assessments have been tested against local government strategies and priority projects to verify whether the recommendations are aligned.

To support increased density outcomes in the SRL East Structure Plan Areas, the public realm including open spaces and streets, needs to be optimised to support and enable a high quality of life in a compact urban environment. This includes providing a highly walkable and permeable core around each SRL station with access to key open spaces (referred to as the station core in this report).

[5] Whitehorse Open Space Strategy, City of Whitehorse 2007
[6] Monash Open Space Strategy, City of Monash 2021

This open space assessment supports an integrated network of high-quality open spaces, streets and key pedestrian linkages to provide the basis for enhanced public realm, urban liveability, and social value. This report should be read in conjunction with the SRL East Structure Plan – Urban Design Technical Reports.

A primary consideration for the development of new open spaces and the quality enhancements of existing open space is the incorporation of appropriate cultural identity and expression. This could involve:

- Meaningful engagement with First Nation people / Traditional Owners
- Dual naming of public open spaces with local Aboriginal names / themes
- Education and interpretation – incorporating cultural elements into place-specific public open space design (such as furniture, play spaces and paths), creating places for traditional storytelling narratives.

4.2 Victorian Government

Plan Melbourne 2017–2050

Plan Melbourne is the Victorian Government's long-term planning strategy for the future development of Melbourne, providing the strategic basis for the planned growth of the city in response to key challenges and opportunities facing Melbourne for the next 30 years. These challenges include a growing population, remaining competitive in a changing economy, providing affordable and accessible housing, keeping up with the growing transport needs, and the need for climate mitigation and adaptation.

A goal of the SRL East Structure Plan Areas is to provide 20-minute neighbourhoods. This refers to the ability to meet most everyday needs of people within a 20-minute journey from home by walking, cycling, riding or public transport. 'Principle 5 Living locally – 20-minute neighbourhoods' of Plan Melbourne includes direction and context for the provision of local public open spaces.

Features of a 20-minute neighbourhood include local parks and playgrounds, as shown in Figure 4.1.

FIGURE 4.1 PLAN MELBOURNE 2017–2050 20-MINUTE NEIGHBOURHOOD
Source: former Department of Environment, Land, Water and Planning

The *Plan Melbourne 2017–2050: Addendum 2019* updated growth projections for Melbourne and recognised that Melbourne's public transport network needs to develop to support the distribution of population and employment in line with growth estimates. The Addendum identifies SRL as an opportunity to create a direct rail connection between Melbourne's major employment, health, and education precincts and activity centres outside the CBD. The Addendum also embeds the 20-minute neighbourhood concept into major infrastructure projects to ensure a coordinated outcomes framework to deliver more inclusive, vibrant, and healthy neighbourhoods. Accordingly, appropriate access to quality public open space locally is vital to achieving 20-minute neighbourhoods: The SRL East Structure Plan Areas will need to provide access to suitable open space in easy walking distance from residential properties and workplaces. Walkable access to public open space, guided by Plan Melbourne concepts guided the rationale for access as an open space metric for this technical assessment.

A new 'Plan for Victoria' that will build on Victoria's Housing Statement and set out the next steps to address the state's 2050 housing and land use needs is currently in development, with community and stakeholder engagement underway.

Open Space for Everyone

Open Space for Everyone was developed as an outcome of the Plan Melbourne Policy 6.4.2: to create a new metropolitan-wide open space strategy, providing a strategic framework to guide the planning, acquisition, design, management, use and maintenance of the Melbourne metropolitan open space network.

Open Space for Everyone promotes the need for creative thinking in providing open space as urban density increases, including how best to share spaces and consider the increasingly important role that access to encumbered or restricted open space plays in open space networks. Further relevance of Open Space for Everyone to this technical assessment is discussed in Appendix E.

4.3 Government policy and strategy review

Local, national and international open space policies and strategies were reviewed for this open space assessment to identify benchmarks and metrics applied to different urban contexts. Understanding the range of perspectives on measuring open space provision assists with determining best practice open space benchmarks and metrics for SRL East. Appendix E summarises the findings of this review.

4.3.1 LOCAL GOVERNMENT

The open space strategies of local governments relevant to the SRL East Structure Plan Areas were reviewed to understand their key directions and approach to public open space benchmarks and metrics. General alignment with these metrics was considered for this open space assessment. The open space strategies are summarised in Table 4.1.

TABLE 4.1 LOCAL GOVERNMENT OPEN SPACE STRATEGIES

OPEN SPACE STRATEGY	KEY DIRECTIONS	PUBLIC OPEN SPACE BENCHMARKS / METRICS APPLIED
City of Whitehorse Open Space Strategy (2007)	The Whitehorse Open Space Strategy aims to: • Improve the links between open space reserves; improve access to and use of existing reserves and maintain existing highly valued reserves; build on diversity of the Whitehorse open space system; have adequate open space to meet existing and future population needs; improve the habitat corridor links and values of the existing linear open space system; improve environmental sustainability of open space management and maintenance practices; and reduce conflicts between different recreational users in open space. • Recommendations for Box Hill have considered increased growth by recommending additional small local open space in the gap areas and to upgrade facilities in open space and the linkages between them. Box Hill will have the largest increase in residential population of all City of Whitehorse suburbs. • Open space is well distributed in Burwood. The City of Whitehorse recommends investigating opportunities to extend the off-road path connection from Lundgren Chain Reserve through to Gardiners Creek, and to upgrade Gardiners Creek linear reserve, improve on-street crossing points, and investigate new small local open space opportunities. Note: a new City of Whitehorse Open Space Strategy is in development, anticipated to be released in 2024. The draft City of Whitehorse Open Space Strategy 2024 notes that best practice research into open space provision for high density precincts revealed no accepted international standards. However, a commonality 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.	Hierarchy classifications and travel distances are assigned to individual reserves: • Small local – up to 0.25 ha (50 m x 50 m), up to 150 m safe walking distance for residents • Local – less than 1 ha (0.99 to 0.26 ha), up to 300 m safe walking distance for residents • Neighbourhood – minimum 1 ha, up to 500 m safe walking distance for residents • Municipal – minimum 3 ha, up to 2 km travel distance for residents • Regional – unlimited size, no specific distance (influenced by the role it plays in providing access and facilities for the broader region). Note: the draft City of Whitehorse Open Space Strategy (2024) has the following changes: Small Local open space increases walkable catchment from 150m to 200m, new inclusion of Urban Civic open space with 400m walkable catchment, Neighbourhood open space reduced from 500m to 400m walkable catchment, Municipal reduced from 2km to 1km to 95% of all dwellings, Regional open space has a 400m walking catchment. No further changes. This strategy is still in draft form as of October 2024.
City of Monash Open Space Strategy (2021)	The Monash Open Space Strategy states the current distribution of open space is not equitable across the municipality, with some SRL East Structure Plan Areas having limited open space, including Clayton. The City of Monash considers it important to address inequities in existing open space while providing for the convenient and functional provision of open space to serve growing populations. The City of Monash seeks to achieve equity of open space for the entire community by: • Establishing an appropriate service standard for open space provision • Identifying areas where there are open space network gaps • Assessing the appropriateness of the existing stock in terms of size and viability, and quality and diversity • Setting out how equity of open space can be improved through mechanisms such as open space contributions.	Open space should be provided within 400 m of every residence in the municipality, giving consideration to barriers that may restrict or prevent access to open space. Currently (in 2021), 85% of Monash residents have access to open space within 400 m of their residence. Maps which identify gaps of open space provision are an additional tool for prioritising areas in need of open space.
2023 – 2033 Open Space Strategy, City of Kingston (2023)	The Kingston Open Space Strategy identifies areas of under-provision of open space based on current and future demographic profiles. From 2021 to 2041, the population of Kingston is forecast to increase by 36,278 (23%) with some of the most significant growth projected to in Highett (141%) and Cheltenham (29%). The Open Space Strategy provides strategies for how land could be acquired or disposed of for providing open spaces. A goal is for the municipality to meet the Council's environmental targets, while ensuring equitable access to open space for all community members that meets their needs. Gaps in the existing open space activity networks are identified, based on Plan Melbourne '20-minute neighbourhood' and walking distances for each open space type. The City of Kingston's 'Access, Connectivity and Inclusivity' principle aims for all residents to have access to a public open space within 1000m walkable distance from their residency and, where possible, provide access within a 400m walkable distance. Actions for Highett include: reinforce Sir William Fry Reserve as a regional standard youth precinct (area for young adult activities), continue to work	Future planning for the open space network will be underpinned by goals of improving the quality of the open space and ensuring equitable access to appropriate open space. There is a focus on design of quality spaces which support diversity of use, improve existing open spaces while advocating and investing in additional open space for suburbs with high-density housing. A gap analysis identifies areas where there is a lack of quality open space with priority given to increasing open space provision. If this cannot be achieved with land acquisition, the strategy advocates open spaces which have restricted access.

OPEN SPACE STRATEGY	KEY DIRECTIONS	PUBLIC OPEN SPACE BENCHMARKS / METRICS APPLIED
	with Development Victoria to deliver open space within the Highett Gasworks site in line with open space requirements and commitment from the Victorian Government to rectify open space shortfall from Sir William Fry Reserve; and investigate opportunities for improved connectivity to open space in the neighbouring City of Bayside.	The gap analysis measures access to open space at two levels: 401 to 1000 m and >1000 m.
City of Bayside Open Space Strategy (2012)	The Bayside Open Space Strategy considers the quantity, quality and role of existing open space across the municipality, and current and emerging characteristics of demand for open space. Bayside has a good allocation of open space per capita of population compared with other middle and inner ring suburbs. There are issues relating to general public access to some of this space that can be addressed. The Open Space Strategy identified inequity in open space distribution across the municipality, with some areas (such as Highett) having far lower amounts of open space per capita than the municipal average.	Residents and workers should be within 400 m walking distance of an open space classified as Social Family Recreation, Sportsground or Beach Based Recreation to allow for passive recreation and exercise opportunities.

4.3.2 FINDINGS

The review of public open space-related policy and strategies from local, national, and international perspectives provided insight into the range of benchmarks and metrics guiding open space provision within different jurisdictions and urban contexts.

As identified in the review, an increasingly widespread metric applied across various localities is the *access* or proximity-based standard. Access standards generally measure walkable access to public open space, with targets of usually 200 to 400 metres to local public open space and longer distances and/or travel times to larger public open space.

The Victorian Planning Authority (VPA) and planning schemes use the target of a 400-metre safe walking distance to at least 95 per cent of all dwellings for subdivision. Similar walkable targets are applied for local public open spaces access across local government policy. The targets set by the VPA's Structure Planning Guidelines are intended for the context of greenfield developments and new communities in growth areas of Victoria; a different context to the established urban areas where the SRL East Structure Plan Areas are being developed. However, they provide useful guidance for measuring appropriate walking distances to public open space. Measuring walkable distances to open space provides spatial interpretation of gaps in the public open space networks, identifying areas that can be prioritised for more equitable access.

The strategy review demonstrated that walkable access metrics are applied across all jurisdictions for the SRL East Structure Plan Areas as well as other urban contexts and would be appropriate as a key primary metric for open space analysis in this report.

Population-based provision per capita ratios are applied in some jurisdictions. However, they can be difficult to compare across localities as the interpretation of measurable 'public open space' is wide-ranging and inconsistent. For example, it could include or exclude street verges, easements, linear open space, encumbered open space and storm water management areas. The population figure is also variable as it may measure residents and/or worker/daytime populations (population type is not always specified). Variations in urban densities, development, cultural and geographic contexts also add complexities to provision per capita benchmark comparisons.

In the context of SRL East Structure Plan Areas, the provision per capita ratios can be applied as a secondary metric, principally to assess the change in public open space provision per person over time and highlight locations to identify opportunities to meet public open space provision shortfalls as populations grow. The use of residential populations for measuring the population-based provision metric is more appropriate than combined worker / resident populations as it measures the number of people who would likely use the open space at all times of day, without large fluctuations for those who are only in the SRL East Structure Plan Area during working / business hours.

Access is a contemporary metric that can be applied to workers and residents in higher density areas. Access metrics consider whether all land within an area has access to public open space, regardless of how many people are located on that land, or whether it contains residences or places of employment.

Planning Practice Note 70 – Open Space Strategies acknowledges the important role of privately-owned land that can provide community open space such as private school fields or a civic space in front of a shopping centre. Opportunities for private open space to contribute to community open space was considered for this open space assessment. Any new private developments that will provide community open space were included in the gap analysis for the SRL East Structure Plan Areas.

Aligning with guidance from the *Planning Practice Note 70 – Open Space Strategies*, this Technical Report includes an understanding of existing supply and likely future demand for open space, identifying gaps in access, quality and provision, and highlighting opportunities for improvement.

To further understand open space provision and metrics for specific SRL East Structure Plan Areas and higher density urban areas, reviews of case studies from local, national, and international perspectives are detailed in Section 5.

5 Drivers for change, guiding principles and metrics

5.1 SRL East

Melbourne's population is expected to reach 9 million people by the 2050s and is on track to officially become Australia's largest city within the decade. As Melbourne grows, a public transport system that will get people where they need to go, take pressure off the existing transport network, and reduce congestion is required. SRL will expand and improve Melbourne's public transport system and provide new travel connections and investments in the areas around each station.

The anticipated growth in employment and residential population around the SRL stations will increase demands on existing facilities and infrastructure. To ensure Melbourne's growth is planned and sustainable, the areas around the stations will benefit from an improved range of infrastructure and services, including public open space. Public open space is critical to ensuring the ongoing liveability for current and future populations and to support people living, working and moving through the neighbourhoods around the new stations.

Projected population growth will have a significant impact on the use of existing open spaces in proximity to the SRL stations. Open space strategies, policies and case studies were reviewed for this open space assessment to determine how public open space provision should be assessed and measured, ensuring increased demand will be met as these areas continue to grow.

5.2 Case study review

This section reviews relevant state, national and international case studies of comparable urban contexts to SRL East Structure Plan Areas.

The review identified there is no singular standard or metric for providing open space that is consistently applied. A range of metrics are used for measuring and delivering adequate public open space, with different approaches for different contexts. Some of the case studies do not include metrics or benchmarks for open space, instead focusing on funding models and land assembly arrangements, identifying exact locations for open space or relying on the municipal-wide open space metrics.

From the early 20th century, North America and Europe generally adopted population-based provision ratios and Australia followed this model. There are no consistent population-based ratios adopted in Australia, however, an established international population-based ratio in higher density urban areas is 9 m^2 per person. This benchmark was applied to the urban renewal project at Fishermans Bend, Victoria. While the 9 m^2 per person ratio is accredited to the World Health Organisation (WHO) and broadly sits in the range of other global cities (Barcelona 10 m^2 per person, New York 10 m^2 per person, Istanbul 7 m^2 per person)[7], it is not a formal WHO policy.

More recently, as urban landscapes have increased in density, a shift to alternative approaches to open space metrics such as performance, access or needs-based models have been applied.

Applying a level of service performance assessment is a useful tool for understanding public open space requirements. Performance assessments, such as those applied to London and Vancouver public open spaces, reveal how well existing open space is performing, including the quality and diversity of open space networks. This tool is appropriate to use alongside access standards to inform where gaps are located in the network, while ensuring existing public open spaces are at optimal performance. High-performing public open space is

[7] Yeliz Ilgar, European Scientific Journal August 2016, Investigation of Open Green Recreation Spaces In Urban Environment with the Context Of Healthy City Planning: Case Of Turkey

recommended in denser areas as there is less private open space available to residents and the same need for access to open space due to its recognised social, health and liveability benefits.

The quality and diversity of open space in higher density development areas is considered more important than quantity, provided there is good access to public open space to be enjoyed for activities as well as aesthetics. A layered approach of measuring access and performance of public open space is particularly important in higher density locations as land restrictions likely require a higher capacity usage of existing public open space.

Table 5.1 summarises the case studies reviewed in more detail in Appendix C. It provides the open space metrics of each case study and their relevance to SRL East.

TABLE 5.1 OPEN SPACE CASE STUDIES

CASE STUDY	WHAT IS IT AND WHICH METRICS ARE APPLIED?	RELEVANCE TO SRL EAST
Arden Urban Renewal Structure Plan Area Melbourne, Victoria	Arden is an urban renewal Structure Plan Area in Melbourne's inner north-west located around the Metro Tunnel's new Arden Station. The Structure Plan aims for open space to be within 300 m walking distance of residents and workers. A minimum of 7.06% of land available for development is allocated for open space (aligning with City of Melbourne requirements).	Similar to the SRL East Structure Plan Areas, Arden plans to develop an employment and residential urban renewal Structure Plan Area centred around a new train station. The metric of open space within 300 m of all residents and workers is appropriate given Arden's relatively compact size and the location of existing open spaces in and around the Structure Plan Area. The SRL East Structure Plan Areas are many magnitudes larger than Arden and their constrained urban contexts would make it difficult to achieve 300 m walkable access to open space across the entire area.
Fishermans Bend Melbourne, Victoria	Fishermans Bend consists of five Structure Plan Areas across two municipalities and is Australia's largest urban renewal project covering approximately 480 ha in inner Melbourne. A target of 200 m walking distance between residents and workers to open space has been set. A target of 9 m^2 public open space per person has been set.	Similar to the SRL East Structure Plan Areas, Fishermans Bend will be a high-density community within a shifting urban landscape. It has comparable public open space needs in which the existing and planned public open space must be high quality, diverse and flexible to compensate for lack of private open space. A target metric of 200 m walking distance to open space would be difficult to achieve across all SRL East Structure Plan Areas due to their large size and constrained urban contexts. A target of 200 m walkable access could be applied to the higher density areas to improve liveability outcomes where private open space may be lacking.
Bowden Structure Plan Area, Adelaide, South Australia	Bowden is a former industrial site, now mixed-use urban renewal Structure Plan Area located 2.5 km north-west of Adelaide's CBD. Bowden has allocated 12.25% open space within the Structure Plan Area. Open space provision is measured by the City of Charles Sturt local council as follows: • 400 m walking distance to regional and district open space • 300 m walking distance to local and neighbourhood reserves.	Bowden was the South Australian Government's first higher density urban infill project focusing on delivering walkable access to flexible, high quality public open spaces in lieu of residential private open space. The SRL East Structure Plan Areas are larger and more constrained within existing urban contexts than the Bowden infill site. The allocation for 12.25% open space and 300m walkable access would likely be difficult to apply, however the 400 m walkable access could be achievable in most contexts within the SRL East Structure Plan Areas.
Bella Vista and Kellyville Precincts, Sydney, New South Wales	Priority high growth areas have been identified near transport hubs in Greater Sydney for accelerated rezoning to create capacity for new housing. Open space needs assessments were undertaken to consider the current and future open space requirements for Bella Vista and Kellyville. A population benchmark is applied for 1 ha per 1000 people for parks, 1 ha per 1000 people for sports spaces and 1 ha for natural spaces, totalling 3 ha per 1000 people. This estimate for the provision of public open space is applied along with access and quality as primary drivers, as well as the identification of quantum gaps in public open space. The following proximity benchmarks are also recognised by the open space needs assessment: • 400 m distance to local parks • 2 km to district parks • 5 km for regional parks and reserves.	Similar to SRL, the precincts identified for rezoning in Greater Sydney are located in existing metropolitan areas that anticipate strong population growth around transportation hubs. The open space metrics are applied with a layered approach, recognising the typology and approximate location where new public open spaces are required, as well as identified enhancements to existing spaces and the need for innovation and creating thinking to ensure adequate public open space provision to meet the diverse needs of future populations.

CASE STUDY	WHAT IS IT AND WHICH METRICS ARE APPLIED?	RELEVANCE TO SRL EAST
The City of London Corporation, London, United Kingdom	The City of London's green spaces provide respite for the capital's residents, workers and visitors. The existing level of provision is used as a benchmark with an aim to maintain this existing ratio of public open space to population. Pocket and local open spaces have a target of 400 m walkable catchments (see Appendix B). A second metric of increasing the amount of high-quality public open space is used in the areas that are lacking. Benchmarking tests the performance of all public open spaces within most Boroughs of Greater London.	The Greater Melbourne population will be around 9 million by the 2050s – similar size to London today. SRL East Structure Plan Areas could apply performance assessments, benchmarking, and cross council partnerships to ensure new and existing public open spaces are performing as required as the population grows.
Vancouver, BC Canada	Vancouver's Parks and Recreation Services Master Plan revealed inequality and gaps in public open space provision. • 2010 – provide green space within a 5-minute walk / 400 m radius 'as the crow flies' which put 92% of the City of Vancouver with 5-minute walk range • 2019 – a focus on equitable provision of public open space was prioritised instead, considering a balance of distance, quantity, and quality to determine how well the city's population is connected to the park system.	Spatial analysis identified areas with less than 0.55 ha of park per 1000 people and/or no park access within a 10-minute walk. The combined analysis reveals a comprehensive picture of access and demand on park space. SRLA could apply a combination of metrics to provide a more fulsome assessment of public open space.

5.3 Principles for a high performing open space network in a higher density urban environment

Principles have been adopted to guide the provision of future open space in the SRL East Structure Plan Areas as they transform into higher density urban environments. These principles were developed with reference to state and local government policy and strategy, relevant case studies, and what is determined as a best practice approach for the Melbourne and SRL East context.

A key consideration is that in higher density urban environments, greater focus must go on access to high quality public open space that will support greater recreational use and activity. Accordingly, priority is given to planning for access, quality and diversity or public open spaces within the local catchment in these highly built-up environments.

PRINCIPLE 1 - POLICY ALIGNMENT AND BEST PRACTICE

Future open space provision for the SRL East Structure Plan Areas should generally align with state and local policy and best practice approaches.

This includes alignment with the following:

- The Victorian Government's Plan Melbourne long-term planning strategy for the future development of Melbourne, and the hallmarks for urban livability in the 20-minute neighbourhood concept – safe, accessible, well-connected, high quality
- Open Space for Everyone and the three directions of Protect, Optimise and Grow, which provide a sound framework for overall planning and investment in public open space.

PRINCIPLE 2 - OPTIMISATION

The public open space network should be optimised to enable the best possible outcomes.

Optimisation of the public open space network occurs through enhancement, improving accessibility, quality, connectivity between open spaces, amenity, optimising activation, programming and use, and enhancing the multi-functional role of every open space. Public open spaces should be welcoming for everyone, networked

and well connected to surrounding areas and other open spaces, and flexible and adaptable to changing needs over time.

Future open space requirements should also be considered as part of a wider network. Open spaces just outside but within walking distance of the SRL East Structure Plan Areas will also serve the needs of future populations within the SRL East Structure Plan Areas, therefore optimising use of these spaces within a 1.6-kilometre station radius (equivalent to a 20-minute walkable distance) will be important.

PRINCIPLE 3 – SUSTAINABILITY

Public open spaces should incorporate sustainable design, nature-based solutions, and contribute to a nature positive future.

In higher density urban environments, public open spaces should be designed, built and maintained to be resilient, integrate with nature and provide valuable outcomes to climate change response, protecting and enhancing biodiversity, local ecosystems and natural habitats, enabling integrated water management and mitigating flooding risks, and increasing urban tree canopy cover and natural shade.

In these built-up urban environments, public open spaces should be a primary avenue for people to connect with nature for their health and wellbeing.

PRINCIPLE 4 - ACCESS

Equity of access to open space – people living and working within the SRL East Structure Plan Areas should have ready access to quality open space within a walkable distance.

In a higher density urban environment, a high degree of access to public open space for residents and workers becomes a primary requirement.

In urban environments, walkable access to public open space is typically within 200 to 400 metres, where a smaller pocket park in a higher density area may be expected to serve a 200-metre walkable catchment, and a larger neighbourhood park would be expected to serve a 400-metre walkable catchment.

In the areas of highest population density, it would be desirable to have access to public open space better than a 400-metre walkable distance.

Access to public open space is a primary metric for this open space assessment.

PRINCIPLE 5 – QUALITY

Public open spaces in each SRL East Structure Plan Area should be high quality.

In higher density urban environments, public open spaces need to be high quality to support higher levels of usage, demands and expectations from adjacent resident and worker populations. Public open spaces should be fit-for-purpose for their intended function and use, as well as resilient and adaptable. This includes quality of design as well as ongoing maintenance to provide for optimal activation and use.

Quality of public open space is a primary metric for this open space assessment.

PRINCIPLE 6 – DIVERSITY

Each SRL East Structure Plan Area should have a diverse range of public open spaces to enable diversity and choice of recreational experiences.

There should be a diverse range of public open spaces by catchment and primary function across the SRL East Structure Plan Areas and the wider 1.6-kilometre station radius, so that open spaces collectively provide

multiple benefits, including diversity of experience, connectivity between open spaces, and environmental functionality (urban heat, biodiversity, water, climate change resilience). This includes accessible public open spaces within walking distance outside the SRL East Structure Plan Area.

A high-performing public open space network in a higher density environment should also be well distributed geographically, so there is equity of access for residents and workers.

Diversity is used as a performance indicator for this open space assessment.

PRINCIPLE 7 – PROVISION

There should be an adequate provision of public open space across the open space network.

When evaluating the performance of public open space networks, provision of public open space is a relevant factor. Provision of open space measures the quantity of open space, usually per capita, in a specific area. As population density rises, so do the challenges and constraints in providing an increased quantum of public open space, particularly in established suburbs where opportunities to deliver additional public open space are constrained by the existing built environment. This principle acknowledges the importance of increasing the overall provision of public open space in the SRL East Structure Plan Areas, balanced with considerations of how much public open space could practically be delivered in each location. Accordingly, provision of public open space is considered a secondary metric, complementing the primary metrics of access and quality that are paramount for assessing public open space in higher density areas.

The application of provision ratios for each 1.6-kilometre station radius and SRL East Structure Plan Area helps to benchmark future open space provision against current provision, especially with an understanding of walkability to these areas. While it is difficult to accurately compare public open space provision ratios in different geographic contexts due to wide-ranging interpretations of how public open space is defined, measured and assessed, a provision indicator of 9 m^2 per person is considered broadly appropriate for this technical assessment. This indicator is an accepted ratio applied globally, as well as locally in the urban renewal of Fishermans Bend.

Open space provision ratios were assessed against resident populations, excluding employment populations. Access to quality public open space is more relevant than provision when considering both resident and employment populations.

5.4 Innovative solutions for open space delivery

In response to the anticipated population growth in each of the SRL East Structure Plan Areas, innovative solutions to improve open space provision need to be considered. The following opportunities are relevant and could be considered innovative depending on current practice in an area:

5.4.1 IMPROVING EXISTING PUBLIC OPEN SPACE

Opportunities to improve and optimise the existing public open spaces include quality enhancements to improve their recreational use and capacity, and to improve their accessibility. Other options include:

- Improving road frontages and access points for existing public open space
- Creating new pedestrian links to improve permeability and access to public open space
- Creating green streets with improved linear connections to and between public open spaces
- Maximising linkages – introducing and widening linkages with useable open spaces
- Opening access to restricted or private open spaces

- Introducing smaller multipurpose recreational facilities into public open spaces to support informal sport and recreation activity such as fitness equipment, half court facilities and climbing walls to help manage demand on formal sports facilities.

Figure 5.1 to Figure 5.4 show examples of optimised open spaces.

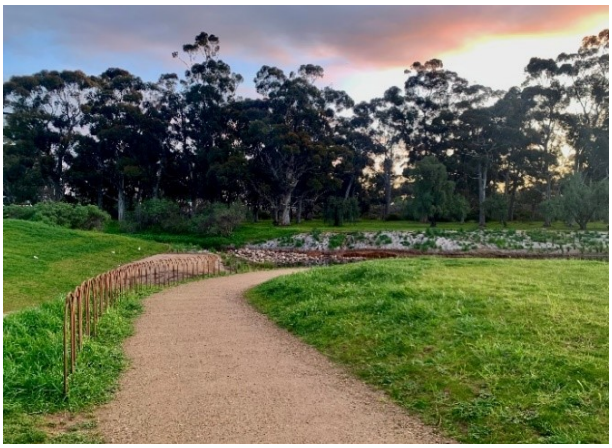


FIGURE 5.1 IMPROVE PERMEABILITY WITH PEDESTRIAN AND CYCLING LINKS – VICTORIA PARK/PAKAPAKANTHI, SA

FIGURE 5.2 MAXIMISING LINKAGES – MARY STREET PIAZZA, WA

FIGURE 5.3 GREEN CORRIDORS – ST GEORGES ROAD CYCLEWAY, MELBOURNE

FIGURE 5.4 SPORT AND RECREATION FACILITIES INTRODUCED TO OPEN SPACE – NEWSTEAD WATERFRONT PARK, QLD

5.4.2 CREATING NEW PUBLIC OPEN SPACE

The delivery of the SRL stations provides a unique opportunity to deliver quality new public open spaces. Strategic site development by private developers will provide opportunities for new public open space, which should be prioritised. Conversion of local or state government land such as car parking areas, and areas under major transport structures such as overhead rail lines provide public open space opportunities. Acquisition of private land can be considered to close out remaining access gaps.

New public open space could be created through the following ways:

- Expanding existing public open space
- Converting or repurposing local and the State government land, such as car parking areas
- Closing roads, and widening existing road reserves

- Converting or repurposing land reserved for future roads or highways
- Using spaces under transport structures.

Figure 5.5 to Figure 5.8 show examples of these open spaces.

FIGURE 5.5 ENLARGED STATION FORECOURT AND INTEGRATION WITH COLEMAN PARADE – GLEN WAVERLEY

FIGURE 5.6 STRATEGIC SITE DEVELOPER PROVISION – CARIBBEAN BUSINESS PARK, SCORESBY

FIGURE 5.7 ROAD CLOSURE - OXFORD STREET RESERVE, COLLINGWOOD

FIGURE 5.8 PUBLIC OPEN SPACES UNDER TRANSPORT STRUCTURES - CLAYTON

5.4.3 INCREASING PUBLIC ACCESS TO EXISTING RESTRICTED OPEN SPACE/PUBLIC LAND

There are opportunities to increase public access to restricted open space areas, which would complement access to public open space areas. This would require collaborative shared use agreements with landowners and managers to preferably secure long-term tenure.

The following land uses provide opportunities for private or restricted open space made available to the public:

- Primary and secondary schools can provide public access to open space areas like sports fields and playgrounds outside school hours
- Universities can provide public access to open space areas such as sports fields outside school hours

- Golf courses include perimeter paths that can be available to the general public
- Cemeteries include paths and passive recreational amenities like seating
- Land reserved for drainage easements and utility corridors can include paths or tracks
- Open and public spaces in shopping and entertainment spaces can be increased, including by offering informal sports spaces and amphitheatres.

Strategic links that would increase permeability and access across open space networks could include opening access to private and restricted open space and other private land.

Figure 5.9 to Figure 5.12 show examples of restricted open spaces.

FIGURE 5.9 NORTHCOTE PUBLIC GOLF COURSE

FIGURE 5.10 WESLEY COLLEGE SPORTS FIELDS, GLEN WAVERLEY

FIGURE 5.11 BOX HILL CEMETERY

FIGURE 5.12 DEAKIN UNIVERSITY GROUNDS, BURWOOD

6 Cheltenham Structure Plan Area

The Cheltenham Structure Plan Area is located in the City of Bayside (on the western side of the Frankston Line) and the City of Kingston (on the eastern side of the Frankston Line).

Southland Shopping Centre is a central focus in the Structure Plan Area, identified as a Major Activity Centre in Plan Melbourne. The arterial roads of Bay Road and Nepean Highway traverse the Structure Plan Area and along with the Frankston Line, are barriers to connectivity of the open space network, with limited crossings.

The Structure Plan Area is predominantly residential, with a cluster of commercial land uses to the south of Bay Road, within and around Southland Shopping Centre or fronting Nepean Highway. The Bayside Business District, centred on Bay Road and extending into the south-west of the Structure Plan Area, is a major focal point for commercial and industrial land use.

Sir William Fry Reserve is the largest and centrally located public open space in the Structure Plan Area, bordered by the Frankston Line, Bay Road and Nepean Highway. The SRL station will be constructed in the southern portion of Sir William Fry Reserve, permanently removing a portion of this public open space.

The network of open spaces in the Structure Plan Area includes one large District Community Park (Sir William Fry Reserve) and predominantly smaller neighbourhood parks. Highett Reserve and the Cheltenham Park Reserve and Playground are large public open spaces located outside the Structure Plan Area, with both featuring multiple sports fields and supporting amenities that service the populations within and outside the Structure Plan Area.

The population in the Cheltenham Structure Plan Area is forecast to more than double (121 per cent) by 2041.[8] This highlights the need to plan public open spaces to serve the future population.

6.1 Existing open space

This section describes existing open space in the Cheltenham Structure Plan Area, and within a 1.6-kilometre radius (20-minute walk) of the SRL East station at Cheltenham.

This includes public open space, private open space (such as at non-government schools) and restricted open space (public spaces but with restricted access and uses, such as university campuses or cemeteries).

6.1.1 PUBLIC OPEN SPACE IN THE STRUCTURE PLAN AREA

There are eight public open spaces covering a combined area of 112,890 m^2 in the Cheltenham Structure Plan Area.

The public open spaces are primarily owned by Bayside City Council and Kingston City Council. The largest park is Sir William Fry Reserve.

Table 6.1 summarises the eight public open spaces in the Structure Plan Area by their primary function, catchment classification and size.

Figure 6.1 shows their location and distribution.

[8] Based on SRLA BIC population projections

TABLE 6.1 PUBLIC OPEN SPACES IN CHELTENHAM STRUCTURE PLAN AREA

PUBLIC OPEN SPACE	PRIMARY FUNCTION	CATCHMENT CLASSIFICATION	AREA (M2)
Eddie Reserve/ Beaumaris Parade Playground	Community park	Neighbourhood	5515
Amberley Park	Community park	Neighbourhood	1879
Jean Street Children's Playground	Community park	Neighbourhood	2462
Lyle Anderson Reserve	Community park	Community	10,158
Pennydale Park	Community park	Neighbourhood	6324
Sir William Fry Reserve	Community park	District	85,389
Train Street Park	Community park	Pocket	567
Tulip Grove Playground	Community park	Pocket	594
Total			112,890

Note: Amberley Park is also known as Jack Road Mirvac Development and Pallisades Boulevard Playground. This is a privately-owned publicly accessible site.

6.1.2 PUBLIC OPEN SPACE IN THE 1.6-KILOMETRE STATION RADIUS

There are 20 public open spaces covering a combined area of 419,459 m^2 within a 1.6-kilometre radius (20-minute walk) of the SRL station at Cheltenham. This includes public open spaces that are partially within the 1.6-kilometre radius, where they straddle the boundary. The public open spaces are primarily owned by Kingston City Council and Bayside City Council.

6.1.3 PRIVATE AND RESTRICTED OPEN SPACE

The main locations of private or restricted open spaces in the Cheltenham Structure Plan Area are:

- Sports clubs – Sandy Mini Golf, Pine Street tennis courts
- Cemeteries – Cheltenham Memorial Park.

Private or restricted open spaces outside the Structure Plan Area but within the 1.6-kilometre station radius are:

- Melbourne Water Retarding Basin
- Sports facilities – Highett Tennis Club, Cheltenham Golf Club, Victoria Golf Club
- Schools – Bayside Special Developmental School, Cheltenham Secondary College, Our Lady of the Assumption School, Cheltenham Primary School
- Cheltenham Pioneer Cemetery.

Figure 6.1 shows the location of private and restricted open spaces as well as public open spaces.

Some of these locations are in areas with gaps in walkable access to public open space. Increasing access to these private or restricted open spaces could be considered as a way of improving walkable access to nearby public open spaces. Examples include the Cheltenham Memorial Park and the Victoria Golf Club, which are both located in areas with gaps in walkable access to public open space. As noted in *Open Space for Everyone*, past practices of using cemeteries and memorial parks as open space should be revisited as an innovative approach to making encumbered open space more accessible, user-friendly community spaces.[9]

The 6 hectares of land at 20 Wangara Road, Sandringham adjacent to the Cheltenham Memorial Park was formerly Sandringham Golf Driving Range – this is shown as restricted open space in Figure 6.1. Bayside City Council is currently investigating future use of this site as potential passive open space, subject to Environmental Protection Authority (EPA) Victoria requirements, council strategies and plans).[10]

[9] Department of Environment, Land, Water and Planning, 2021, Open Space for Everyone – Open Space Strategy for Metropolitan Melbourne, < https://www.environment.vic.gov.au/open-space-for-everyone>, accessed 16 April 2024.
[10] Bayside City Council, 2024, Future Use of 20 Wangara Road, Sandringham < Future use of Wangara Road site | Have Your Say - Bayside City Council>, accessed 16 April 2024

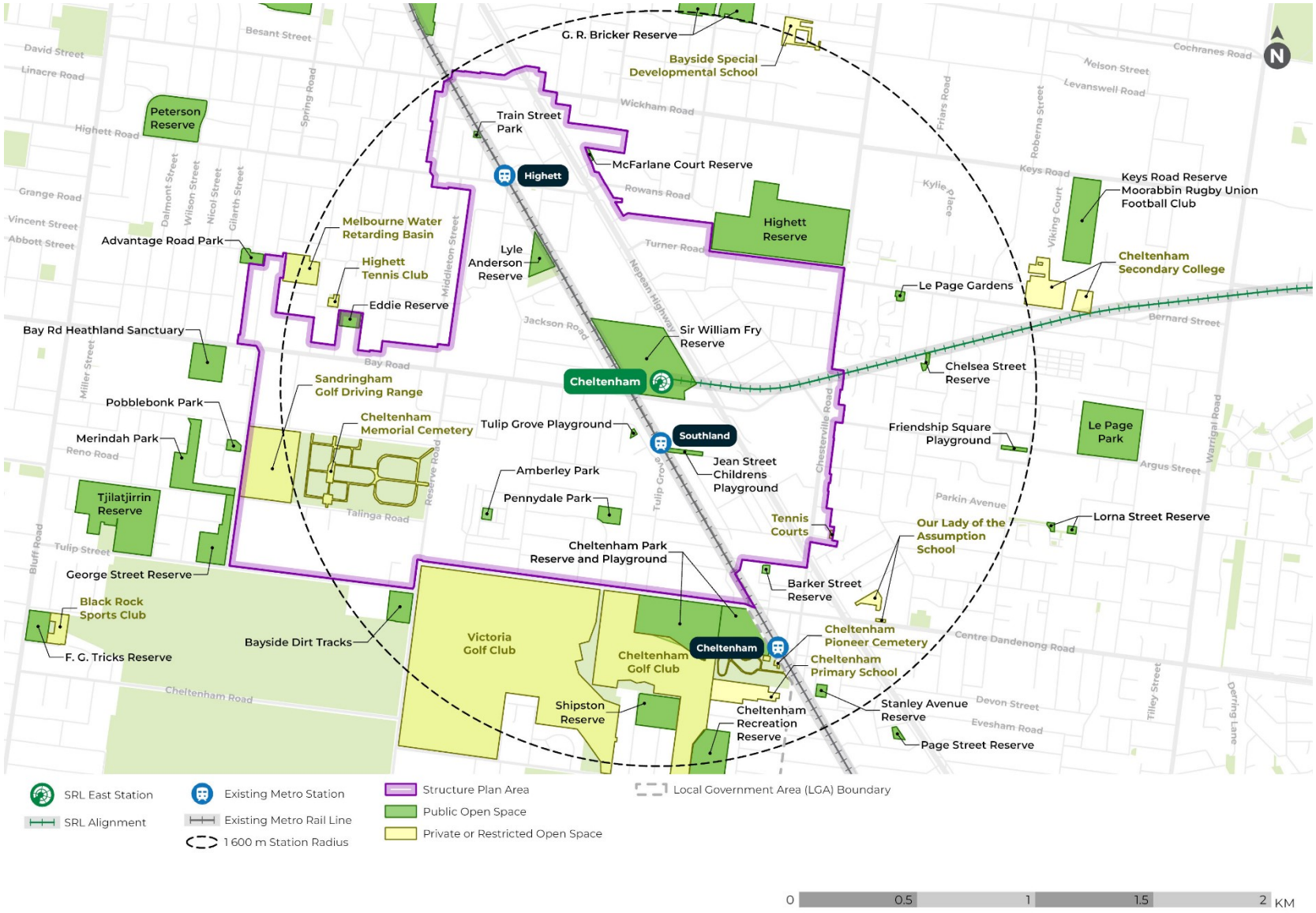


FIGURE 6.1 PUBLIC, PRIVATE AND RESTRICTED OPEN SPACE IN CHELTENHAM STRUCTURE PLAN AREA AND 1.6-KILOMETRE STATION RADIUS

6.1.4 SRL EAST COMMITTED AND PROPOSED PROJECTS

Within the approvals for SRL East (rail and infrastructure) there are requirements to manage and mitigate impacts on public open space and recreational infrastructure. The requirements include temporarily offsetting open space impacted by construction, and the relocation of infrastructure near existing sites before SRL East construction starts.

Table 6.2 describes the proposed temporary public open space (as of February 2024) to be provided as an offset location during the occupation of Sir William Fry Reserve for construction of SRL East.

TABLE 6.2 PROPOSED OFFSET PUBLIC OPEN SPACE SITES

OFFSET PUBLIC OPEN SPACE	LOCATION	APPROX SIZE	DESCRIPTION
Cheltenham offset site. Location TBC – within the Cheltenham / Highett area	Under investigation	TBC	Offset site for portion of Sir William Fry Reserve that will be permanently impacted by SRL East is under investigation. To open to the public in 2027.

The impacted section and remaining enhanced section of public open space at Sir William Fry Reserve was considered for the analysis and recommendations of this report.

Note: The location of the offset public open space was not determined before completion of this report and so could not be considered within the analysis of open space in Cheltenham.

6.2 Performance of existing open space network

This section outlines the quantitative and qualitative performance of the existing open space network, with reference to:

- Access to open space, and where the significant gaps are, including the extent of private and restricted open space
- Quality of existing open space
- Diversity of function and catchment classification across the open space network
- Provision of open space across the 1.6-kilometre station radius and within the Structure Plan Area.

6.2.1 ACCESS TO OPEN SPACE

The primary metrics for assessing the performance of existing public open space networks measure the access and quality of public open space.

Access is assessed by identifying gaps in walkable (400 metres) access to public open space in the Box Hill Structure Plan Area.

6.2.1.1 Extent of existing public open space within a 400-metre walk

The spatial analysis in Figure 6.2 demonstrates that over half of the Structure Plan Area (60 per cent) has access to public open space within a 400-metre walk.

Table 6.3 shows the existing area proportion and number of addresses within the Cheltenham Structure Plan Area with 400-metre walkable access to public open space. Refer to Appendix H and Appendix I for mapping analysis of each open space classification and its associated walkable catchment.

TABLE 6.3 CHELTENHAM EXISTING ACCESS TO PUBLIC OPEN SPACE

CHELTENHAM STRUCTURE PLAN AREA	EXISTING ACCESS TO PUBLIC OPEN SPACE WITHIN 400 M WALKABLE DISTANCE
PROPORTION OF STRUCTURE PLAN AREA COVERED	60%
NUMBER OF ADDRESSES	5327

6.2.1.2 Walkable access gaps

The Cheltenham Structure Plan Area and the 1.6-kilometre station radius have low walkable access to public open spaces. Lack of permeability in the street network in Cheltenham contributes to a number of small gaps in walkable access to open space. Some gaps could be reduced if poor street permeability is improved (such as creating new links through cul-de-sacs in residential and industrial areas). Nepean Highway, Bay Road and the Frankston Line impact connectivity and walkable access across the public open space network. There are also large areas with gaps in walkable access due to a lack of public open spaces across the Structure Plan Area.

Seven significant gaps in access to public open space are shown in Figure 6.2.

These gaps could be resolved by applying an appropriate balance of the following options:

- Improving access to existing public open space by increasing the permeability of the street network or bridging a major barrier such as a railway line
- Providing new public open space
- Opening private or restricted open space to greater public access (such as a cemetery or school grounds). This option is considered more appropriate as a secondary or support approach to improving access to open space and is not relied on as a primary solution in this technical assessment, due to the lack of control and longer-term tenure of such arrangements.

Figure 6.2 shows the 400-metre walkable access to public open space in the Cheltenham Structure Plan Area and identifies the areas with a significant gap in walkable access.

Gap area 1

Residential area (with commercial land uses along Highett Road), located north of the existing Highett Station, between Nepean Highway and the Frankston Line. A pocket community park (Train Street Park) is located adjacent to this area, although access is blocked by the rail line and a disconnected street network. No other public open spaces are located in proximity of this gap area.

Gap area 2

Adjacent to the eastern side of the Frankston Line, within Development Victoria's Highett Gasworks site. This area is near Sir William Fry Reserve (located to the south) and Lyle Anderson Reserve (on the western side of the Frankston Line) although it does not have direct connections to either public open space.

Gap area 3

North of Bay Road and east of Middleton Street. This area includes existing residences and a large private residential development (Highett Common), located on the former CSIRO site. There are 4 hectares of public open space proposed within Highett Common.

Gap area 4

North and south of Bay Road, in the eastern section of Cheltenham Structure Plan Area. This area is mostly residential land uses surrounding the eastern side of Southland Shopping Centre and associated car park. No public open spaces are located near this area.

Gap area 5

A large gap is located south of Bay Road, around Chandos Street and Mernda Avenue where there is a range of residential, commercial and industrial land uses. This gap is due to a lack of open spaces and poor connectivity in the surrounding street network (long blocks and cul-de-sacs).

Gap area 6

North of Park Road in a residential area around Correa Avenue. This area is close to two neighbourhood community parks that are not accessible due to the poor connectivity in the surrounding street network.

Gap area 7

A large gap around Wangara Road to the west of Reserve Road. This area does not have existing public open space and is a mix of commercial and industrial land uses and private and restricted open space in the form of Cheltenham Memorial Park and the former Sandringham Golf driving range. Bayside City Council is currently considering opportunities for the 6 hectares of land that formerly comprised the Sandringham Golf driving range to be converted to passive public open space (subject to Environmental Protection Authority requirements).[11] There is opportunity for the Cheltenham Memorial Park to increase public access as a provider of public open space and to improve permeability and east-west connectivity in Cheltenham.

[11] Bayside City Council, 2024, Future Use of 20 Wangara Road, Sandringham < Future use of Wangara Road site | Have Your Say - Bayside City Council>, accessed 16 April 2024

FIGURE 6.2 400 M WALKABLE ACCESS TO PUBLIC OPEN SPACE AND SIGNIFICANT GAP AREAS FOR THE CHELTENHAM STRUCTURE PLAN AREA

6.2.2 QUALITY OF OPEN SPACE

An assessment of the quality of the current public open spaces informed this technical assessment. The quality assessment framework is described in more detail in Appendix D.

The methodology for assessing the quality of the public open spaces involved:

1. A site visit to observe thoroughly, work through considerations, assign a performance score of 1 to 5 against the criteria, taking notes and photos to support findings.
2. Calculating a quality performance score for each site (1 to 5 rating scale).
3. Assigning a site / activation potential score (this indicator is not a direct performance score; it is a professional observation of what 'could be' and assists with prioritisation.

The performance criteria rating scale is shown in Table 6.4.

TABLE 6.4 CRITERIA RATING SCALE

SCORE			RANK	DESCRIPTION
5	Very good		High	Meets criteria very effectively
4	Good			Meets criteria adequately with minor limitation
3	Fair		Medium	Criteria partially met
2	Poor			Criteria poorly or only partially met
1	Very poor		Low	Criteria not achieved

Table 6.5 shows the overall quality assessment and site potential rating score for each park.

TABLE 6.5 CHELTENHAM STRUCTURE PLAN AREA OPEN SPACE QUALITY ASSESSMENT

PUBLIC OPEN SPACE IN CHELTENHAM STRUCTURE PLAN AREA	PRIMARY FUNCTION	CATCHMENT CLASSIFICATION	AREA (M2)	QUALITY ASSESSMENT RATING	SITE POTENTIAL RATING
Eddie Reserve/ Beaumaris Parade Playground	Community park	Neighbourhood	5515	4	4
Amberley Park	Community park	Neighbourhood	1879	5	4
Jean Street Children's Playground	Community park	Neighbourhood	2462	4.6	4
Lyle Anderson Reserve	Community park	Community	10,158	3.4	4
Pennydale Park	Community park	Neighbourhood	6324	4.2	4
Sir William Fry Reserve	Community park	District	85,389	4.8	4
Train Street Park	Community park	Pocket	567	3.4	3
Tulip Grove Playground	Community park	Pocket	594	4.2	3

The quality assessment rating scale is from 1 'Very poor' to 5 'Very good'. Scores of 4 to 5 indicate higher quality public open spaces, and scores of 1 to 2 indicate lower quality public open spaces.

The higher-quality public open spaces include Sir William Fry Reserve (Figure 6.3), Jean Street Children's Playground (Figure 6.4) and Amberley Park. Sir William Fry Reserve plays an important role as a large community park with a district catchment, providing a wide range of facilities and features, with attractive open

spaces. It has good potential for further improvement to enable increased use. Jean Street Children's Playground has recently been upgraded with an adventure play space, new landscaping and paths.

The lower quality public open spaces include Train Street Park (Figure 6.5), Lyle Anderson Reserve (Figure 6.6) which both score a fair / medium quality rating due to their current design, landscaping and condition of facilities. Both sites have potential for quality improvements, which will enable increased use.

FIGURE 6.3 SIR WILLIAM FRY RESERVE

FIGURE 6.4 JEAN STREET CHILDRENS PLAYGROUND

FIGURE 6.5 TRAIN STREET PARK

FIGURE 6.6 LYLE ANDERSON RESERVE

Figure 6.7 shows the quality of public open space in the Cheltenham Structure Plan Area. The coverage of walkable access to exiting public open spaces is also shown, highlighting the two primary metrics of access and quality in the Cheltenham Structure Plan Area.

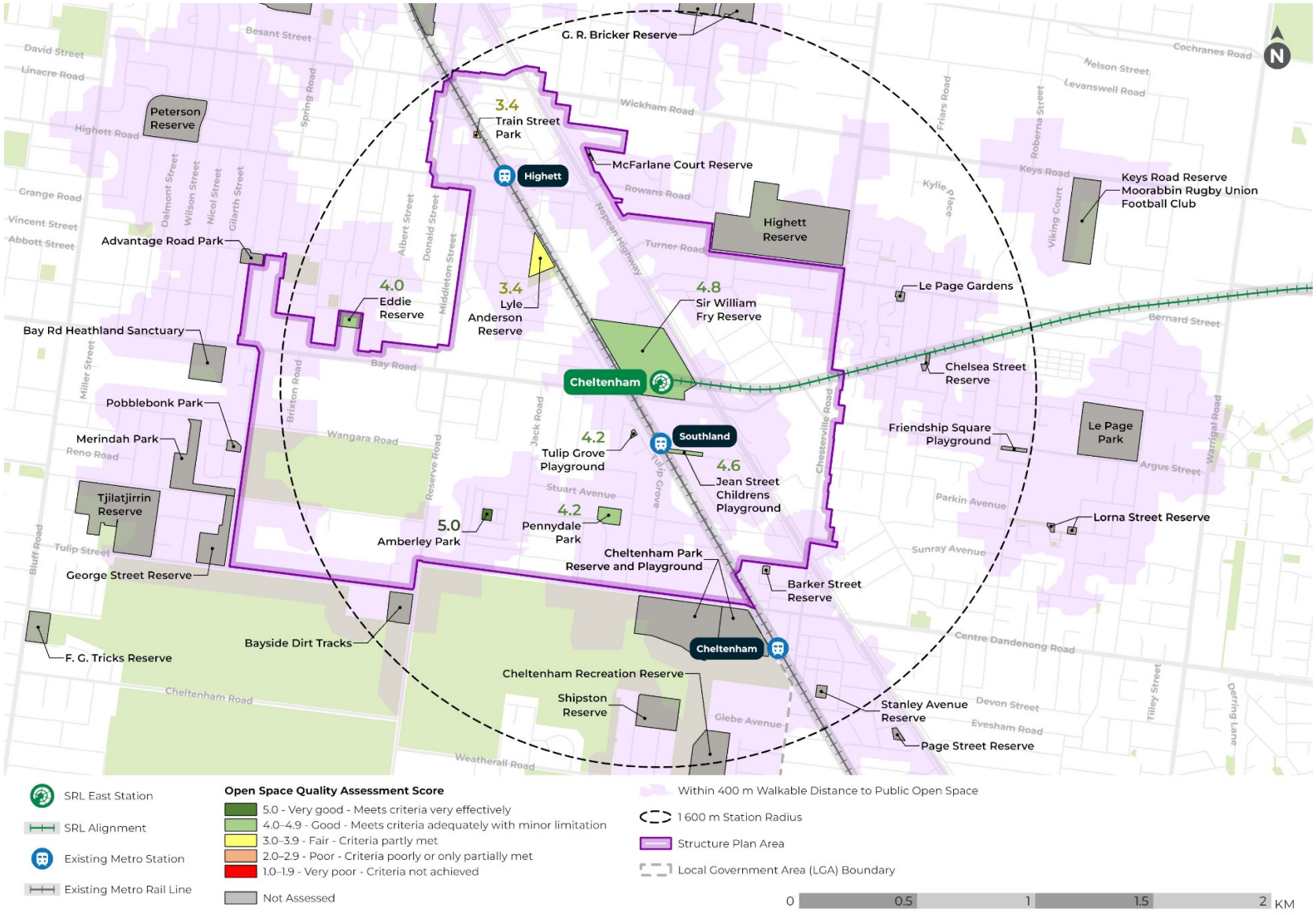


FIGURE 6.7 QUALITY OF PUBLIC OPEN SPACE

6.2.3 DIVERSITY OF OPEN SPACE

There should be a diverse range of public open spaces by *catchment* and *function* across the SRL East Structure Plan Areas and the wider 1.6-kilometre station radius. The function of a public open space may change over time depending on community needs and trends, whereas the hierarchy type is less flexible due to the areas required.

Local pocket, neighbourhood, community and district catchments are used to define the catchment hierarchy and geographic distribution of public open space. The function classifications of community park, landscape park, nature park, linear park, sports park and civic space have been applied to this assessment.

6.2.3.1 Structure Plan Area

There are eight public open spaces covering a combined area of 112,890 m^2 in the Cheltenham Structure Plan Area.

There is a lack of diversity in the function of the spaces, with all being Community Parks. There is a range of spaces by hierarchy, with pocket, neighbourhood, community and district spaces all located across the Cheltenham Structure Plan Area. Sir William Fry Reserve in the centre of the Structure Plan Area is the largest open space, and a destination park for informal recreation which serves as a district catchment across suburbs.

Table 6.6 summarises the eight public open spaces in the Structure Plan Area by their primary function and catchment classification and total combined area (in square metres).

Figure 6.1 shows their location and distribution.

TABLE 6.6 PRIMARY FUNCTION AND CATCHMENT CLASSIFICATION OF PUBLIC OPEN SPACES IN CHELTENHAM STRUCTURE PLAN AREA

CHELTENHAM STRUCTURE PLAN AREA	COMMUNITY PARK	LANDSCAPE PARK	NATURE PARK	LINEAR PARK	SPORTS PARK	CIVIC SPACE
POCKET	2 (1,161 m^2)					
NEIGHBOURHOOD	4 (16,180 m^2)					
COMMUNITY	1 (10,158 m^2)					
DISTRICT	1 (85,389 m^2)					

Table 6.7 shows the diversity rating for public open space in the Cheltenham Structure Plan Area.

The Cheltenham Structure Plan Area rates average for diversity of public open spaces. It has above average diversity for the catchments and below average for function (only community parks), therefore the overall rating is ‘average’.

TABLE 6.7 DIVERSITY RATING FOR PUBLIC OPEN SPACE IN CHELTENHAM STRUCTURE PLAN AREA

DIVERSITY CRITERIA		DIVERSITY RATING
ABOVE AVERAGE	More than two thirds of the public open spaces in the Structure Plan Area are represented by catchment and primary function classifications.	
AVERAGE	One third to two thirds of the public open spaces in the Structure Plan Area are represented by catchment and primary function classifications.	✓
BELOW AVERAGE	Less than one third of the public open spaces in the Structure Plan Area are represented by catchment and primary function classifications.	

6.2.3.2 1.6-kilometre station radius

There are 20 public open spaces covering a combined area of 419,459 m^2 within a 1.6-kilometre radius (20-minute walk) of the SRL station at Cheltenham. This includes public open spaces that are partially within the 1.6-kilometre radius, where they straddle the boundary.

The two main public open spaces are Highett Reserve, and Cheltenham Park Reserve and Playground. All the other spaces are smaller public open spaces. There is a lack of diversity of open space by function, with a predominance of Community Parks. The 1.6-kilometre station radius contains three sports parks (Cheltenham Park Reserve, Cheltenham Recreation Reserve, and Shipston Reserve), which will serve the Structure Plan Area. Highett Reserve also contains sports ovals.

There is a good distribution of large and small public open spaces around the 1.6-kilometre station radius, including a number of sites on the periphery. The hierarchy of open spaces are well distributed in the 1.6-kilometre radius with all types included (pocket, neighbourhood, community, district).

Table 6.8 shows the primary function and catchment classification of the 20 public open spaces in the 1.6-kilometre station radius.

TABLE 6.8 PRIMARY FUNCTION AND CATCHMENT CLASSIFICATION OF PUBLIC OPEN SPACES IN CHELTENHAM 1.6-KILOMETRE STATION RADIUS

CHELTENHAM 1.6 KM STATION RADIUS	COMMUNITY PARK	LANDSCAPE PARK	NATURE PARK	LINEAR PARK	SPORTS PARK	CIVIC SPACE
POCKET	7					
NEIGHBOURHOOD	5					
COMMUNITY	2				2	
DISTRICT	2		1		1	

6.2.3.3 Distribution of Open Space

The distribution of public open space by hierarchy can be assessed through a spatial analysis that applies the walkable catchments for each hierarchy classification identified in section 2.3.2. This analysis considers the different walkable catchments of each public open space by hierarchy (pocket, neighbourhood, community, district) as a different performance indicator to the 'access' gap analysis in section 6.2.1 which identifies how much of the Structure Plan Area is within 400m walkable access to any type of public open space (400m walkable access being a primary metric of this technical assessment).

A high-performing public open space network should be well distributed geographically, so there is a suitable spread of public open spaces by hierarchy. Figure 6.8 incorporates the performance indicator of diversity with the walkable catchments of public open spaces by hierarchy across the Cheltenham Structure Plan Area and 1.6-kilometre station radius. The darker purple layers in the map represent a crossover of walkable catchments of different spaces, demonstrating locations of good public open space diversity.

Most of the Cheltenham Structure Plan Area is within the walkable catchment of more than one classification of public open space. The locations most lacking diversity are south of Bay Road near Reserve Road and the south-west corner of the Structure Plan Area. Refer to Appendix H for detailed mapping analysis of each open space classification and its associated walkable catchment.

Appendix I includes spatial analysis of the function of each existing public open space in the Structure Plan Area and 1.6-kilometre station radius. Cheltenham has only community park functions located within the Structure Plan Area. Sports parks are evenly dispersed in the surrounding area to the north, south, east and west, with nature parks located just outside the Structure Plan Area boundary to the south and west.

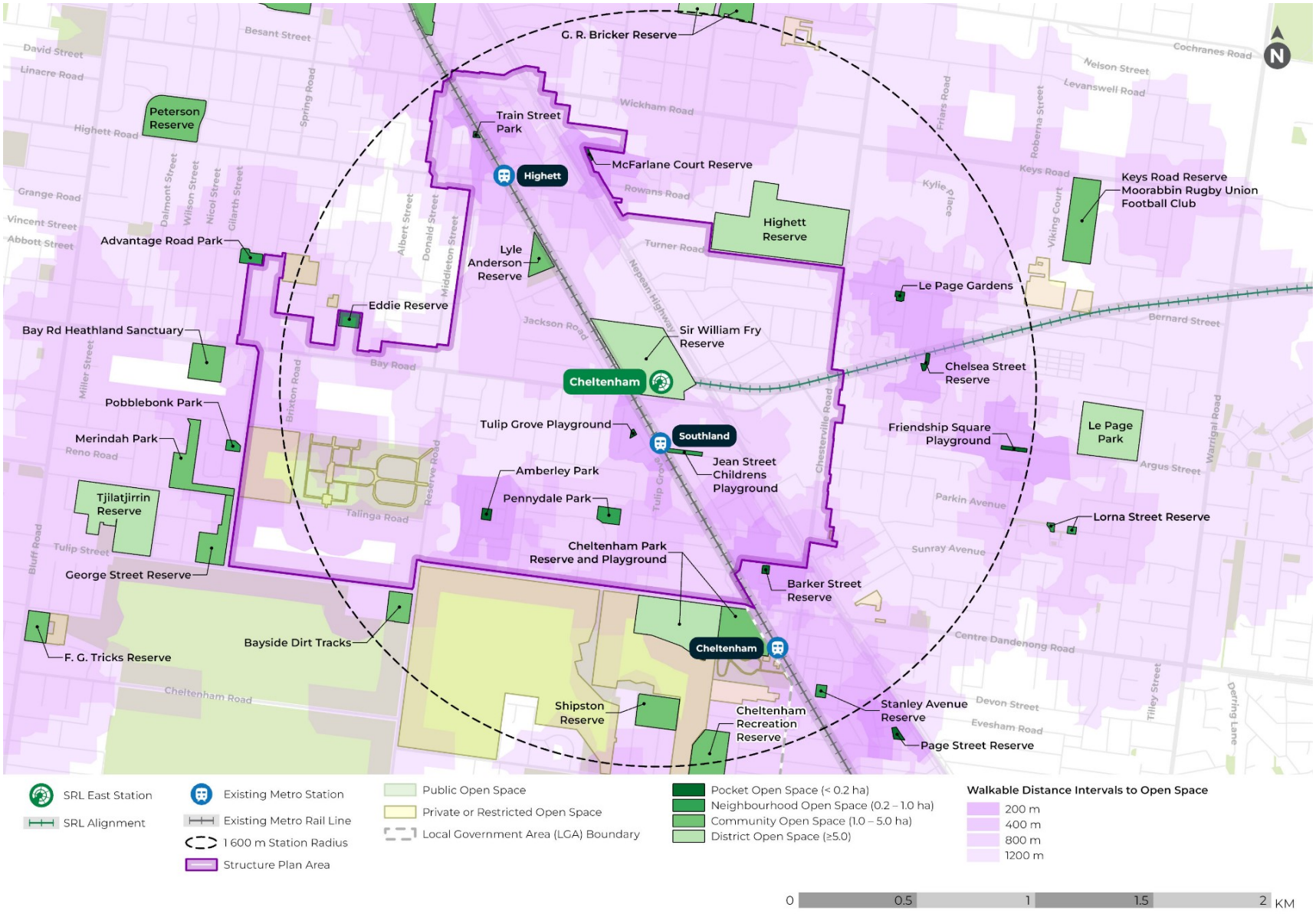


FIGURE 6.8 DIVERSITY OF PUBLIC OPEN SPACE BY HIERARCHY CATCHMENTS

6.2.4 PROVISION OF OPEN SPACE

The secondary metric for assessing the performance of existing public open space networks measures the *provision* of public open space against the provision per capita ratio of 9 m^2/person.

The current provision of public open space in the Cheltenham 1.6-kilometre station radius is 20.8 m^2/person, as shown in Table 6.9.

TABLE 6.9 EXISTING PUBLIC OPEN SPACE PER PERSON – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
	419,459	20,200	20.8

The current provision of public open space in the Cheltenham Structure Plan Area is 12 m^2/person, as shown in Table 6.10.

TABLE 6.10 EXISTING PUBLIC OPEN SPACE PER PERSON – STRUCTURE PLAN AREA

STRUCTURE PLAN AREA	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
	112,890	9400	12

6.2.5 CHALLENGES AND OPPORTUNITIES

The challenges and opportunities in transitioning to higher density areas in relation to the metrics and performance indicators are summarised in Table 6-11.

TABLE 6.11 OPEN SPACE NETWORK PERFORMANCE

OPEN SPACE METRIC	SUMMARY OF PERFORMANCE OF EXISTING OPEN SPACE NETWORK	CHALLENGES / OPPORTUNITIES
METRICS		
Access	• Cheltenham Structure Plan Area has a low level of walkable access to public open spaces. • There are seven significant gaps in access to public open space to be addressed: 1. North of Highett Station, between Nepean Highway and the Frankston Line. 2. Adjacent to the eastern side of the Frankston Line, within Development Victoria's Highett Gasworks site. 3. North of Bay Road and east of Middleton Street. This area includes existing residences and a large private residential development (Highett Common), located on the former CSIRO site. 4. Surrounding the eastern side of Southland Shopping Centre and associated car park (mostly residential area) 5. South of Bay Road, around Chandos Street and Mernda Avenue (commercial and industrial land uses). Lack of open spaces and poor connectivity in the surrounding street network (long blocks and cul-de-sacs). 6. North of Park Road in a residential area around Correa Avenue. Poor connectivity in the surround street network. 7. A large gap around Wangara Road to the west of Reserve Road. This area has private or restricted open space in the form of Cheltenham Memorial Park and the former Sandringham Golf driving range.	• Nepean Highway, Bay Road and the Frankston Line impact connectivity and walkable access across the public open space network. There are also large areas with no public open spaces. • Enable a highly pedestrianised and activated core area around the SRL station, including a multi-functional civic square, and active mode transport (walking, cycling) connections to key open space areas including Sir William Fry Reserve and Lyle Anderson Reserve. • Create crossing points to overcome the physical barrier created by the Frankston Line and Nepean Highway. • Primary opportunities lie with new strategic pedestrian linkages that cross barriers, create links between long street blocks and improve permeability and access to existing open space. • There are 4 ha of public open space proposed in Highett Common. • There is opportunity for public open space to be delivered at the Highett Gasworks site. • Cheltenham Memorial Park is a large area of restricted open space which provides an opportunity for further public access to help meet growing demand. • The 6 ha of land at 20 Wangara Road, Sandringham (adjacent to Cheltenham Memorial Park) was formerly used as a golf driving range. The City of Bayside is currently investigating potential opportunity to use this site as passive public open space (subject to Environmental Protection Authority requirements, council strategies and plans).
Quality	• Six of the eight public open spaces in the Structure Plan Area have a higher quality rating (4 or 5), including Sir William Fry Reserve, Jean Street Children's Playground, and Amberley Park. • Sir William Fry Reserve has an important role as a large Community Park with a district catchment, providing a range of facilities and features, with attractive open spaces. It has good potential for further improvement to enable increased use.	• The challenge is that all public open spaces within the Structure Plan Area will need to be high quality (rating 4 or 5) to cater to the increased demand and use anticipated. • The opportunity is to prioritise quality improvements, starting with the sites with the lowest quality ratings and higher site potential ratings. The lower-quality public open spaces include Train Street Park and Lyle Anderson Reserve due to their current design, landscaping and condition of facilities. Both sites have potential for quality improvements, which will enable increased use.

OPEN SPACE METRIC	SUMMARY OF PERFORMANCE OF EXISTING OPEN SPACE NETWORK	CHALLENGES / OPPORTUNITIES
Provision	• The current provision of public open space in the Cheltenham 1.6 km station radius is 20.8 m^2/person, and in the Structure Plan Area is 12 m^2/person.	• The main challenge will be the declining level of public open space provision as the population increases, and that this may be perceived as being detrimental to future liveability within the SRL East Structure Plan Areas. • There are opportunities to explore innovative ways to deliver new public open spaces to balance the decrease in open space provision ratios. Improvements in access, quality and diversity of existing public open spaces will assist in maintaining liveability within the SRL East Structure Plan Areas.
PERFORMANCE INDICATORS		
Diversity	• The Structure Plan Area has an average rating for diversity, with all current public open spaces being community parks, however, the open space hierarchy is diverse. • The 1.6 km station radius has good diversity of function and distribution of public open spaces. The main gaps in function are landscape parks, linear parks and civic spaces.	• The challenge is to provide a suitably diverse and well distributed mix of public open spaces within the Structure Plan Area, across both the primary function and classification hierarchies. • The opportunity lies with the provision of new public open spaces in the Structure Plan Area that are well distributed and provide greater levels of diversity.

6.3 Future open space needs

Factors influencing future demand for open space in the Cheltenham Structure Plan Area include:

- Population growth forecasts
- Population density and where those people will live.

6.3.1 LOCAL GOVERNMENT PRIORITIES AND OPPORTUNITIES FOR CHELTENHAM STRUCTURE PLAN AREA

Local government documents relating to public open space in the Cheltenham Structure Plan Area are summarised in Table 6.12. Priorities and opportunities are identified, as well as their relevance to the Structure Plan Area. As the Cheltenham Structure Plan Area is located across the City of Kingston and City of Bayside, documents from both councils are summarised in Table 6.12.

TABLE 6.12 CITY OF KINGSTON AND CITY OF BAYSIDE PRIORITIES AND OPPORTUNITIES FOR CHELTENHAM STRUCTURE PLAN AREA

COUNCIL DOCUMENT	PRIORITIES / OPPORTUNITIES	RELEVANCE TO STRUCTURE PLAN AREA
2023-2033 Open Space Strategy, City of Kingston (2023)	• Reinforce Sir William Fry Reserve as a regional standard youth precinct (area for young adult activities). • Continue to work with Development Victoria to deliver open space within the Highett Gasworks site in line with open space requirements and commitment from Victorian Government to rectify open space shortfall from Sir William Fry Reserve. • Investigate opportunities for improved connectivity to open space assets in the neighbouring City of Bayside. • Work with SRLA to prepare an Open Space Master Plan for Sir William Fry Reserve and the Highett Gasworks site, building on the concepts developed in the Cheltenham SRL Advocacy report.	• SRLA is working with the City of Kingston on plans for Sir William Fry Reserve (impacted by SRL East construction and operation). • New public open space as part of SRL East Rail approval requirements are under investigation in the Highett / Cheltenham area. • New open space within the Highett Gasworks site would improve connectivity and address a gap in the open space network. • Proposed pedestrian crossings over the Frankston Line would improve connectivity between open space assets across the two municipalities.
Bayside Open Space Strategy: Suburb Analysis and Action Plan, Bayside City Council (2012)	• Providing additional open space in the area where open space is deficient through the Council's planning provisions. • In Highett, there is opportunity for the Council to: » Improve the trail network to link places with poor access to significant open space in the suburb » Investigate shared uses of open space with schools in the area, both private and public, to formalise arrangements for the community to access school ovals and playgrounds » Increase the number of or linkages to sportsgrounds and Social Family Recreation spaces » Provide dog off-leash areas in open space where appropriate.	• Opportunities for pedestrian and cycle links along the Frankston Line, to and from the CSIRO site to the existing Highett Station, and from west to east, particularly toward Lyle Anderson Reserve. • Increase access to Sir William Fry Reserve in Highett. • Seek a land contribution to be given in lieu of cash at the CSIRO site to alleviate some of the suburb's open space deficiencies (open space has since been included in the CSIRO 'Highett Common' master plan).

6.3.2 LOCAL GOVERNMENT FEEDBACK ON THE CHELTENHAM STRUCTURE PLAN AREA

The City of Kingston and City of Bayside provided feedback to SRLA on key directions for the Cheltenham Structure Plan during the first half of 2024, including feedback on issues and opportunities related to open space. Feedback from the City of Kingston included the need for more play spaces in Cheltenham and surrounds as demand will increase due to SRL East. Connectivity across the Cheltenham Structure Plan Area should be addressed, particularly due to the barriers of the Frankston Line and Nepean Highway.

City of Bayside feedback included the need to expand cycling routes and wayfinding to connect open spaces and facilities across the Cheltenham Structure Plan Area, including connections between the Highett Gasworks site and Lyle Anderson Reserve. Increased greenery was also encouraged. The open space issues and opportunities discussed are summarised in Table 6.13.

TABLE 6.13 CITY OF KINGSTON AND CITY OF BAYSIDE FEEDBACK ON OPEN SPACE IN THE CHELTENHAM STRUCTURE PLAN AREA

ISSUES / OPPORTUNITIES RAISED BY CITY OF KINGSTON
• SRL East will significantly increase demand for play provision in Cheltenham and its surrounds, with a likely need to consider alternative urban spaces for play • Opportunities for teen and adult play are limited in Cheltenham, and numbers of teens are high and forecast to significantly increase • The accessibility and quality of existing playgrounds could be improved, and access to play spaces on the City of Bayside side of the railway line could be improved and across Nepean Highway • Seven playgrounds in Cheltenham are considered beyond their useful life, which equates to almost 50% of available playgrounds in the suburb • The diversity of current and future public open space in Cheltenham and Highett should be considered to ensure diversity is planned and provided for • Increased greenery is supported • Sir William Fry Reserve should be reinforced as a regional standard youth precinct, building on concepts from the City of Kingston Cheltenham SRL East Advocacy Report.
ISSUES / OPPORTUNITIES RAISED BY CITY OF BAYSIDE
• Links between existing and proposed public open spaces should be improved • Connections should be created between the Highett Gasworks site and Lyle Anderson Reserve • Improving existing open spaces should be considered to provide for population growth • Increased greenery is supported • Opportunities for new and enhanced public open space in City of Bayside include Wangara Road (passive recreation) and upgrades to Lyle Anderson Reserve.

6.3.3 STRUCTURE PLAN AREA DENSITY PROJECTIONS

The locations of highest projected residential population density in 2041 in the Cheltenham Structure Area are centred around the SRL station core and the main arterial roads such as Nepean Highway, Highett Road and Bay Road.

As described in Section 5.3 Principle 4, a high degree of access to public open space for residents and workers becomes a primary requirement in higher density urban environments. In the highest density areas of the Cheltenham Structure Plan Area, greater than 400-metre walkable access to public open space is preferred, so 200-metre walkable access becomes a desirable benchmark where possible. This is assessed more in the next section.

Figure 6.9 illustrates the 2041 projected population densities for the Cheltenham Structure Plan Area at neighbourhood level.

Figure 6.10 illustrates the 2041 projected employment densities for the Cheltenham Structure Plan Area at neighbourhood level.

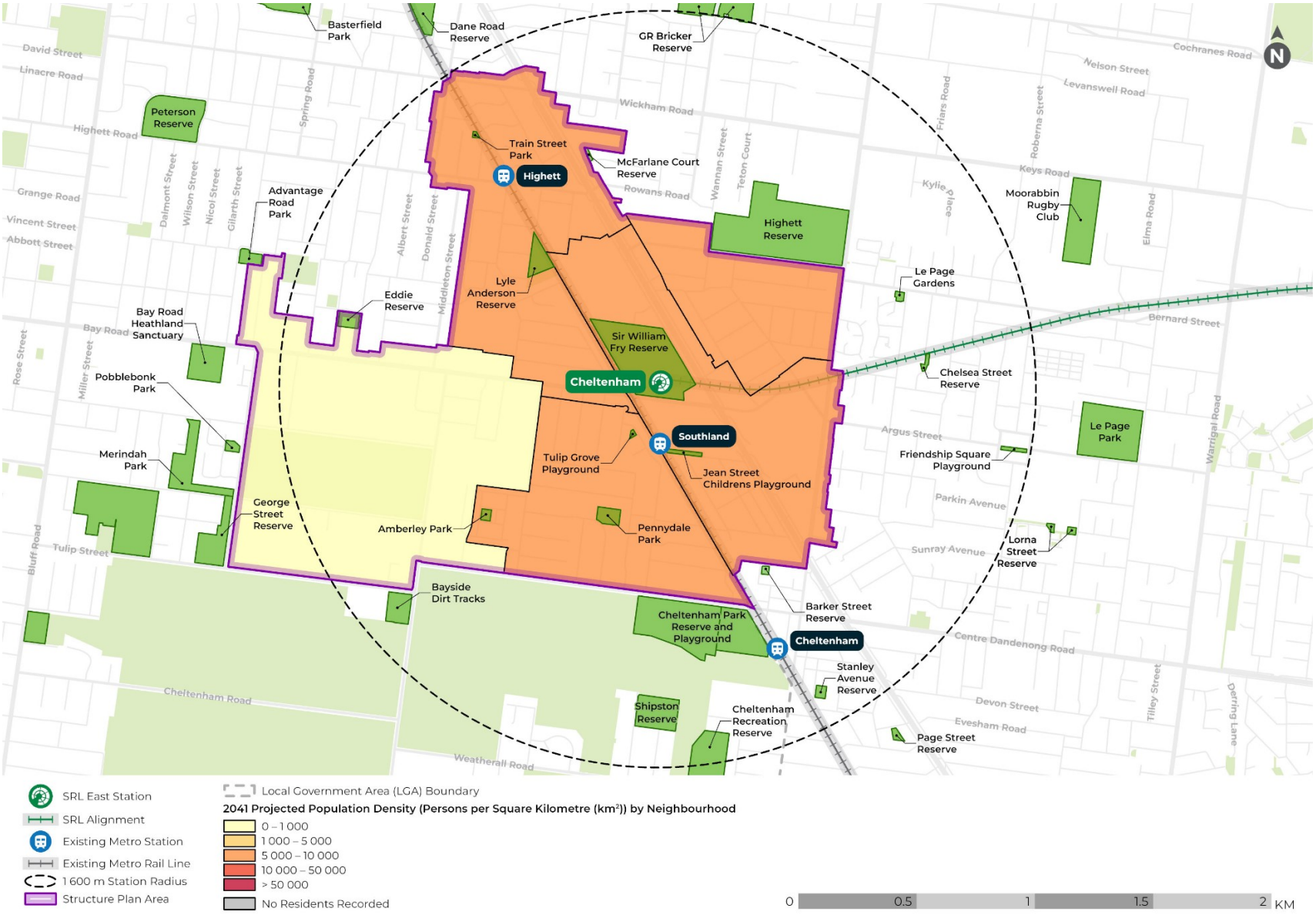


FIGURE 6.9 2041 PROJECTED RESIDENTIAL DENSITY FOR CHELTENHAM STRUCTURE PLAN AREA

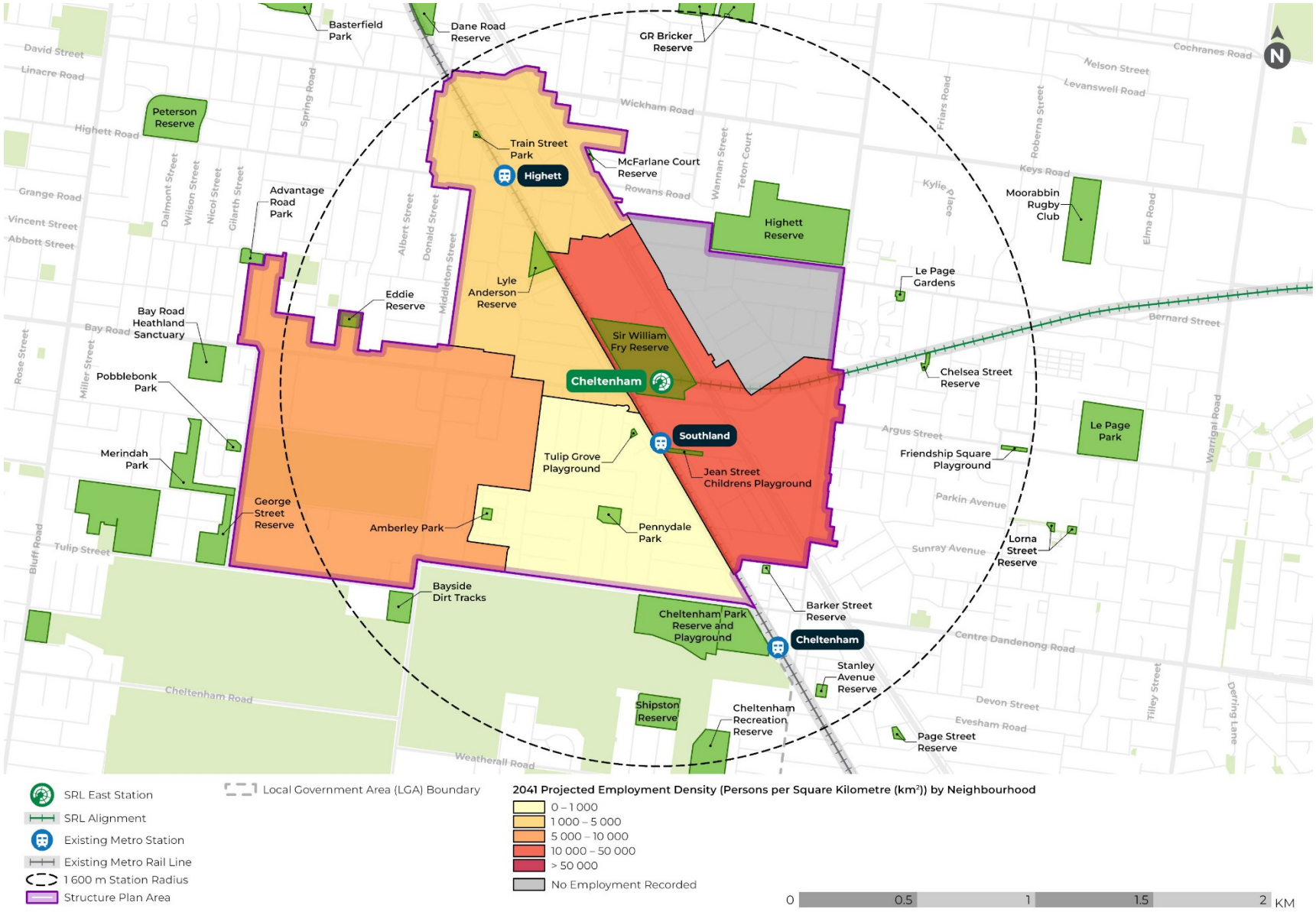


FIGURE 6.10 2041 PROJECTED EMPLOYMENT DENSITY FOR CHELTENHAM STRUCTURE PLAN AREA

6.3.4 ACCESS

Changes to the open space network in the Cheltenham Structure Plan Area are needed to support its transition to a higher density urban environment. These changes include improving walkable access to public open space across the Structure Plan Area, as well as the areas around the station core where the highest population density is expected.

6.3.4.1 Changes needed to support transition to higher density environments

The following changes in the Cheltenham Structure Plan Area are needed:

- Close gaps in 400-metre walkable access to public open space to increase the existing 60 per cent coverage to 95 per cent coverage for residents and workers
- Improve 200-metre walkable access to public open space in the highest projected density areas around the SRL station core, where possible.

6.3.4.2 Addressing the 400-metre walkable access gaps

There are seven significant gap areas in the Cheltenham Structure Plan Area.

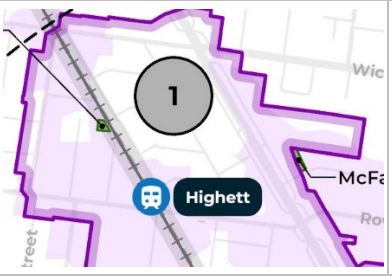
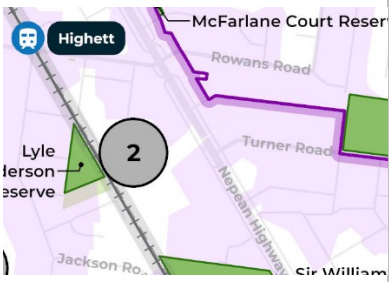
These gaps could be resolved by applying an appropriate balance of the following options:

- Improving access to existing public open space by increasing the permeability of the street network or bridging a major barrier such as a railway line
- Providing new public open space
- Opening private or restricted open space to greater public access (such as university or school grounds). This option is considered more appropriate as a secondary or support approach to improving access to open space, and is not relied on as a primary solution for this technical assessment, due to the lack of control and longer-term tenure of such arrangements.

Table 6.14 summarises potential solutions to address the significant gap areas where public open space cannot be accessed within a 400-metre walk.

Detailed descriptions and rationale for the solutions are provided in Section 6.4.

TABLE 6.14 ADDRESSING GAPS IN ACCESS TO PUBLIC OPEN SPACE

GAP AREA	LOCATION	POTENTIAL SOLUTIONS
Gap Area 1		This gap is due to a lack of open space and poor connectivity across the Frankston Line. A strategically placed open space on the eastern side of the rail line would close this gap.
Gap Area 2		A strategically placed crossing over the Frankston Line would improve permeability and walkable access to public open space at Lyle Anderson Reserve. This would provide better connections and links to the existing and proposed open space network. The provision of a linear park linking with Sir William Fry Reserve and connecting to Lyle Anderson Park would address a gap area in walkable access to open space and improve permeability in the area.
Gap Area 3		The proposed private residential development on the former CSIRO site, Highett Common, will provide 4 ha of new public open space as part of the development. This is proposed to include a conservation park and trails (Southern Common - Highett Grassy Woodland) and playground and grassed public open space (Northern Common). This will address a large gap in walkable access to public open space in this area.
Gap Area 4		A new pocket park around Tennyson Street and Edsall Street would assist in closing the gap in walkable access to public open space in this area.
Gap Area 5		A new community park proposed around Bay Road and Jack Road could provide for nearby residents and workers in this predominantly commercial and manufacturing area. Any potential opportunities for Cheltenham Memorial Park to become accessible public open space in the future would not address this gap which is more than 400 m walk from the cemetery.
Gap Area 6		A proposed new pedestrian link connecting Erskine Ave to Wembley Ave would improve permeability by providing easier access to Pennydale Park from streets to the south-west (Erskine Ave, Correa Ave). There is a significant gap in walkable access to public open space around Correa Ave and Erskine Ave, predominantly due to the large blocks and lack of permeability in this area.

GAP AREA	LOCATION	POTENTIAL SOLUTIONS
Gap Area 7		A proposed new pedestrian link connecting Reserve Road and Monterey Drive would improve permeability and access to the Cheltenham Memorial Park which covers a large part of this gap area. Increased access to the restricted open space at Cheltenham Memorial Park would be required to address the lack of public open space in this area. Passive open space opportunities are being investigated by Bayside City Council for the former Sandringham Driving Range site at 20 Wangara Road, west of the Cheltenham Memorial Park. If delivered, the six hectare site would address the gap in public open space in this area.

6.3.5 QUALITY

6.3.5.1 Changes needed to support transition to higher density environments

The following changes in the Cheltenham Structure Plan Area are needed:

- Public open spaces will need to be high quality (rating 4 or 5) to cater to future increased demand and use
- Enhancing low-quality public open space sites is a priority, particularly those with the most potential for improvement and activation to optimise their use.

The priority for quality improvement is Lyle Anderson Reserve, which could benefit from a redesign, opening up of sightlines, upgraded facilities such as the toilets, barbeque and seating, and improved landscaping and paving. The Gehl[12] report noted the following:

- 'Considering the relatively large size of the Reserve there was very little activity noted'
- 'There is considerably low diversity of activities compared to other open spaces'
- 'The Reserve does not attract other activities such as exercise, eating and drinking, taking care of pets etc'.

6.3.6 DIVERSITY

6.3.6.1 Changes needed to support transition to higher density environments

The following changes in the Cheltenham Structure Plan Area are needed:

- New public open spaces to improve the diversity of the function and distribution of public open space
- A new civic space around the new SRL East station at Cheltenham.

6.3.7 PROVISION

6.3.7.1 Changes needed to support transition to higher density environments

Table 6.15 shows the existing public open space provision ratio (square metres per person) for the 1.6-kilometre station radius. Table 6.16 shows the provision ratio once the 2041 population projection is applied (assuming no change in quantum of open space).

The tables show a decrease from the existing 20.8 m^2/person to 12.3 m^2/person in 2041. Both the 2021 and 2041 ratios exceed the indicator ratio of 9 m^2/person.

TABLE 6.15 EXISTING PUBLIC OPEN SPACE PER PERSON – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
Cheltenham	419,459	20,200	20.8

TABLE 6.16 PROJECTED PUBLIC OPEN SPACE PER PERSON 2041 – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
Cheltenham	419,459	34,000	12.3

[12] Gehl – SRL East Public Space and Public Life Study 2023, page 302-303

Table 6.17 shows the existing public open space provision ratio (square metres per person) for the Structure Plan Area. Table 6.18 shows the provision ratio once the 2041 population projection is applied (assuming no change in quantum of open space).

The tables show a decrease of public open space from the existing 12 m^2/person to 5.4 m^2/person in 2041, which is below the 9m^2/person indicator ratio. An additional 74,310m^2 of public open space would be required to meet this ratio.

TABLE 6.17 EXISTING PUBLIC OPEN SPACE PER PERSON – STRUCTURE PLAN AREA

STRUCTURE PLAN AREA	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
Cheltenham	112,890	9,400	12

TABLE 6.18 PROJECTED PUBLIC OPEN SPACE PER PERSON FOR 2041 – STRUCTURE PLAN AREA

STRUCTURE PLAN AREA	CURRENT STATE PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
Cheltenham	112,890	20,800	5.4

6.4 Changes to the open space network

This section describes the potential changes to the open space network in the Cheltenham Structure Plan Area.

This includes the purpose and rationale of each potential change and whether it is already planned or is proposed as a recommendation of this assessment. The location of each potential change is mapped to show how it would change the gaps in walkable access to public open space in the Structure Plan Area.

The potential changes are grouped into four categories:

1. **New open spaces** – includes known new open spaces arising from planned private development and proposed new public open space to address a gap in 400-metre walkable access.
2. **Enhanced open spaces** – planned reconfigurations and priority quality improvements and enhancements to existing public open space.
3. **New or enhanced pedestrian links** – proposed strategic pedestrian linkages to provide a new link to an existing open space, or a street-to-street link, both of which will improve permeability and help address existing 400-metre walkable access gaps to public open space.
4. **Temporary open spaces** – proposed temporary public open spaces to offset the loss of any public open space during SRL East construction works.

The locations of these potential changes are shown on Figure 6.11, with their category identified by colour coding.

The ‘current status’ column of the tables in the following sections categorises the site of each potential change as one of the following:

- **Planned** – the open space is already planned, such as by a private developer, council, or by SRLA for SRL East (refer to dark green circles on Figure 6.11)
- **Proposed** – a new public open space, a new or enhanced pedestrian link, or an enhanced or upgraded existing public open space is proposed as a recommendation of this assessment. The locations of proposed new open spaces or links are not fixed, and an alternative location that addresses walkability gaps could be considered (refer to light green circles for new public open space, purple circles for new pedestrian links and yellow circles for enhanced public open spaces on Figure 6.11). The classifications and area of the

proposed public open spaces are indicative only. The suggested catchment and functions are based on geographic context and diversity considerations of the broader open space network, however, each new public open space should consider community preferences, current trends, geographic context, sports and recreation participation rates and asset requirements. The indicative area for proposed public open spaces is provided within a range (e.g. 1000 – 3000 m^2) for flexibility. The minimum size (e.g. 1000 m^2) has been applied to access and provision calculations across this assessment but opportunities to deliver larger spaces (e.g. 3000 m^2) may be more beneficial from maintenance/economic, environmental and community perspectives, to be evaluated in future planning processes.

- **Future opportunity** – no immediate need is identified but the site should be considered for open space if the opportunity for delivery arises in future and it would contribute appropriately to the existing and future open space network in the Structure Plan Area (not shown on Figure 6.11; see the tables on the following pages for details).

The mapping of the potential changes on Figure 6.11 demonstrates how the 400-metre walkable access gaps to public open space can be resolved.

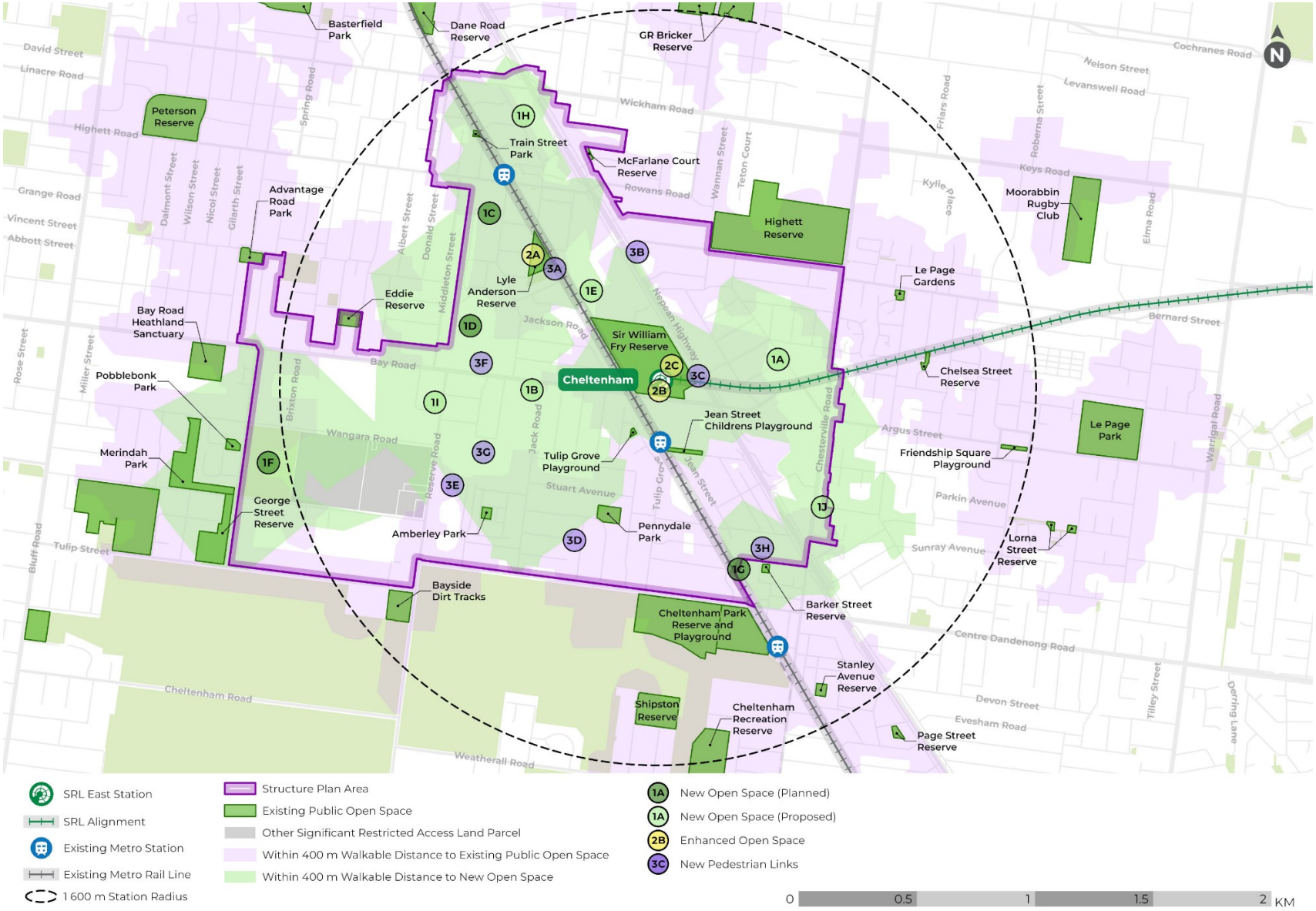
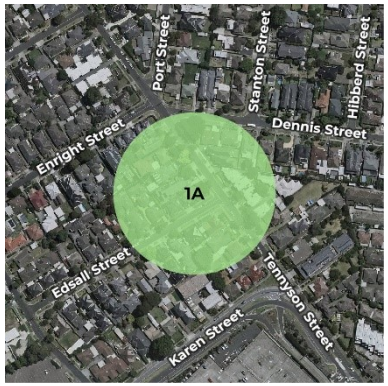


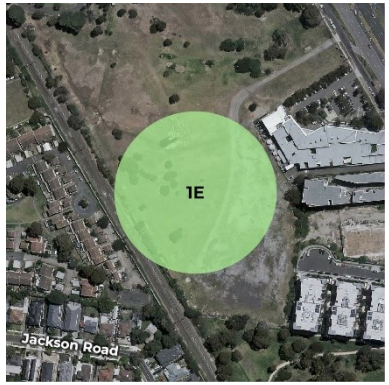
FIGURE 6.11 WALKABILITY ACCESS FOR POTENTIAL FUTURE OPEN SPACE NETWORK IN THE CHELTENHAM STRUCTURE PLAN AREA

6.4.1 NEW OPEN SPACES

TABLE 6.19 CHELTENHAM – NEW OPEN SPACES

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
1A	Potential new open space around Tennyson Street and Edsall Street, Highett. 	Purpose is to address gap in walkable access to public open space in the eastern portion of the Structure Plan Area. Would function as a local pocket park.	PROPOSED • Land use: commercial / residential. • Ownership: private • Existing or proposed open space: proposed • Committed or potential: potential	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 - 3000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. Centrally located in an area lacking walkable (400 m) access to public open space. New open space would address gap in public open space as well as support liveability outcomes. Safe pedestrian connections would be required around this location to ensure easy access to the proposed public open space from surrounding residential area.
1B	Potential new open space Jack Road and Bay Road, Cheltenham 	Purpose is to provide a community park in an area with a gap in access to public open space. This could serve residential and worker populations.	PROPOSED • Land use: commercial and residential • Ownership: Private • Existing or proposed open space: proposed • Committed or potential: potential	Catchment: Community Function: Community park Size: 20,000 – 30,000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a large gap in walkable access to public open space in this area. This is due to the lack of open space and poor pedestrian connectivity in the surrounding street network (long blocks and cul-de-sacs). A new public open space around Jack Road and Bay Road could provide for surrounding residents and workers in the commercial and manufacturing area (to the west).

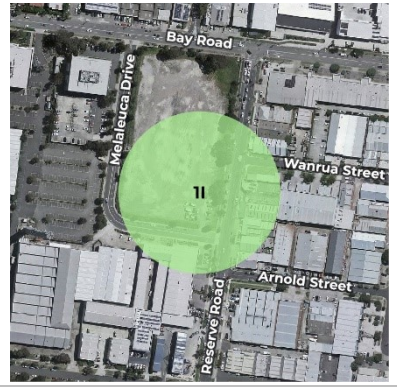
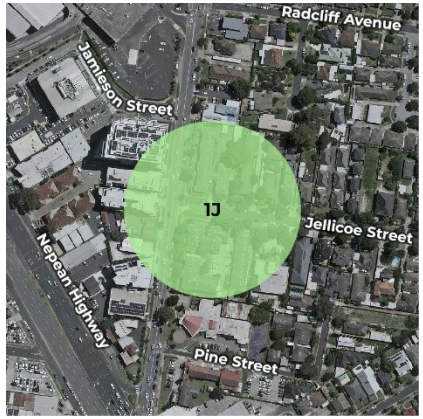
MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
1C	Northern Common – a new open space within the Highett Common residential development, Graham Road, Highett. 	Proposed residential development with public open space on the former CSIRO site in Highett.	PLANNED (by private developer) • Land use: Former CSIRO site, now a residential development (being constructed) • Ownership: Highett Common (Sunkin Property Group) • Existing or proposed open space: proposed. To be delivered as part of residential development • Committed or potential: committed.	Catchment: Local community park Function: Community park Size: approx. 10,000 m2	**Is it required to address a gap in open space provision?** Yes. There is a large gap in walkable access to public open space south-west of this location. Highett Common is a proposed private development providing a total of 4 ha of new public open space. Approx 1 ha of this public open space consists of 'Northern Common' (1E) that will provide grassed areas and play spaces in the northern part of the residential development. This will assist in addressing a large gap in walkable access to public open space in this area.
1D	Southern Common - new open space (Highett Grassy Woodland) located south of the Highett Common residential development, Graham Road, Highett 	Proposed area of grassy woodland (environmentally sensitive area) for community use on former CSIRO site in Highett.	PLANNED (by private developer and City of Bayside) • Land use: Former CSIRO site, now a proposed area for restoration of grassy woodland and community use • Ownership: City of Bayside (land transferred ownership in 2023, master plan developed in 2024) • Existing or proposed open space: proposed • Committed or potential: committed.	Catchment: Local community Function: Nature park Size: approx. 30,000 m2	**Is it required to address a gap in open space provision?** Yes. This is located within a large gap in walkable access to public open space. The land was transferred into City of Bayside's ownership in April 2023 and will be protected and enhanced as a conservation reserve. A Master Plan is being developed during 2024. Once open to the public (post-construction of Highett Common), this nature park will address a large gap in walkable access to public open space in this area.
1E	Potential new open space at the former Highett Gasworks site	This site presents an opportunity for a linear park adjacent to the Development Victoria residential development	PROPOSED • Land use: Former Highett Gasworks site, now a	Catchment: Local community Function:	**Is it required to address a gap in open space provision?** Yes. This is located within a large gap in walkable access to public open space.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
		at the former Highett Gasworks site. It should include links to Lyle Anderson Reserve (on opposite side of railway line) to improve connectivity across the open space network and address a gap in public open space.	proposed residential development • Ownership: Development Victoria • Existing or proposed open space: proposed • Committed or potential: potential.	Linear park Size: TBC. Approx. 11,400 m^2. A Development Plan Overlay schedule 7 (DPO7) under the Kingston Planning Scheme applies to the site to guide the strategic redevelopment by Development Victoria. The DPO7 requires 11.6 per cent of the site value as an open space contribution (one local level playground and two neighbourhood level open spaces) and infrastructure contribution for active pedestrian and cycling paths along the railway corridor within the development.	The proposed linear park would link Sir William Fry Reserve to View Street through the former Highett Gasworks site (owned by Development Victoria). The linear park would address a gap area in walkable access to open space and improve permeability in the area. A pedestrian and cycling link and crossing over the railway line would further increase permeability and connectivity throughout Highett and Cheltenham. Considering the requirements of DPO7 as well as the need to address a large gap in walkable access to public open space in this location, the size of approximately 11,400 m^2 would be appropriate as a minimum to address the gap in walkable access to public open space.
1F	New passive open space at 20 Wangara Road, Sandringham 	Former quarry and landfill site, and golf driving range, is proposed to be developed as a new public open space by the City of Bayside.	PLANNED (by City of Bayside) • Land use: Former quarry and landfill site (also used as a golf driving range recently). Due to contamination from previous land uses, extensive rehabilitation and monitoring is required by EPA Victoria.[13] • Ownership: City of Bayside • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: District Function: Community / Landscape park Size: approx. 60,000 m^2	**Is it required to address a gap in open space provision?** Yes. This is located on the western edge of a large gap in walkable access to public open space. The proposed open space would contribute to liveability outcomes in the Cheltenham Structure Plan Area through the provision of a large passive open space in an area lacking in public open space. City of Bayside is developing a master Plan in 2024 for this site with consideration of the significant development limitations, rehabilitation and ongoing monitoring requirements by EPA Victoria.
1G	Potential new pocket park on Moola Court, Cheltenham	City of Kingston are considering a potential pocket park within Moola	PLANNED (by City of Kingston) • Land use: road	Catchment: Local pocket Function:	**Is it required to address a gap in open space provision?** Yes.

[13] Bayside City Council, 2024, Future Use of 20 Wangara Road, Sandringham < Future use of Wangara Road site | Have Your Say - Bayside City Council>, accessed 16 April 2024

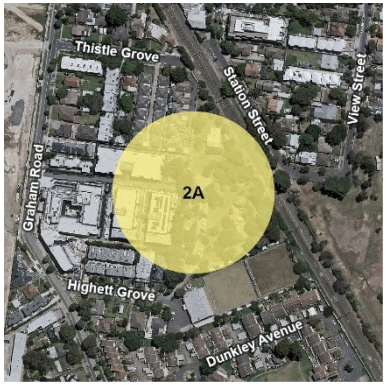
MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
		Court, replacing road with green space.	• Ownership: City of Kingston • Existing or proposed open space: Proposed. To be delivered by City of Kingston as part of a residential project in Moola Court.[14] • Committed or potential: potential.	Community park Size: approx. 250 m2	This site is located on the southern edge of a small gap in walkable access to public open space in the southeastern corner of the Cheltenham Structure Plan Area. If delivered, this public open space would offer additional green space for nearby community members, although its small size and location means it lacks permeability due to its proximity to the rail line, and so it would not address gaps in open space provision in the broader area.
1H	Potential new public open space near Henry Street, Highett 	Purpose is to provide a local pocket park in an area with a gap in access to public open space in the northern section of the Cheltenham Structure Plan Area.	PROPOSED • Land use: Residences • Ownership: Private residences • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 – 3000 m2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space in this area. This is due to the lack of open space and poor pedestrian connectivity in the surrounding street network due to its location wedged between the Frankston Line and Nepean Highway. A new public open space around Henry Street would service the surrounding resident and improve liveability outcomes in an anticipated higher density location in the Cheltenham Structure Plan Area.
1I	Potential new public open space at the south-eastern corner of a vacant block at Melaleuca Drive and Reserve Road, Cheltenham.	Purpose is to provide a local pocket park in an area with a gap in access to public open space in the western section of the Cheltenham Structure Plan Area.	PROPOSED • Land use: industrial, commercial • Ownership: Private • Existing or proposed open space: proposed	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 -3000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space in this area. This is due to a lack of open space and poor pedestrian connectivity in the surrounding street network due to large block sizes and major roads with limited pedestrian crossing

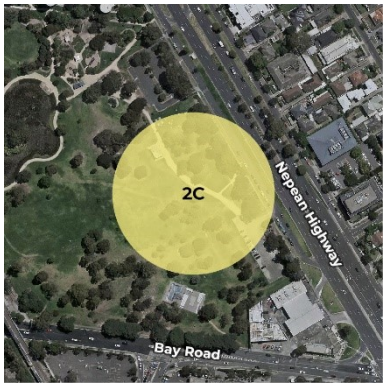
[14] City of Kingston, Moola Court Pocket Park, <Have your say on the proposed Moola Court Pocket Park | Your Kingston Your Say>, access 30th May 2024

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
			• Committed or potential: potential.		points. A new public open space at the vacant block at Reserve Road / Melaleuca Drive would service the surrounding worker population and improve liveability outcomes in a location without walkable access to public open space.
1J	Potential new public open space at Jellicoe Street, Cheltenham 	Purpose is to provide a local pocket park in an area with a gap in access to public open space in the eastern section of the Cheltenham Structure Plan Area.	PROPOSED • Land use: road and verge • Ownership: likely Council-owned • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 – 3000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a gap in walkable access to public open space in this area. This is due to the lack of open space and poor pedestrian connectivity in the surrounding street network due to large block sizes and Nepean Highway dissecting this area. A new public open space near the intersection of Jellicoe Street and Nepean Highway would service the surrounding residential and worker populations and improve liveability outcomes in a location without walkable access to public open space. Landscaped verges with generous widths already exist at this location. Enhancing and increasing the size of these verges and either vehicle movements or narrowing the road would allow for a pocket park to be developed in this location.

6.4.2 ENHANCED OPEN SPACES

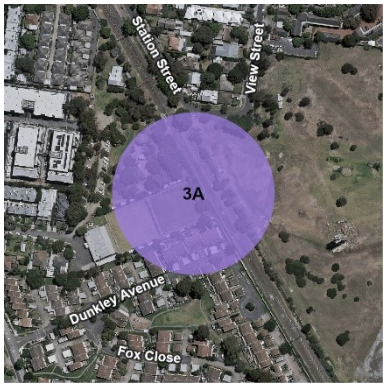
TABLE 6.20 CHELTENHAM – ENHANCED OPEN SPACES

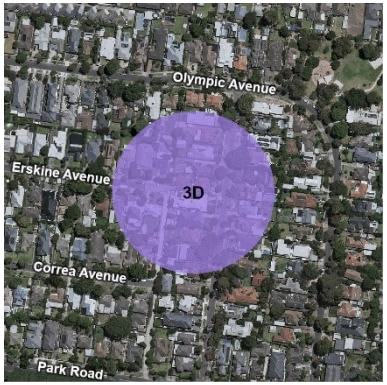
MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
2A	Lyle Anderson Reserve 	Quality improvement upgrade	PROPOSED • Upgrade existing public open space.	Catchment: Local community Function: Community park Size: 10,158 m^2	**Is it required to address a gap in open space provision?** No. It is the location of existing open space. Lyle Anderson Reserve could benefit from a redesign and upgrade of facilities. It has a lower quality rating and a high site potential rating, indicating this is a priority site for quality improvement. High quality open space offerings would improve liveability outcomes in this anticipated higher density location in the Cheltenham Structure Plan Area.
2B	New public realm / open space around the SRL station within the existing Sir William Fry Reserve site. 	Sir William Fry Reserve - land to be acquired for SRL East purposes and partially returned as civic space once the SRL station is constructed.	PLANNED (by SRL Rail and Infrastructure works) • Land use: public open space • Ownership: City of Kingston • Existing or proposed open space: existing • Committed or potential: committed.	Catchment: District (as part of Sir William Fry Reserve) Function: Civic space within existing footprint of Sir William Fry Reserve. Size: 1440 m^2 (station plaza size is fixed – subject to SRL East approved rail scope).	**Is it required to address a gap in open space provision?** No. Located in area with existing public open space. A public space around the SRL station entrance will be delivered as part of the SRL East rail and infrastructure works. According to the SRL East Urban Design Strategy, the space will connect pedestrian movement networks through the station environs and beyond. It will provide opportunities to make visual connections with Sir William Fry Reserve from within the station environs to support wayfinding and capitalise on the landscape values of the surrounding area.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
2C	High quality open space to be reinstated to the north of the new SRL station at Sir William Fry Reserve 	Sir William Fry Reserve - Land to be acquired for SRL East purposes and partially returned as open space once the SRL station is constructed.	PLANNED (by SRL Rail and Infrastructure works) • Land use: public open space • Ownership: City of Kingston • Existing or proposed open space: existing • Committed or potential: committed.	Catchment: District Function: Community park Size: reinstating approximately 17,000 m^2 of parkland that will be impacted by construction of the new SRL station at Cheltenham. Total size of Sir William Fry Reserve is currently 85,389 m^2. Size is fixed, subject to SRL East approved rail scope.	**Is it required to address a gap in open space provision?** No. Located in area with existing public open space (to be reconfigured). High quality public realm is to be delivered as part of the SRL East rail and infrastructure works. Approximately 17,000 m2 of Sir William Fry Reserve will be impacted during construction of the SRL station at Cheltenham (current size is 85,389 m2). The reinstated space supports liveability outcomes through the delivery of easily accessible, high quality public realm interfacing with the SRL station and extending the treed landscape character of the parkland through a central spine.

6.4.3 NEW / ENHANCED PEDESTRIAN LINKS

TABLE 6.21 CHELTENHAM – NEW / ENHANCED PEDESTRIAN LINKS

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND SIZE	RATIONALE
3A	Pedestrian link across Frankston Line near Lyle Anderson Reserve and the Highett Gasworks development site. 	Purpose is to improve permeability in Cheltenham by providing more direct access to Sir William Fry Reserve, Lyle Anderson Reserve, Highett Gasworks development, the SRL station area at Cheltenham and connect the existing and proposed open space network.	PROPOSED • Land use: railway • Ownership: VicTrack • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link at railway line Size: approx.20 m long	**Is it required to address a gap in open space provision?** Yes. A significant gap in 400 m walkable access to public open space is located next to the proposed pedestrian link location. Strategically placed crossings can improve permeability and walkable access to existing public open space. Due to the potential lack of passive surveillance in this area, an appropriate location and design that considers crime prevention and safety will need to be considered for this link.
3B	Pedestrian crossing over Nepean Highway 	Purpose is to improve permeability in Cheltenham by providing more direct access to Sir William Fry Reserve, the SRL station area at Cheltenham and connect the existing and proposed open space network in Highett and Cheltenham.	PROPOSED • Land use: Road • Ownership: Transport for Victoria • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian links over Nepean Highway Size: approx. 60 m long	**Is it required to address a gap in open space provision?** Yes. A significant gap in 400 m walkable access to public open space is located to the east of the pedestrian crossing locations. Strategically placed pedestrian crossings can improve permeability and walkable access to the existing public open space at Sir William Fry Reserve and improve connections from the Highett Gasworks site to the eastern side of Nepean Highway.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND SIZE	RATIONALE
3C	Pedestrian crossing over Nepean Highway 	Purpose is to improve permeability in Cheltenham by providing more direct access to Sir William Fry Reserve, the SRL station area at Cheltenham and connect the existing and proposed open space network in Highett and Cheltenham.	PROPOSED • Land use: Road • Ownership: Transport for Victoria • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian links over Nepean Highway Size: approx. 60m.	**Is it required to address a gap in open space provision?** Yes. A significant gap in 400 m walkable access to public open space is located to the east of the pedestrian crossing locations. Strategically placed pedestrian crossings can improve permeability and walkable access to the existing public open space at Sir William Fry Reserve from the residences on the eastern side of Nepean Highway.
3D	Potential new pedestrian link connecting Erskine Ave to Wembley Ave 	Purpose is to improve permeability in Cheltenham by providing easier access to Pennydale Park from streets to the southwest (Erskine Ave, Correa Ave). Function is a pedestrian link.	PROPOSED • Land use: Residences • Ownership: Private • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link between Erskine Ave and Wembley Ave Size: 50 m long, approx. 2-3 m wide recommended.	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space around Correa Ave and Erskine Ave, predominantly due to the large block sizes and lack of permeability in this area. This gap could be reduced by providing a pedestrian link between Erskine Ave and Wembley Ave to shorten the walking distance to Pennydale Park from the gap area.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND SIZE	RATIONALE
3E	Potential new pedestrian link connecting Reserve Road and Monterey Drive 	Purpose is to improve permeability in Cheltenham by providing direct east-west access to Cheltenham Memorial Park (restricted open space) from streets to the east, as well as enhancing connections to the potential new open space at 20 Wangara Road (1H).	PROPOSED • Land use: Industrial / commercial • Ownership: Private • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link between Reserve Road and Monterey Drive. Size: 200 m long, approx. 2 to 3 m wide recommended.	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space in the western section of Cheltenham Structure Plan Area, predominantly due to the restricted open space of Cheltenham Memorial Cemetery which covers a large area, as well as other large blocks with poor permeability. This gap could be reduced by providing a pedestrian link between Reserve Road and Monterey Drive. Delivery of the potential new public open space at 20 Wangara Road (1H) and increased access to the restricted open space at Cheltenham Memorial Park would assist in further addressing the lack of public open space in this area.
3F	Potential new pedestrian link connecting the Southern Common new open space (Highett Grassy Woodland) to Bay Road, Highett. 	Purpose is to improve permeability in Cheltenham by providing direct north-south access to Bay Road from the Southern Common proposed new open space to the area south of the site.	PROPOSED • Land use: industrial / commercial • Ownership: private • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link between Southern Common (Highett Grassy Woodland) and Bay Road, Highett. Size: 100 m long, approx. 2 to 3 m wide recommended.	**Is it required to address a gap in open space provision?** Yes. This is located within a significant gap in walkable access to public open space in the western section of the Cheltenham Structure Plan Area. The potential delivery of 3 ha of public open space at the Southern Common site would address the gap in public open space in this location, provided there was a direct link from the southern section of the public open space to Bay Road and surrounds. This gap could be addressed by providing a pedestrian link between large blocks and safe crossing locations at Bay Road.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND SIZE	RATIONALE
3G	Potential new pedestrian link connecting Wangara Road, Sandringham to Jack Road, Cheltenham. 	Purpose is to improve permeability in Cheltenham by providing direct east-west access between Wangara Road and Jack Road. Includes crossing over Reserve Road.	PROPOSED • Land use: industrial / commercial • Ownership: private • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link between Wangara Road and Jack Road. Size: 400 m long, approx. 2 to 3 m wide recommended.	**Is it required to address a gap in open space provision?** Yes. The proposed pedestrian link is located in an area with a significant gap in walkable access to public open space. The lack of public open space in the western section of the Cheltenham Structure Plan Area is predominantly due to the restricted open space of Cheltenham Memorial Cemetery covering a large area, industrial and commercial land uses on large blocks and poor connectivity and permeability. This gap could be reduced by providing a pedestrian link between Wangara Road and Jack Road. This link would be beneficial for connectivity to the potential new public open space at 20 Wangara Road (1H) and Cheltenham Memorial Park (particularly if access is increased at the restricted cemetery site).
3H	Potential new pedestrian link connecting Barker Street to Sinclair Street (via Jean Street), Cheltenham. 	Purpose is to improve permeability in Cheltenham by providing direct north-south access between Barker Street and Sinclair Street.	PROPOSED • Land use: residential / commercial • Ownership: private • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link connecting Barker Street to Sinclair Street (via Jean Street), Cheltenham. Size: 150 m long, approx. 2 to 3 m wide recommended.	**Is it required to address a gap in open space provision?** Yes. The proposed pedestrian link is located in an area with a gap in walkable access to public open space. The lack of public open space in the southern section of the Cheltenham Structure Plan Area is predominantly due to the poor permeability from large blocks sizes and the barriers of Nepean Highway to the east and the Frankston Line to the west. This gap in walkable access to public open space could be reduced by providing a pedestrian link between Barker Street to Sinclair Street, potentially via Jean Street. This link would be beneficial for connectivity to the existing public open spaces of Barker Street Reserve, Jean Street Playground and the potential new public open space at Moola Court.

6.4.4 INNOVATIVE OPEN SPACE OPPORTUNITIES FOR CHELTENHAM

6.4.4.1 Improving existing public open space

The following are potential sites with opportunities for innovation in improving open spaces subject to detailed design, funding and maintenance considerations:

- Enhancing the quality of Lyle Anderson Reserve would improve the diversity of recreational offerings for this large and under-used public open space. Specifically engaging with users of the adjacent Highett Bowls Club could provide valuable feedback.
- Opportunity for enhancements to existing public open spaces within the Structure Plan Area (beyond those identified in this technical assessment) to meet future community needs. The demand on public open spaces should be monitored over time as the populations grow and urban environments change in the Structure Plan Areas.

6.4.4.2 Creating new public open space

The following are potential sites and locations with opportunities for innovation in creating new open spaces subject to detailed design, funding and maintenance considerations:

- New high quality civic space/public realm around the SRL station in Sir William Fry Reserve
- New higher density private developments could provide open space for public use
- Potential new open space at the former Highett Gasworks site
- New open spaces as part of the planned level crossing removal project at Highett
- Considering partial road closure, or extending road reserve land on Jellicoe Street, at the intersection with Chesterville Road.

6.4.4.3 Increasing public access to restricted open space

The following is a potential site with opportunity for innovation in the use of restricted open space:

- Cheltenham Memorial Park.

Opening up greater public access to this site would require a collaborative shared use agreement.

6.5 Findings

This section summarises the open space assessment for the Cheltenham Structure Plan Area. Recommendations to consider when developing the Structure Plan for Cheltenham are provided.

There are eight public open space in the Cheltenham Structure Plan Area. The open space network is characterised by the dominance of the large Sir William Fry Reserve in the centre of the Structure Plan Area, a number of scattered smaller public open spaces, and several larger public open spaces bordering the Structure Plan Area. Overall, there is a lack of diversity of public open space functions, with a predominance of community parks.

The population in the Cheltenham Structure Plan Area is projected to increase 121 per cent by 2041. This will increase demand on the open space network.

The planned and recommended changes to the open space network within the Structure Plan Area are:

- Four new planned open spaces – two provided by a private developer and the City of Bayside within the Highett Common development (approximately 4 hectares of new public open space), one new passive open space of 6 hectares (Wangara Road) provided by the City of Bayside, and a new pocket park is being considered by the City of Kingston (Moola Court).
- Six proposed new public open spaces – to address gaps in 400-metre walkable access to public open space. Four local pocket or neighbourhood parks and one local community catchment park are proposed, with potential functions as community parks. One local community linear park is also proposed.
- One offset public open space – in the Cheltenham / Highett area (location and exact size to be determined) to reduce the impact of the SRL station permanently removing a portion of Sir William Fry Reserve.
- One public open space is recommended for a priority quality enhancement (Lyle Anderson Reserve).
- Two planned open spaces are located in the current existing footprint of Sir William Fry Reserve for SRL East, to be created or reinstated.
- Eight new pedestrian linkages are recommended to improve permeability and access to existing public open space in the Structure Plan Area.
- Increased public access to the restricted open space at Cheltenham Memorial Park cemetery is recommended as a future opportunity to supplement public open space provision and provide improved permeability and connections in Cheltenham.

The four planned new open spaces will add a combined 100,250 m^2 of open space in the Structure Plan Area. The six recommended new open spaces would add a combined 35,400 m^2 of public open space as a minimum. These 10 new open spaces would add a combined 135,650 m^2 of open space to the Cheltenham Structure Plan Area.

Adding the planned and proposed open space to the Cheltenham Structure Plan Area would achieve the following metrics and performance indicators:

- **Access** – achieving 94 per cent walkable access coverage within 400 metres to public open space for residents and workers and improved 200-metre walkable access to public open space in the highest projected density areas.
- **Quality** – enhancing low-quality public open space to optimise potential along with subsequent staged quality upgrades will help achieve the need for high-quality open space.
- **Diversity** – the proposed new open spaces will improve the diversity and distribution of public open spaces across the Structure Plan Area.
- **Provision** – achieving a 2041 projected open space provision ratio of 11.9 m^2/person (including planned and proposed new public open space).

6.5.1 OUTCOMES IN RELATION TO ACCESS

Most of the planned and proposed new open spaces and the quality enhancements in the Cheltenham Structure Plan Area are located in the highest density areas, connecting quality public open space with high density living locations.

Implementing the planned and proposed changes to the public open space network would increase the coverage of 200-metre walkable access to public open space in the central neighbourhood of Southland (the highest projected density area of 5000 – 10,000 persons per square kilometre) from 32 per cent to 47 per cent.

Refer Appendix G which shows the 200-metre walkability coverage in the existing and proposed public open space networks in relation to the projected residential population density. It demonstrates that large sections of

the highest density areas would have a 200-metre walk to public open space, a bonus improvement on the 400-metre walkable access metric.

In applying the planned new open spaces, and the recommendations for proposed new open spaces and enhanced pedestrian linkages, the projected proportion of the Cheltenham Structure Plan Area with 400-metre walkable access to public open space is 94 per cent, as shown in Table 6.22.

The number of existing addresses in the Structure Plan Area with 400-metre walkable access to public open space would increase from 5327 to 7671, which is a 44 per cent increase.

The remaining gap areas primarily relate to:

- Cheltenham Memorial Park cemetery
- Commercial / industrial land on the northern, eastern and southern sides of the Cheltenham Memorial Park cemetery.

As a significant portion of the Cheltenham Structure Plan Area is occupied by the large restricted open space area of the Cheltenham Memorial Park cemetery, this site was excluded from calculations of 400-metre walkable access to public open space. However, the Cheltenham Memorial Park cemetery remains a key consideration for improving public access to its restricted open space (see Section 6.6.2: Future Opportunities).

In this context, 94 per cent coverage of 400-metre walkable access to public open space is considered an acceptable outcome for the Structure Plan Area.

TABLE 6.22 PROJECTED PROPORTION OF STRUCTURE PLAN AREA WITH 400-METRE WALKABLE ACCESS TO PUBLIC OPEN SPACE

STRUCTURE PLAN AREA	STRUCTURE PLAN AREA (M^2)	400-METRE WALKABLE COVERAGE AREA (M^2)	PROPORTION OF STRUCTURE PLAN AREA WITH 400-METRE WALKABLE ACCESS
	3,540,847	3,336,006	94%

6.5.2 OUTCOMES IN RELATION TO QUALITY

Three-quarters (75 per cent) of the existing public open spaces in the Structure Plan Area have a high quality rating. The priority for quality improvement is Lyle Anderson Reserve, which could benefit from a redesign to improve sightlines, upgrade facilities such as toilets, barbeque and seating, and improve landscaping and paving. Improving the quality of Lyle Anderson Reserve and progressively focusing on the other lower-quality ratings will improve the overall capacity of the existing public open space network.

The locations with the highest projected residential population density in 2041 in the Structure Plan Area are centred around the SRL station core and main arterial roads Nepean Highway, Highett Road and Bay Road. Most of the planned and proposed new open spaces and the quality enhancements for the Cheltenham Structure Plan Area are located in the higher density areas, connecting quality public open space with the high density living locations.

6.5.3 OUTCOMES IN RELATION TO DIVERSITY

The Cheltenham Structure Plan Area has an average rating for diversity of public open space. There are no existing landscape parks, nature parks, linear parks, sports parks, or civic spaces, however the catchment hierarchy of pocket, neighbourhood, community and district parks are well distributed.

Delivering the four planned and six proposed new public open spaces (shown in red text in Table 6.23) would improve the diversity and distribution of public open spaces in the Structure Plan Area, lifting the diversity rating from average to above average. Two proposed and one planned new public open space south of Bay Road will

improve the distribution of open space hierarchy by adding new pocket, community and district parks to the network.

The proposed public open spaces could be pocket, neighbourhood or community spaces, depending on the feasibility and opportunities at each location. The functions have been suggested as community parks, however, the optimal function for each space should be evaluated through future planning processes and consideration of community preferences.

The 1.6-kilometre station radius also contains a number of sports parks to serve the needs of the Structure Plan Area.

TABLE 6.23 PRIMARY FUNCTION AND CATCHMENT CLASSIFICATION OF FUTURE PUBLIC OPEN SPACES IN CHELTENHAM STRUCTURE PLAN AREA

CHELTENHAM STRUCTURE PLAN AREA	COMMUNITY PARK	LANDSCAPE PARK	NATURE PARK	LINEAR PARK	SPORTS PARK	CIVIC SPACE
POCKET	2 +5					1*
NEIGHBOURHOOD	4					
COMMUNITY	1 +1		1	1		
DISTRICT	1 +1					

*New pocket civic space and reinstated community park at Sir William Fry Reserve (district).

6.5.4 OUTCOMES IN RELATION TO PROVISION

The existing provision of public open space in the 1.6-kilometre station radius is 20.8 m^2/person, and the projected 2041 provision is 12.3 m^2/person (assuming no change in quantum of open space).

As the changes to public open space in this technical assessment focus on the Structure Plan Area (not the entire 1.6-kilometre station radius) only the current open space provision is included in Table 6.24.

It's likely that some changes to public open space will occur within the 1.6-kilometre station radius (in addition to those planned or proposed in the Structure Plan Area) from 2024 to 2041, although as these changes are unknown and excluded from the recommendations, they are excluded from Table 6.24.

TABLE 6.24 PROJECTED PUBLIC OPEN SPACE PER PERSON FOR 2041 – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
	419,459	34,000	12.3

The current provision of public open space in the Cheltenham Structure Plan Area is 12 m^2/person. Once the planned and proposed new public open spaces are applied against the 2041 population projection, this results in public open space provision of a minimum of 11.9 m^2/person, as shown in Table 6.25. This exceeds the indicator provision ratio of 9m^2/person.

TABLE 6.25 PROJECTED PUBLIC OPEN SPACE PER PERSON FOR 2041 INCLUDING PLANNED AND PROPOSED PUBLIC OPEN SPACE

STRUCTURE PLAN AREA	PROJECTED PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
	248,540	20,800	11.9

As noted in section 6.3.7, a total of at least 187,200m^2 of public open space would be required in 2041 to provide 9m^2/person. The planned and proposed additions to the public open space network listed in this report will meet this requirement. Provision ratios are a secondary metric that should be applied as part of a variety of

strategies including prioritising walkable access to new and existing public open space, high quality and multifunctional spaces and innovative approaches to providing additional spaces. This includes opening private open space for public access, as discussed in section 6.4.4.

6.6 Recommendations

6.6.1 STRUCTURE PLANNING

Recommendations to inform the development of the Cheltenham Structure Plan are listed in Table 6.26 . The map references in the table relate to Figure 6.11 (in Section 6.4).

Proposed new open spaces, and enhanced open spaces and pedestrian links are recommended to meet future open space demand in the Structure Plan Area.

Recommendations are classified as one of the following:

- **Proposed** – a new public open space, a new or enhanced pedestrian link, or an enhanced or upgraded existing public open space is proposed. The locations and size of proposed new open spaces or links are not fixed, and an alternative location that addresses walkability gaps could be considered.
- **Future opportunity** – the site should be considered if the opportunity for delivery arises in future and would contribute appropriately to the existing and future open space network in the Structure Plan Area.

The locations of the proposed sites are shown on Figure 6.11.

The future opportunities for general consideration are summarised in Table 6.27. It includes a recommendation to increase public access to the restricted open space at the Cheltenham Memorial Park cemetery.

TABLE 6.26 RECOMMENDATIONS FOR CHELTENHAM STRUCTURE PLAN AREA

CATEGORY		LOCATION	STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
1	New open space	Around Tennyson Street and Edsall Street, Highett. (map ref 1A)	Proposed	Catchment: Pocket / neighbourhood Function: Community park Size: 1000 -3000 m^2	To address a gap in 400 m walkable access to public open space.
2	New open space	Around Jack Road and Bay Road (map ref 1B)	Proposed	Catchment: Community Function: Community park Size: 20,000 – 30,000 m^2	To address a gap in 400 m walkable access to public open space.
3	New open space	Former Highett Gasworks site (map ref 1E)	Proposed	Catchment: Community Function: Linear park Size: approx. 11,400 m^2	To address a gap in 400 m walkable access to public open space.
4	New open space	Around Henry Street, Highett (map ref 1H)	Proposed	Catchment: Pocket / neighbourhood Function: Community park Size: 1000 – 3000 m^2	To address a gap in 400 m walkable access to public open space.
5	New open space	Around Melaleuca Drive and Reserve Road, Cheltenham (map ref 1I)	Proposed	Catchment: Pocket / neighbourhood Function: Community Park Size: 1000 – 3000 m^2	To address a gap in 400 m walkable access to public open space.
6	New open space	Around Jellicoe Street, Cheltenham (map ref 1J)	Proposed	Catchment: Pocket / neighbourhood Function: Community Park Size: 1000 - 3000 m^2	To address a gap in 400 m walkable access to public open space.
7	Enhanced open space	Lyle Anderson Reserve (map ref 2A)	Proposed	Catchment: Community Function: Community Park Size: 10,158 m^2	Priority site for quality improvement with lower quality rating and higher site potential rating.
8	New / enhanced pedestrian links	Pedestrian crossings over Frankston Line (map ref 3A)	Proposed	Pedestrian access link Size: approx. 20 m long recommended	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.
9	New / enhanced pedestrian links	Pedestrian crossing over Nepean Highway (map ref 3B)	Proposed	Pedestrian access link Size: approx. 60 m long recommended	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.
10	New / enhanced pedestrian links	Pedestrian crossings over Nepean Highway (map ref 3C)	Proposed	Pedestrian access link Size: approx. 60 m long recommended	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.
11	New / enhanced pedestrian links	Potential new pedestrian link connecting Erskine Ave to Wembley Ave (map ref 3D)	Proposed	Pedestrian access link Size: 50m long, approx. 2 to 3 m wide recommended.	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.

CATEGORY		LOCATION	STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
12	New / enhanced pedestrian links	Potential new pedestrian link connecting Reserve Road and Monterey Drive (map ref 3E)	Proposed	Pedestrian access link Size: 200 m long, approx. 2 to 3 m wide recommended.	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.
13	New / enhanced pedestrian links	Potential new pedestrian link connecting the Southern Common new open space (Highett Grassy Woodland) to Bay Road, Highett. (map ref 3F)	Proposed	Pedestrian access link Size: 100 m long, approx. 2 to 3 m wide recommended.	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.
14	New / enhanced pedestrian links	Potential new pedestrian link connecting Wangara Road, Sandringham to Jack Road, Cheltenham. This includes crossing over Reserve Road. (map ref 3G)	Proposed	Pedestrian access link Size: 400 m long, approx. 2 to 3 m wide recommended.	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.
15	New / enhanced pedestrian links	Potential new pedestrian link connecting Barker Street to Sinclair Street (via Jean Street), Cheltenham. (map ref 3H)	Proposed	Pedestrian access link Size: 150 m long, approx. 2 to 3 m wide recommended.	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.

6.6.2 FUTURE OPPORTUNITIES

TABLE 6.27 FUTURE OPPORTUNITIES

CATEGORY		LOCATION	STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
16	Opening access to restricted open space	Cheltenham Memorial Park	Future opportunity	N/A	To address a gap in 400 m walkable access to POS. This can be achieved through a shared use agreement in collaboration with the Southern Metropolitan Cemeteries Trust.
17	Enhancements to existing public open spaces (beyond those identified)	Existing public open spaces within the Structure Plan Area	Future opportunity	N/A	Opportunity for enhancements to existing public open spaces within the Structure Plan Area (beyond those identified in this technical assessment) to meet future community needs. The demand on public open spaces should be monitored over time as the populations grow and urban environments change in the Structure Plan Areas.

7 Clayton Structure Plan Area

The Clayton Structure Plan Area is mainly located in the City of Monash, with a small portion to the south of Centre Road in the City of Kingston.

Clayton is identified as a Major Activity Centre (MAC) in Plan Melbourne, the *Clayton Activity Centre Structure Plan Area Plan* (Monash City Council 2020) and is included in the *Monash National Employment and Innovation Cluster (NEIC) Draft Framework Plan* (Victoria Planning Authority 2017). The NEIC is a focus for jobs growth and strategic infrastructure investment to help expand job opportunities. Major Activity Centres are identified as suburban centres that provide access to a wide range of goods and services.

The Structure Plan Area includes the existing Clayton Station, and Clayton Road commercial and health services such as Monash Medical Centre and Monash Children's Hospital. The Cranbourne / Pakenham Line diagonally dissects the Structure Plan Area from the north-west to the south-east. Outside the core of the Structure Plan Area there is residential land.

The largest public open spaces in the Structure Plan Area are the community sports parks of Fregon Reserve in the north and Jack Meade Reserve in the west. The Djerring Trail, a 17-kilometre linear trail travels alongside the Caulfield to Dandenong Line, providing a recreational focal point across central Clayton. The Djerring Trail provides an open space linkage to surrounding suburbs and caters for active and passive recreational activities, including skate parks, fitness stations, and multi-use sports courts.

The population in the Structure Plan Area is forecast to increase 89 per cent by 2041.[15] This highlights the need to plan for public open space to serve the future population.

7.1 Existing open space

This section describes existing open space in the Clayton Structure Plan Area and within a 1.6-kilometre radius (20-minute walk) of the SRL station at Clayton.

This includes public open space, private open space (such as at non-government schools) and restricted open space (public spaces but with restricted access and uses, such as university campuses or cemeteries).

7.1.1 PUBLIC OPEN SPACE IN THE STRUCTURE PLAN AREA

There are 13 public open spaces covering a combined area of 112,879 m^2 in the Clayton Structure Plan Area.

These public open spaces are primarily owned by Monash City Council and Kingston City Council.

Table 7.1 summarises the 13 public open spaces in the Structure Plan Area by their primary function, catchment classification and size.

Figure 7.1 shows their location and distribution.

[15] Based on SRLA BIC population projections

TABLE 7.1 PUBLIC OPEN SPACES IN CLAYTON STRUCTURE PLAN AREA

PUBLIC OPEN SPACE	PRIMARY FUNCTION	CATCHMENT CLASSIFICATION	AREA (M2)
Clayton Station West Multi-Sports Area (Clayton Community Space)	Sports park	Neighbourhood	2736
Clayton Urban Park Courts/RSL Memorial Space	Sports park	Community	14,455
Djerring Trail POS	Linear park	Neighbourhood	5562
Evelyn Street Reserve	Community park	Neighbourhood	7280
First Street Reserve	Community park	Neighbourhood	8420
Flora Road Reserve	Community park	Neighbourhood	2083
Fregon Reserve	Sports park	Community	35,156
Haughton Road Fenced Dog Park	Community park	Community	3279
Jack Meade Reserve	Sports park	Community	25,058
Jackson Green Playground	Community park	Neighbourhood	3117
Meppel Drive Reserve	Community park	Pocket	1682
No name public forecourt (Clayton Railway Station)	Community park	Community	752
Remembrance Garden/ Clayton Hall	Landscape park	Neighbourhood	3292
Total			112,879

Note:

- Clayton Remembrance Garden and the Clayton Station West Multi-Sports Area (Clayton Community Space) will be impacted by SRL East construction works. At this point in time, temporary offset open space will be provided for the Clayton Station West Multi-Sports Area (Clayton Community Space) although requirements for offset open space for the Clayton Remembrance Gardens are still under investigation.
- Jackson Green Playground is located within a private housing development but is open for public use.

7.1.2 PUBLIC OPEN SPACE IN THE 1.6-KILOMETRE STATION RADIUS

There are 25 public open spaces covering a combined area of 628,804 m^2 in a 1.6-kilometre radius (20-minute walk) of the SRL station at Clayton. This includes public open spaces that are partially within the 1.6-kilometre radius, where they straddle the boundary. The public open spaces are primarily owned by Kingston City Council, Monash City Council, and VicTrack.

7.1.3 PRIVATE AND RESTRICTED OPEN SPACE

The main locations of private and restricted open spaces in the Clayton Structure Plan Area are:

- St Peter's Primary School
- Thompson Street drainage catchment areas / laneways.

Outside the Structure Plan Area but within the 1.6-kilometre station radius are:

- Clarinda Primary School, Clayton North Primary School, Monash University
- Clayton South Drain and drainage catchment areas / laneways from Thompson Street to Roy Street (within an area subject to inundation).

Some of these locations are in areas with gaps in walkable access to public open space. Increasing access to these private or restricted open spaces could be considered as a way of improving walkable access to nearby public open spaces. Figure 7.1 shows the location of private and restricted open spaces as well as public open spaces.

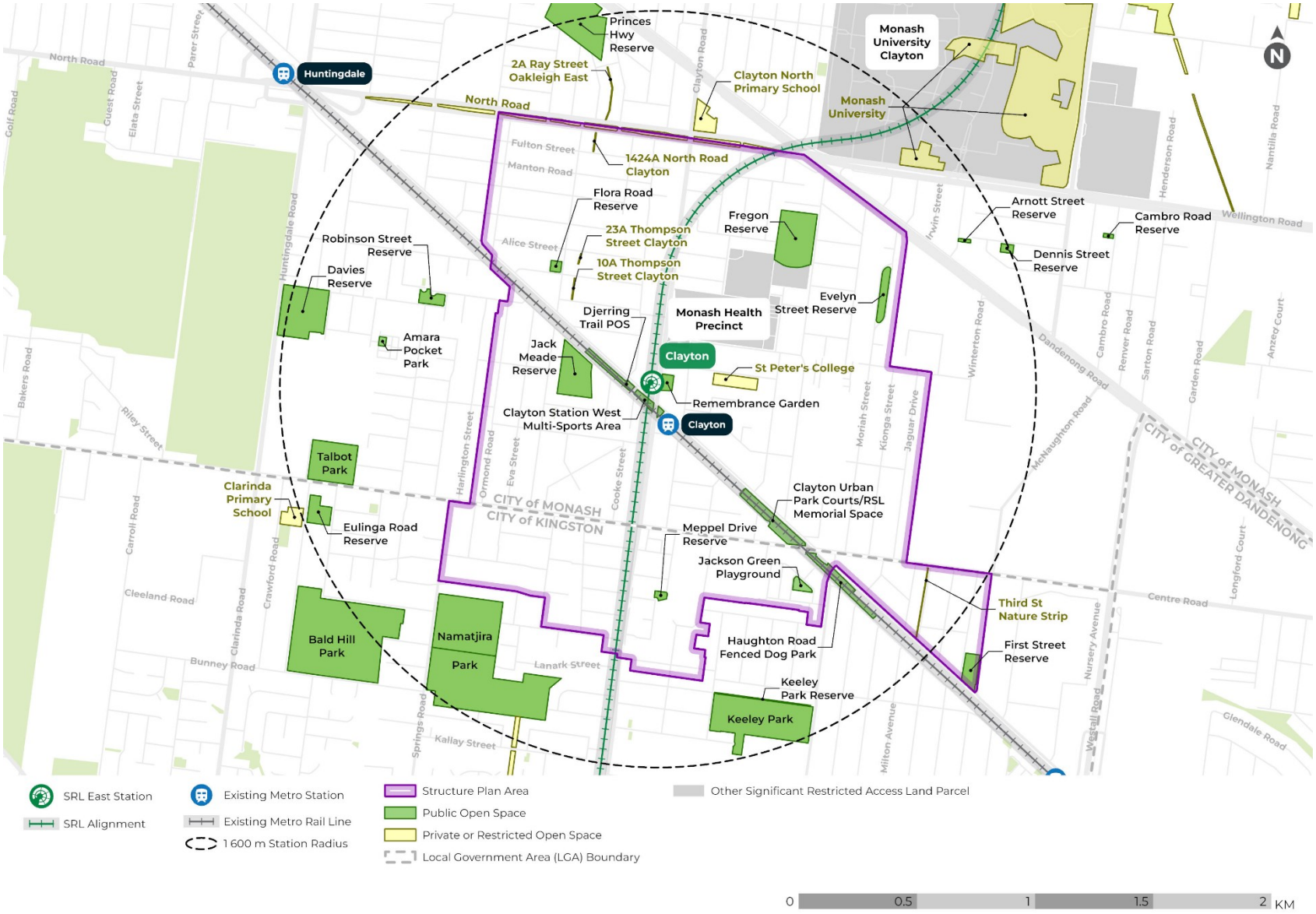


FIGURE 7.1 PUBLIC, PRIVATE AND RESTRICTED OPEN SPACE IN CLAYTON STRUCTURE PLAN AREA AND 1.6-KILOMETRE STATION RADIUS

7.1.4 SRL EAST COMMITTED AND PROPOSED PROJECTS

Within the approvals for SRL East (rail and infrastructure) there are requirements to manage and mitigate impacts on public open space and recreational infrastructure. The requirements include temporarily offsetting open space impacted by construction and the relocation of infrastructure near existing sites before SRL East construction starts.

Table 7.2 describes the temporary public open spaces to be provided as offset locations during the decade that Clayton Community Space will be occupied for the construction of SRL East.

There is potential for these temporary open public spaces to become permanent.

TABLE 7.2 PROPOSED OFFSET PUBLIC OPEN SPACES

OFFSET PUBLIC OPEN SPACE	LOCATION	APPROX SIZE	DESCRIPTION
Clayton Community Space Offset Site 1 and Site 2 274 Clayton Road, Clayton		1456 m^2 (site 1) 826 m^2 (site 2)	Two temporary offset sites are located 75m apart, connected by the Djerring Trail shared pathway. The sites will accommodate equipment to be relocated from the existing Clayton Community Space. Total combined approximate size of 2282 m^2.

7.2 Performance of existing open space network

This section outlines the quantitative and qualitative performance of the existing open space network, with reference to:

- Access to open space, and where the significant gaps are, including the extent of private and restricted open space
- Quality of existing open space
- Diversity of function and catchment classification across the open space network
- Provision of open space across the 1.6-kilometre station radius and within the Structure Plan Area.

7.2.1 ACCESS TO OPEN SPACE

The primary metrics for assessing the performance of existing public open space networks measure the access and quality of public open space.

Access is assessed by identifying gaps in walkable (400 metres) access to public open space in the Clayton Structure Plan Area.

7.2.1.1 Extent of existing public open space within a 400-metre walk

The spatial analysis in Figure 7.2 shows that over half the Clayton Structure Plan Area (60%) has access to public open space within a 400-metre walk.

Table 7.3 shows the existing area proportion and number of addresses within the Structure Plan Area with 400-metre walkable access to public open space. Refer to Appendix H and Appendix I for mapping analysis of each open space classification and its associated walkable catchment.

TABLE 7.3 CLAYTON EXISTING ACCESS TO PUBLIC OPEN SPACE

CLAYTON STRUCTURE PLAN AREA	EXISTING ACCESS TO PUBLIC OPEN SPACE WITHIN 400 M WALKABLE DISTANCE
PROPORTION OF STRUCTURE PLAN AREA COVERED	60%
NUMBER OF ADDRESSES	5860

7.2.1.2 Walkable access gaps

The Clayton Structure Plan Area currently has low walkable access to public open space. Substantial gaps are located in the north, around the North Road and Clayton Road intersection, in proximity of Monash University and large industrial and commercial areas.

A number of public open spaces in Clayton are located within a 400-metre range of properties but do not have walkable access due to a lack of permeability in the surrounding street networks (including Meppel Drive Reserve and Jack Meade Reserve).

Residential areas close to industrial or commercial developments also lack access, often due to large blocks. This is also evident around Browns Road where a large gap is part of the Monash Hospital and medical precinct. Arterial roads (North Road, Clayton Road and Centre Road) and the Cranbourne / Pakenham Line add barriers to access existing public open space. A lack of local public open spaces in the east and south-west of the Clayton Structure Plan Area also contribute to the large gap areas.

Across the 1.6-kilometre station radius there are large public open spaces on the west and south that service the surround residential populations. The north has significant gaps in public open space, partially due to the presence of Monash University's large grounds, and the east which is predominantly industrial land uses.

Four significant gaps in access to public open space are shown in Figure 7.2.

These gaps could be resolved by applying an appropriate balance of the following options:

- Improving access to existing public open space by increasing the permeability of the street network or bridging a major barrier such as a railway line
- Providing new public open space
- Opening private or restricted open space to greater public access (such as school grounds). This option is considered more appropriate as a secondary or support approach to improving access to open space, and in is not relied on as a primary solution for this technical assessment, due to the lack of control and longer-term tenure of such arrangements.

Figure 7.2 shows the 400-metre walkable access to public open spaces, with four significant gap areas highlighted.

Gap area 1

On the southern boundary of North Road, in the northern section of Clayton Structure Plan Area. This area consists of detached dwellings on large blocks with some end blocks and cul-de-sacs that limit access and permeability. There is green space on the linear reserve in the centre of North Road, but there are no other public open spaces in this area.

Gap area 2

Browns Road, near the intersection with Wright Street. This area has a significant gap in public open space as it is more than 400 metres from Fregon Reserve (to the north), Remembrance Gardens (to the west) and the Clayton Urban Park courts and Djerring Trail to the south. The area is a mix of residential, health, education and industrial land uses. It is located near the proposed PMP Printing mixed used development site where 8600 m^2 total public open space is planned (this will likely address the gap in public open space).

Gap area 3

Between Centre Road and the Cranbourne / Packenham Line, this is a significant gap area that is lacking public open spaces. The area is predominantly residential with long blocks.

Gap area 4

A smaller significant gap in access to public open space located to the east of Meppel Drive, surrounding Audsley Street. This gap is predominantly due to the large street blocks and lack of permeability in this commercial and industrial area.

FIGURE 7.2 400 M WALKABLE ACCESS TO PUBLIC OPEN SPACE AND SIGNIFICANT GAP AREAS FOR THE CLAYTON STRUCTURE PLAN AREA

7.2.2 QUALITY OF OPEN SPACE

An assessment of the quality of the current public open spaces informed this technical assessment. The quality assessment framework is described in more detail in Appendix D.

The methodology for assessing the quality of the public open spaces involved:

- A site visit to observe thoroughly, work through considerations, assign a performance score of 1 to 5 against the criteria, taking notes and photos to support findings
- Calculating a quality performance score for each site (1 to 5 rating scale)
- Assigning a site / activation potential score (this indicator is not a direct performance score; it is a professional observation of what 'could be' and assists with prioritisation.

The performance criteria rating scale is shown in Table 7.4.

TABLE 7.4 CRITERIA RATING SCALE

Score			Rank	Description
5	Very good		High	Meets criteria very effectively
4	Good			Meets criteria adequately with minor limitation
3	Fair		Medium	Criteria partially met
2	Poor			Criteria poorly or only partially met
1	Very poor		Low	Criteria not achieved

Table 7.5 shows the overall quality assessment and site potential rating score for each public open space.

TABLE 7.5 CLAYTON STRUCTURE PLAN AREA OPEN SPACE QUALITY ASSESSMENT

PUBLIC OPEN SPACE IN CLAYTON STRUCTURE PLAN AREA	PRIMARY FUNCTION CLASSIFICATION	CATCHMENT CLASSIFICATION	AREA (M2)	QUALITY ASSESSMENT RATING	SITE POTENTIAL RATING
Clayton Station West Multi-Sports Area	Sports park	Neighbourhood	2736	5	3
Clayton Urban Park Courts / RSL Memorial Space	Sports park	Community	14,455	4.8	4
Djerring Trail POS	Linear park	Neighbourhood	5562	3.6	3
Evelyn Street Reserve	Community park	Neighbourhood	7280	4.6	4
First Street Reserve	Community park	Neighbourhood	8420	5	4
Flora Road Reserve	Community park	Neighbourhood	2083	4.6	3
Fregon Reserve	Sports park	Community	35,156	5	4
Haughton Road Fenced Dog Park	Community park	Community	3279	4.8	4
Jack Meade Reserve	Sports park	Community	25,058	4.2	4
Jackson Green Playground	Community park	Neighbourhood	3117	5	4
Meppel Drive Reserve	Community park	Pocket	1682	3	4
No name public forecourt (Clayton Railway Station)	Community park	Community	752	4.8	3
Remembrance Garden / Clayton Hall	Landscape park	Neighbourhood	3292	3.8	3

The quality assessment rating scale is from 1 ‘Very poor’ to 5 ‘Very good’. Scores of 4 to 5 indicate higher quality public open spaces, and scores of 1 to 2 indicate lower-quality public open spaces.

The higher-quality public open spaces include Fregon Reserve, First Street Reserve, Flora Road Reserve, Clayton Station West Multi-Sport Area, Clayton Urban Park Courts / RSL Memorial Space, Jackson Green Playground, and Evelyn Street Reserve.

Given the higher quality of many of these sites in the Clayton Structure Plan Area, several are regarded as exemplar examples:

- First Street Reserve (Figure 7.3) is considered an exemplar community park, with a well-designed large central open space with perimeter shade trees, a great range of play facilities, shelter, and barbeque. A toilet facility could be added to further enhance the quality of the site.
- Jackson Green Playground / Reserve is considered an exemplar community park development of a new playground and reserve centrally located and surrounded by medium density residential development.
- Clayton Urban Park Courts / RSL Memorial Space (Figure 7.4) is considered an exemplar development of high-quality multi-purpose urban courts, fitness stations and recreational facilities such as table tennis tables, optimising use of space beneath the overhead rail line.

Medium-quality public open spaces include Meppel Drive Reserve (Figure 7.5) and Djerring Trail public open space (Figure 7.6). Both sites have potential for further development to improve their quality, provide more facilities and amenities, and increase use and activation of the spaces.

FIGURE 7.3 FIRST STREET RESERVE

FIGURE 7.4 CLAYTON URBAN PARK COURTS RSL MEMORIAL SPACE

FIGURE 7.5 MEPPEL DRIVE RESERVE

FIGURE 7.6 DJERRING TRAIL PUBLIC OPEN SPACE

Figure 7.7 shows the quality of public open space in the Clayton Structure Plan Area. The coverage of walkable access to exiting public open spaces is also shown, highlighting the two primary metrics of *access* and *quality* in the Clayton Structure Plan Area.

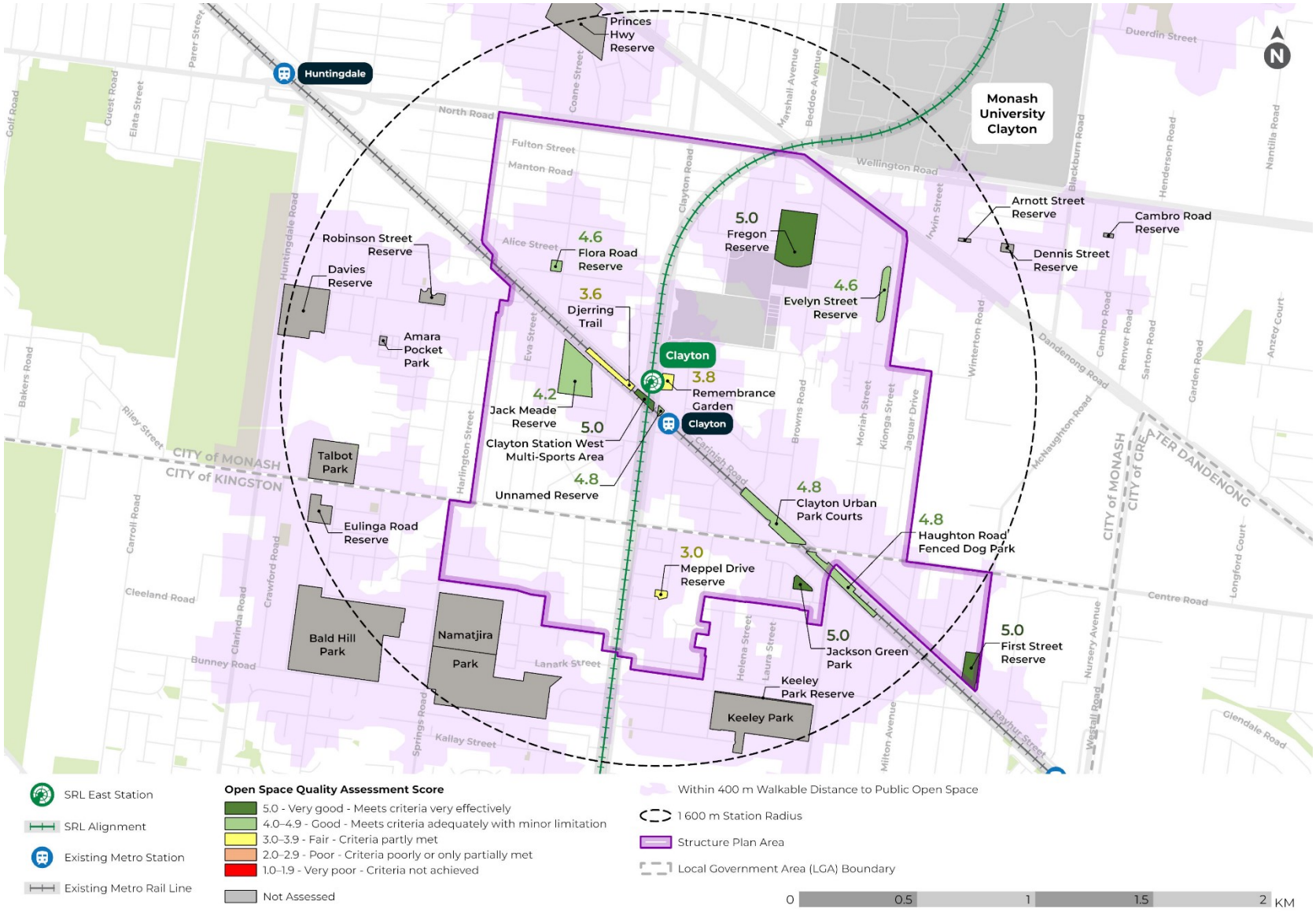


FIGURE 7.7 QUALITY OF PUBLIC OPEN SPACE IN THE CLAYTON STRUCTURE PLAN AREA

7.2.3 DIVERSITY OF OPEN SPACE

There should be a diverse range of public open spaces by *catchment* and *function* across the SRL East Structure Plan Areas and the wider 1.6-kilometre station radius. The function of a public open space may be changed over time depending on community needs and trends, whereas the hierarchy type is less flexible due to the areas required.

Local pocket, neighbourhood, community and district catchments are used to define the catchment hierarchy and geographic distribution of public open space. The function classifications of community park, landscape park, nature park, linear park, sports park and civic space have been applied to this assessment.

7.2.3.1 Structure Plan Area

There are 13 public open spaces covering a combined area of 112,879 m^2 in the Clayton Structure Plan Area.

The open spaces have a diversity of function, including community parks, landscape parks, linear parks, and sports parks. The largest public open spaces are Fregon Reserve and Jack Meade Oval, both large community sports parks which also provide for informal recreation. There are pocket, neighbourhood and community parks represented in the open space hierarchy. The closest district parks are Bald Hill Park and Namatjira Park on the south-west edge of the 1.6-kilometre station radius.

Table 7.6 summarises the 13 public open spaces in the Structure Plan Area by their primary function and catchment classification and total combined area (in square metres).

Figure 7.1 shows their location and distribution.

Table 7.7 shows the diversity rating for public open space for the Structure Plan Area.

TABLE 7.6 PRIMARY FUNCTION AND CATCHMENT CLASSIFICATION OF PUBLIC OPEN SPACES IN CLAYTON STRUCTURE PLAN AREA

CLAYTON STRUCTURE PLAN AREA	COMMUNITY PARK	LANDSCAPE PARK	NATURE PARK	LINEAR PARK	SPORTS PARK	CIVIC SPACE
POCKET	1 (1682 m^2)					
NEIGHBOURHOOD	4 (17,783 m^2)	1 (3292 m^2)		1 (5562 m^2)	1 (2736 m^2)	
COMMUNITY	2 (4031 m^2)				3 (60,214 m^2)	
DISTRICT						

Table 7.7 shows the diversity rating for public open space for the Clayton Structure Plan Area.

Overall, the Clayton Structure Plan Area rates above average for diversity of public open spaces.

TABLE 7.7 DIVERSITY RATING FOR CLAYTON STRUCTURE PLAN AREA

DIVERSITY CRITERIA		DIVERSITY RATING
ABOVE AVERAGE	More than two thirds of the public open spaces in the Structure Plan Area are represented by catchment and primary function classifications.	✓
AVERAGE	One third to two thirds of the public open spaces in the Structure Plan Area are represented by catchment and primary function classifications.	
BELOW AVERAGE	Less than one third of the public open spaces in the Structure Plan Area are represented by catchment and primary function classifications.	

7.2.3.2 1.6-kilometre station radius

There are 25 public open spaces covering a combined area of 628,804 m^2 in a 1.6-kilometre radius (20-minute walk) of the SRL station at Clayton. This includes public open spaces that are partially within the 1.6-kilometre radius, where they straddle the boundary.

Public open space in the 1.6-kilometre station radius is characterised by several key features:

- The Djerring Trail shared use pathway, aligned with the Cranbourne / Packenham Line, runs through the centre of the 1.6-kilometre station radius. The Djerring Trail provides a connector link between open spaces including the Clayton Station West Multi-Sports Area, Clayton Urban Park Courts, and Haughton Road Fenced Dog Park.
- There are several public open spaces on the edge of the 1.6-kilometre radius, including Princes Highway Reserve, Davies Reserve, Talbot Park, Bald Hill Park, Namatjira Park, and Keeley Park, most of which are sports parks.

Outside the commercial and health areas, the land is mostly residential in the 1.6-kilometre radius.

There is good diversity of public open space across the 1.6-kilometre station radius.

Table 7.8 summarises the function and catchment classification of the 25 public open spaces in the 1.6-kilometre station radius. Figure 7.1 shows their location and distribution.

TABLE 7.8 PRIMARY FUNCTION AND CATCHMENT CLASSIFICATION OF PUBLIC OPEN SPACES IN CLAYTON 1.6-KILOMETRE STATION RADIUS

CLAYTON 1.6 KM STATION RADIUS	COMMUNITY PARK	LANDSCAPE PARK	NATURE PARK	LINEAR PARK	SPORTS PARK	CIVIC SPACE
POCKET	2					
NEIGHBOURHOOD	5	1		1	2	
COMMUNITY	4				5	
DISTRICT	1		1		3	

7.2.3.3 Distribution of Open Space

The distribution of public open space by hierarchy can be assessed through a spatial analysis that applies the walkable catchments for each hierarchy classification identified in section 2.3.2. This analysis considers the different walkable catchments of each classification of public open space by hierarchy (pocket, neighbourhood, community, district) as a different performance indicator to the 'access' gap analysis in section 7.2.1 which identifies how much of the Structure Plan Area is within 400m walkable access to any type of public open space (400m walkable access being a primary metric of this technical assessment).

A high-performing public open space network should be well distributed geographically, so there is a suitable spread of public open spaces by hierarchy. Figure 7.8 incorporates the performance indicator of diversity with the walkable catchments of public open spaces by hierarchy across the Clayton Structure Plan Area and 1.6-kilometre station radius. The darker purple layers in the map represent a crossover of walkable catchments of different spaces, demonstrating locations of good public open space diversity.

Most of the Clayton Structure Plan Area is within the walkable catchment of more than one classification of public open space. Neighbourhood and community spaces are well distributed across the Clayton Structure Plan Area, with district parks located to the south, on the edge of the 1.6-kilometre station radius. Locations most lacking diversity in the open space hierarchy are the north-west corner of the Structure Plan Area (south of North Road), and south of Fregon Reserve, near the Monash health precinct. Refer to Appendix H for detailed mapping analysis of each open space classification and its associated walkable catchment.

Appendix I includes spatial analysis of the function of each existing public open space in the Structure Plan Area and 1.6-kilometre station radius. Clayton has a mix of public open space functions located within the Structure Plan Area boundary. Sports parks are evenly dispersed to the north, south, east and west, with community parks of mostly smaller sizes scattered to the north and south-east in the Structure Plan Area. Larger community parks are located in the 1.6-kilometre station radius, with Bald Hill Park and Talbot Park serving the south-western area of Clayton as well as Namatjira Park with sports and nature park functions.

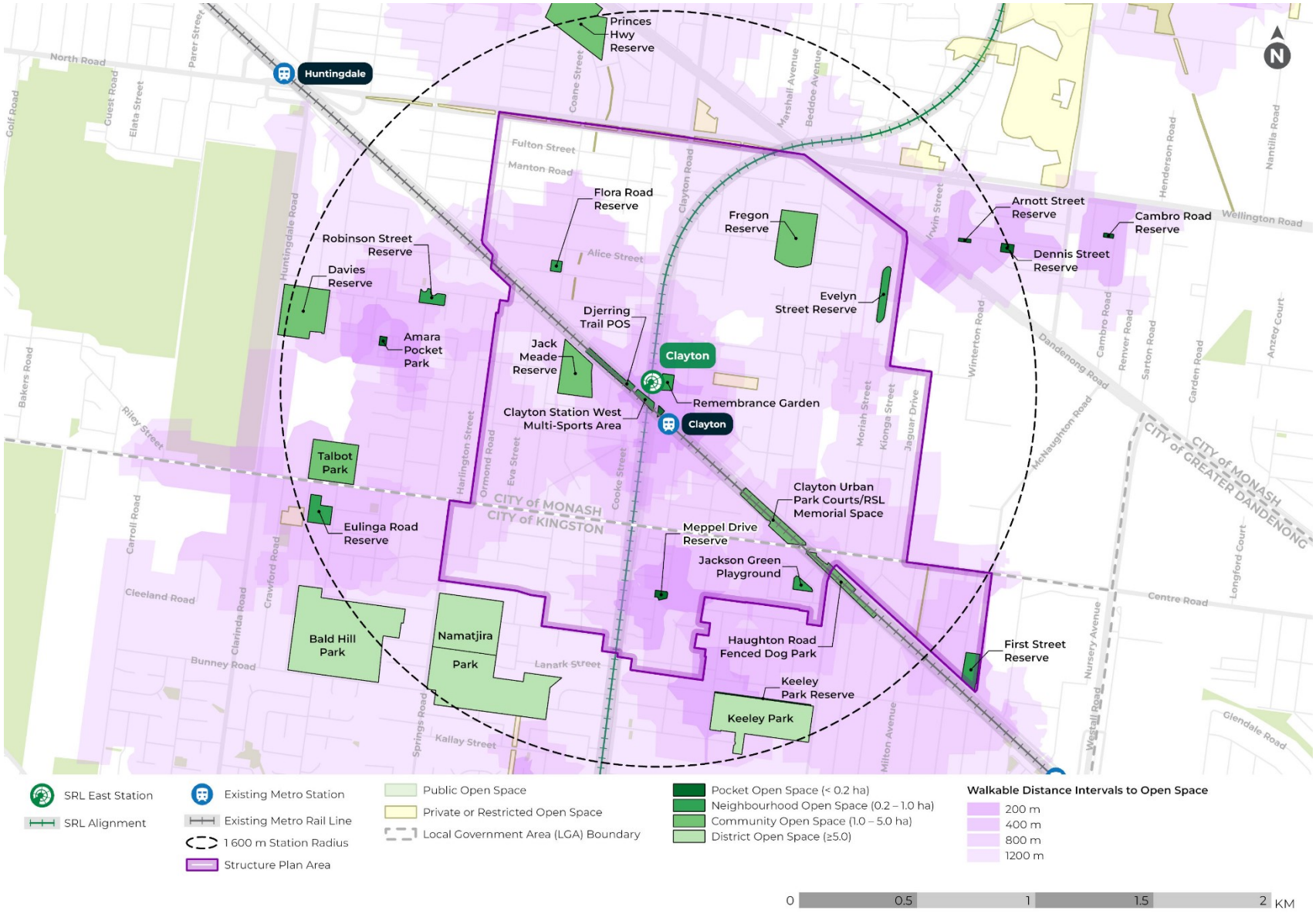


FIGURE 7.8 DIVERSITY OF PUBLIC OPEN SPACE BY HIERARCHY

7.2.4 PROVISION OF OPEN SPACE

The secondary metric for assessing the performance of existing public open space networks measures the *provision* of public open space against the provision ratio of 9 m^2/person.

The current provision of public open space in the Clayton 1.6-kilometre station radius is 27.9 m^2/person, as shown in Table 7.9.

TABLE 7.9 EXISTING PUBLIC OPEN SPACE PER PERSON – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	628,804	22,500	27.9

The current provision of public open space in the Clayton Structure Plan Area is 7.9 m^2/person, as shown in Table 7.10.

TABLE 7.10 EXISTING PUBLIC OPEN SPACE PER PERSON – STRUCTURE PLAN AREA

STRUCTURE PLAN AREA	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	112,879	14,200	7.9

7.2.5 CHALLENGES AND OPPORTUNITIES

The challenges and opportunities in transition to higher density areas in relation to the metrics and performance indicators are summarised in Table 7.11.

TABLE 7.11 OPEN SPACE NETWORK PERFORMANCE

OPEN SPACE METRIC	SUMMARY OF PERFORMANCE OF EXISTING OPEN SPACE NETWORK	CHALLENGES / OPPORTUNITIES
METRICS		
Access	• The Clayton Structure Plan Area has low walkable access to public open space. • There are four significant gaps in access to public open space to be addressed: 1. On the southern boundary of North Road, in the northern section of the Structure Plan Area. This area consists of large blocks and cul-de-sacs that limit access. 2. Browns Road, near the intersection with Wright Street. It is located near the proposed PMP Printing mixed used development site where 8600 m2 total public open space is planned (this will likely address the gap in public open space). 3. Between Centre Road and the Cranbourne / Packenham Line, the area is predominantly residential with long blocks. 4. East of Meppel Drive, surrounding Audsley Street. This gap is predominantly due to the large street blocks and lack of permeability in this commercial and industrial area.	• Substantial gaps are located in the north, in proximity of Monash University and large industrial and commercial areas. A number of public open spaces in Clayton are located within 400-m range of properties but do not have walkable access due to a lack of permeability in the surrounding street networks. • Main arterial roads (North Road, Clayton Road and Centre Road) and the Cranbourne / Pakenham Line add barriers to access existing public open space. • Leverage the existing open space network by improving connectivity to and enhancing the quality and facilities within them. This will improve the capacity of the existing network as demand increases.
Quality	• Ten of the 13 public open spaces in the Structure Plan Area have a higher quality rating (4 or 5), meaning the Clayton Structure Plan Area has the highest ratio of higher quality public open spaces of all SRL East Structure Plan Areas. • Several high-quality public open spaces in Clayton are considered exemplar.	• The challenge is that all public open spaces within the Structure Plan Area will need to be high quality (rating 4 or 5) to cater to the increased demand and use anticipated. • The opportunity is to prioritise quality improvements, starting with the sites with the lowest quality ratings and higher site potential ratings (Meppel Drive Reserve).
Provision	• The current provision of public open space in the Clayton 1.6 km station radius is 27.9 m^2/person, and in the Structure Plan Area is 7.9 m^2/person.	• The main challenge will be the declining level of public open space provision as the population increases, and that this may be perceived as being detrimental to future liveability within the SRL East Structure Plan Areas. • There are opportunities to explore innovative ways to deliver new public open spaces to balance the decrease in open space provision ratios. Improvements in access, quality and diversity of existing public open spaces will assist in maintaining liveability within the SRL East Structure Plan Areas.
PERFORMANCE INDICATORS		
Diversity	• The Structure Plan Area has an average rating for diversity of public open spaces. • There is a reasonable distribution of public open spaces, but no nature parks or civic spaces, or district catchment parks. • The 1.6 km station radius similarly has a relatively good diversity and distribution of public open spaces. All park typologies are represented except civic spaces.	• The challenge is to provide a suitably diverse and well distributed mix of public open spaces within the Structure Plan Area, across both the primary function and classification hierarchies. • The opportunity lies with the provision of new public open spaces in the Structure Plan Area that are well distributed and provide greater levels of diversity.

7.3 Future open space needs

Factors influencing future demand for open space in the Clayton Structure Plan Area include:

- Population growth forecasts
- Population density and where those people will live.

7.3.1 LOCAL GOVERNMENT PRIORITIES AND OPPORTUNITIES FOR CLAYTON STRUCTURE PLAN AREA

Local government documents relating to public open space in the Clayton Structure Plan Area are summarised in the table below. Priorities and opportunities are identified, as well as their relevance to the Structure Plan Area. As the Clayton Structure Plan Area is located across the City of Monash and City of Kingston, documents from both councils are summarised.

TABLE 7.12 CITY OF MONASH PRIORITIES AND OPPORTUNITIES IN THE CLAYTON STRUCTURE PLAN AREA

COUNCIL DOCUMENT	PRIORITIES / OPPORTUNITIES	RELEVANCE TO STRUCTURE PLAN AREA
Monash Open Space Strategy, City of Monash, 2021	• The Clayton Structure Plan Area is identified as having a very low level of open space provision per 1000 people. Half the Structure Plan Area does not have access to open space within 400 m. • A low provision of sports reserves is identified. Monash University and schools could be opportunities for joint use of open space to address needs. • Centre Road Sky Rail Playspace pocket park (delivered with the Level Crossing Removal Authority) to be located to the west of the sports courts on the corner of Centre and Carinish Roads. A concept plan was developed in 2020. • Clayton is a priority Structure Plan Area to undertake improvements or additions of open space provision, including in employment areas. Future development of social family recreation and public open spaces should be prioritised in gap areas.	• Gap analysis identified need for more public open space in this Structure Plan Area. • Opportunity for more public open space in Clayton if restricted open spaces increase access to public. • New play space under rail viaduct on Centre Road / Carinish Road identified in this analysis (not located within an area with a gap in access to public open space, but more public open spaces are encouraged across the Clayton area).
Monash Playground and Playspace Strategy, City of Monash, 2021	• The Council regularly upgrades local play spaces to make them more interesting and fun for local children, in line with the Monash Playground and Playspace Strategy 2020. • In Clayton, the following play spaces are to be upgraded in the next 1 to 3 years: » Talbot Park Oakleigh South » Centre Road Sky Rail Playspace.	• Upgrades to existing public open spaces is encouraged for the provision of high-quality public open spaces in the Clayton Structure Plan Area.
Clayton Activity Centre Structure Plan Area Plan, City of Monash 2020	• A lack of high quality green public open space within the Clayton Activity Centre is identified. Fregon Reserve and Meade Reserve provide important sporting roles but have limited passive recreation facilities. • There is opportunity to develop a new public square / plaza within the Cooke Street car park site as part of its redevelopment. The plaza should connect Clayton Road through to the Community Centre and provide a space suitable for events. • Provide a new public plaza on Haughton Road that integrates with the newly developed Level Crossing Removal hard court spaces. • Develop a new pocket park as part of any redevelopment of the car park at the corner of Centre Road and Thomas Street. • Enhance Clayton Remembrance Gardens.	• New public open space within the Cooke Street car park site is supported. • New open space will be delivered at the entrance of the SRL station at Clayton as part of SRL East. As noted in Section 7.1.3, the Clayton Community Space (hard court spaces) on Haughton Road are being temporarily relocated further south-east (adjacent the rail viaduct) while SRL East is constructed. • The pocket park at Centre Road / Thomas Street has not been identified within a significant gap area. • The Clayton Remembrance Gardens will be impacted during SRL East construction and should be reinstated to a higher standard when construction is complete.
2023-2033 Open Space Strategy, City of Kingston, 2023	• Clayton South is acknowledged as having good diversity of function for large open spaces. • Industrial areas located on large allotments limit direct movement and accessibility through the suburb. They also create identified areas of urban heat with very low tree canopy cover. Increased street tree planting is to be prioritised in industrial areas. • A gap analysis revealed small pockets of the suburb do not have access to open space within a 1 km walk.	• Opportunities proposed for the City of Kingston section of Clayton South are all located outside the boundary of the Structure Plan Area and 1.6 km station radius. • Street tree planting in industrial areas is an opportunity that could be applied within the Clayton Structure Plan Area.

7.3.2 LOCAL GOVERNMENT FEEDBACK ON THE CLAYTON STRUCTURE PLAN AREA

In the first half of 2024 City of Monash and City of Kingston provided feedback to SRLA on key directions for the Clayton Structure Plan, including issues and opportunities related to open space. Feedback raised by City of Monash included the need for more public open space in the Clayton area to support healthy living. City of Kingston feedback included prioritising equitable access to public open space for residents of Clayton South.

There are opportunities within City of Kingston to investigate potential community access to private or restricted open space to supplement public open space provision. Table 7.13 summarises the open space issues and opportunities discussed.

TABLE 7.13 CITY OF MONASH AND CITY OF KINGSTON OFFICERS FEEDBACK ON OPEN SPACE IN THE CLAYTON STRUCTURE PLAN AREA

ISSUES / OPPORTUNITIES RAISED BY CITY OF MONASH OFFICERS
• Greater focus on delivering open space in Clayton is required to support healthy living, active transport, affordable/free leisure activities for the community • Important to increase public realm in Clayton (such as potential open space / public plaza near Clayton Community Centre) • Connectivity between Clayton Activity Centre and other areas in Clayton should be improved.
ISSUES / OPPORTUNITIES RAISED BY CITY OF KINGSTON OFFICERS
• Consider improving cycling and pedestrian routes, connecting to Chain of Parks and other open spaces • Opportunities for urban cooling initiatives and habitat corridors • Equitable access to public open space close to home is a priority for residents in Clayton South • Play spaces in Clayton South have significant resident populations within a 10-minute walk. Consider enhancing quality and diversity at these sites or at new spaces in proximity of these catchments • Opportunities for provision of open space for community use at private/restricted open space could be investigated further to supplement public open space provision.

7.3.3 STRUCTURE PLAN AREA DENSITY PROJECTIONS

The locations of highest projected residential population density in 2041 in the Clayton Structure Plan Area are centred around the SRL station core and major arterial roads including Clayton Road.

As described in Section 5 Principle 4, a high degree of access to public open space for residents and workers becomes a primary requirement in a higher density urban environment. In the highest density areas of the Structure Plan Area, greater than 400-metre walkable access to public open space is preferred, so 200-metre walkable access becomes a desirable benchmark where possible. This is assessed more in the next section. Figure 7.9 illustrates the 2041 projected population densities for the Clayton Structure Plan Area at neighbourhood level. Figure 7.10 illustrates the 2041 projected employment densities for the Clayton Structure Plan Area at neighbourhood level.

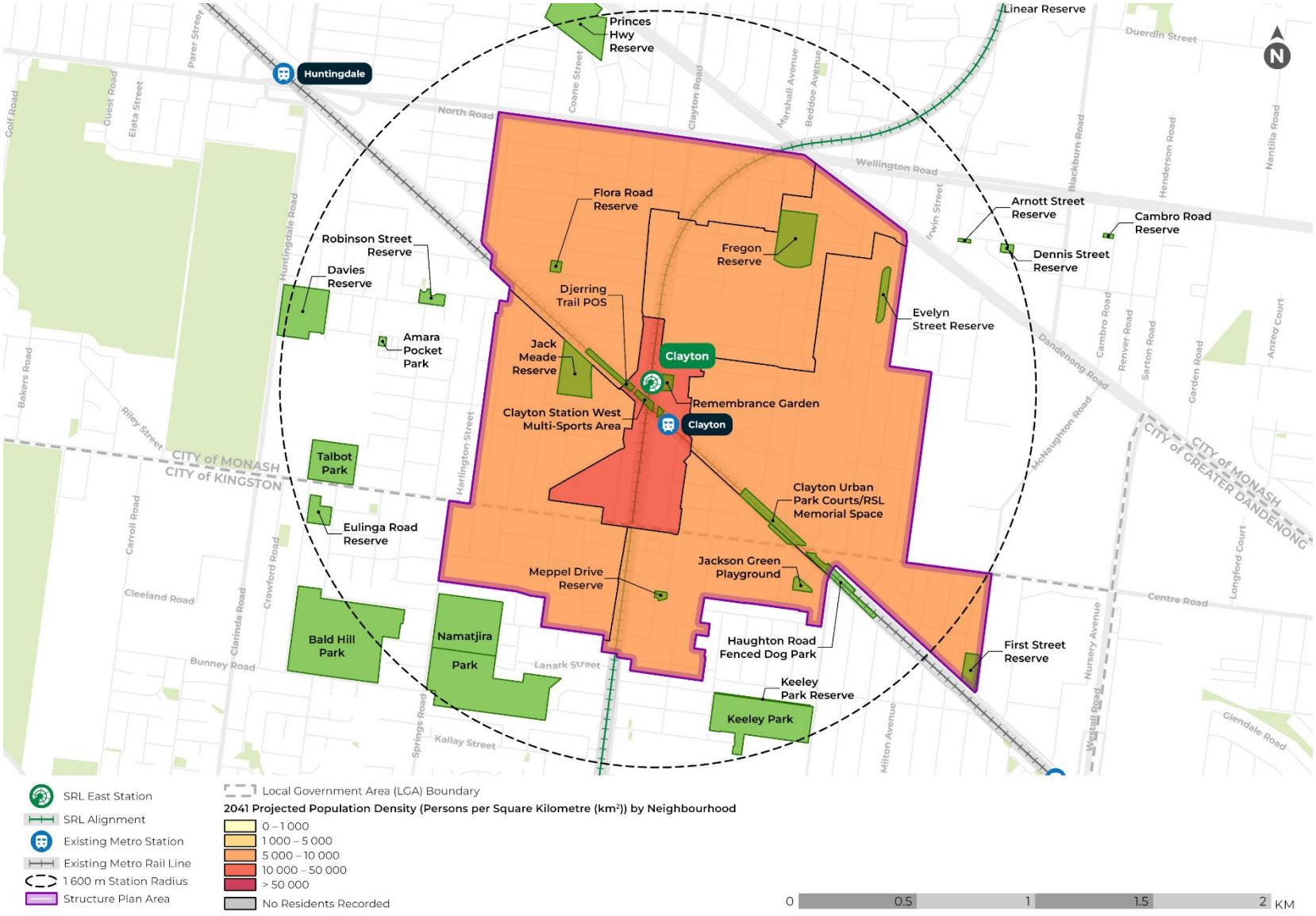


FIGURE 7.9 2041 PROJECTED RESIDENTIAL DENSITY FOR CLAYTON STRUCTURE PLAN AREA

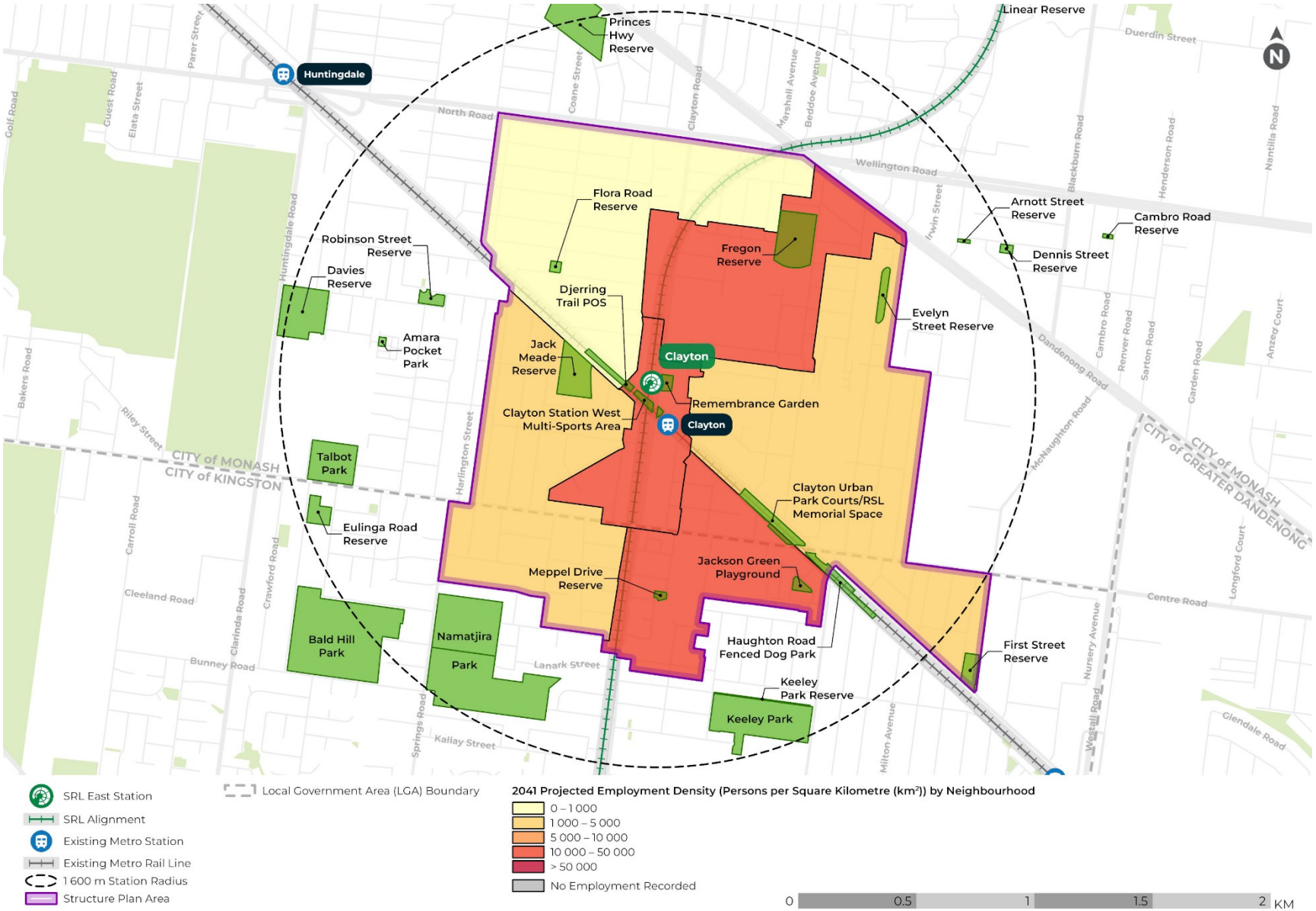


FIGURE 7.10 2041 PROJECTED EMPLOYMENT DENSITY FOR CLAYTON STRUCTURE PLAN AREA

7.3.4 ACCESS

Changes to the open space network in the Clayton Structure Plan Area are needed to support its transition to a higher density urban environment. These changes include improving walkable access to public open space across the Structure Plan Area, as well as the areas around the station core where the highest population density is expected.

7.3.4.1 Changes needed to support transition to higher density environments

The following changes in the Clayton Structure Plan Area are needed:

- Close gaps in 400-metre walkable access to public open space to increase the existing 60 per cent coverage to 95 per cent coverage for residents and workers
- Improve 200-metre walkable access to public open space in the highest projected density areas around the SRL station core, where possible.

7.3.4.2 Addressing the 400-metre walkable access gaps

There are four significant gap areas in the Clayton Structure Plan Area.

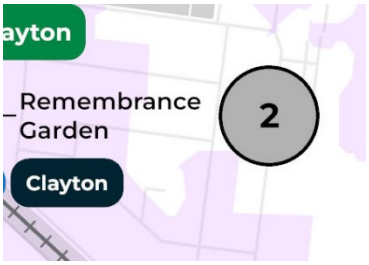
These gaps could be resolved by applying an appropriate balance of the following options:

- Improving access to existing public open space by increasing the permeability of the street network or bridging a major barrier such as a railway line
- Providing new public open space
- Opening private or restricted open space to greater public access (such as university or school grounds). This option is considered more appropriate as a secondary or support approach to improving access to open space, and is not relied on as a primary solution for this technical assessment, due to the lack of control and longer-term tenure of such arrangements.

Table 7.14 summarises potential solutions to address the significant gap areas where public open space cannot be accessed within a 400-metre walk.

Detailed descriptions and rationale for the solutions are provided in Section 7.4.

TABLE 7.14 ADDRESSING GAPS IN ACCESS TO PUBLIC OPEN SPACE

GAP AREA	LOCATION	POTENTIAL SOLUTIONS
Gap Area 1		A proposed new open space around Madeleine Road would serve residential and worker populations (from nearby Clayton Road).
Gap Area 2		The proposed private residential development on the former PMP Printing development site on Carinish / Browns Road includes two new local public open spaces and a civic plaza. This would address a large gap in walkable access to public open space in this area.
Gap Area 3		Two new open spaces are proposed – one around Cooke Street and another around Eva Street / Ormond Road. There is a co-location opportunity with nearby Clayton Community Hub for the Cooke Street open space that could serve nearby residents and workers from Clayton Road.
Gap Area 4		New pedestrian links connecting Meppel Drive Reserve from Audsley St and Clayton Road are proposed to improve permeability and walkable access to public open space in this area.

7.3.5 QUALITY

7.3.5.1 Changes needed to support transition to higher density environments

The following changes in the Clayton Structure Plan Area are needed:

- Public open spaces will need to be high quality (rating 4 or 5) to cater to future increased demand and use
- Enhancing low-quality public open spaces is a priority, particularly those with the most potential for improvement and activation to optimise their use.

The priority for quality improvement is Meppel Drive Reserve, which could benefit from a redesign, opening up of sightlines, upgraded facilities such as the playground, furniture and paths, and improved landscaping.

7.3.6 DIVERSITY

7.3.6.1 Changes needed to support transition to higher density environments

The following changes in the Clayton Structure Plan Area are needed:

- New public open spaces to improve the diversity and distribution of public open space
- A new civic space around the new SRL East station at Clayton.

7.3.7 PROVISION

7.3.7.1 Changes needed to support transition to higher density environments

Table 7.15 shows the existing public open space provision ratio (square metres per person) for the 1.6-kilometre station radius. Table 7.16 shows the provision ratio once the 2041 population projection is applied (assuming no change in quantum of open space).

The tables show a decrease from the existing 27.9 m^2/person to 15.5 m^2/person.

TABLE 7.15 EXISTING PUBLIC OPEN SPACE PER PERSON – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	628,804	22,500	27.9

TABLE 7.16 PROJECTED PUBLIC OPEN SPACE PER PERSON 2041 – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	628,804	40,500	15.5

Table 7.17 shows the existing public open space provision ratio (square metres per person) for the Structure Plan Area. At 7.9 m^2/person, Clayton's Structure Plan Area is less than the indicator provision ratio of 9 m^2/person and would require an additional 14,921 m^2 of public open space to meet this ratio.

Table 7.18 shows the provision ratio once the 2041 population projection is applied (assuming no change in quantum of open space).

The tables show a decrease in public open space provision from the existing 7.9 m^2/person to 4.2 m^2/person in 2041. A total of 242,100 m^2 of public open space would be required to meet the provision ratio of 9m^2/person (an addition of 129,221 m^2 to the current public open space). This demonstrates that public open space in the wider 1.6-kilometre station radius will be important for supplementing public open space in the Structure Plan Area.

TABLE 7.17 EXISTING PUBLIC OPEN SPACE PER PERSON – STRUCTURE PLAN AREA

STRUCTURE PLAN AREA	CURRENT STATE PUBLIC OPEN SPACE (M^2)	2021 POPULATION (ABS ERP)	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	112,879	14,200	7.9

TABLE 7.18 PROJECTED PUBLIC OPEN SPACE PER PERSON FOR 2041 – STRUCTURE PLAN AREA

STRUCTURE PLAN AREA	CURRENT STATE PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	112,879	26,900	4.2

7.4 Changes to the open space network

This section describes the potential changes to the open space network in the Clayton Structure Plan Area.

This includes the purpose and rationale of each potential change and whether it is already planned or is proposed as a recommendation of this assessment. The location of each potential change is mapped to show how it would change the gaps in walkable access to public open space in the Structure Plan Area.

The potential changes are grouped into four categories:

1. **New open spaces** – includes known new open spaces arising from planned private development and proposed new public open space to address a gap in 400-metre walkable access.
2. **Enhanced open spaces** – planned reconfigurations and priority quality improvements and enhancements to existing public open space.
3. **New or enhanced pedestrian links** – proposed strategic pedestrian linkages to provide a new link to an existing open space, or a street-to-street link, both of which will improve permeability and help address existing 400-metre walkable access gaps to public open space.
4. **Temporary open spaces** – proposed temporary public open spaces to offset the loss of any public open space during SRL East construction works.

The locations of these potential changes are shown on Figure 7.11, with their category identified by colour coding.

The 'current status' column of the tables in the following sections categorises the site of each potential change as one of the following:

- **Planned** – the open space is already planned, such as by a private developer, council, or by SRLA for SRL East (refer to dark green circles on Figure 7.11)
- **Proposed** – a new public open space, a new or enhanced pedestrian link, or an enhanced or upgraded existing public open space is proposed as a recommendation of this assessment. The locations of proposed new open spaces or links are not fixed, and an alternative location that addresses walkability gaps could be considered (refer to light green circles for new public open space, purple circles for new pedestrian links and yellow circles for enhanced public open spaces on Figure 7.11). The classifications and area of the proposed public open spaces are indicative only. The suggested catchment and functions are based on geographic context and diversity considerations of the broader open space network, however, each new public open space should consider community preferences, current trends, geographic context, sports and recreation participation rates and asset requirements. The indicative area for proposed public open spaces is provided within a range (e.g. 1000 – 3000 m^2) for flexibility. The minimum size (e.g. 1000 m^2) has been applied to access and provision calculations across this assessment but opportunities to deliver larger spaces (e.g. 3000 m^2) may be more beneficial from maintenance/economic, environmental and community perspectives, to be evaluated in future planning processes.
- **Future opportunity** – no immediate need is identified but the site should be considered for open space if the opportunity for delivery arises in future and it would contribute appropriately to the existing and future open space network in the Structure Plan Area (not shown on Figure 7.11; see the tables on the following pages for details).

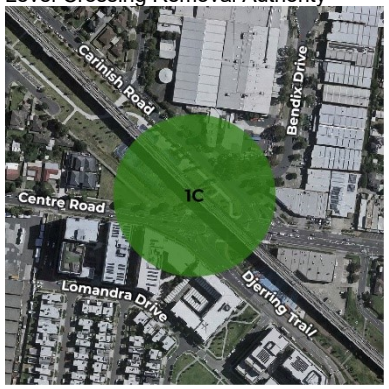
The mapping of the potential changes shown on Figure 7.11 demonstrates how the 400-metre walkable access gaps to public open space can be resolved.

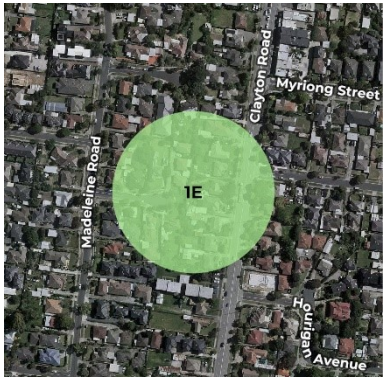
FIGURE 7.11 WALKABILITY ACCESS FOR POTENTIAL FUTURE OPEN SPACE NETWORK IN THE CLAYTON STRUCTURE PLAN AREA

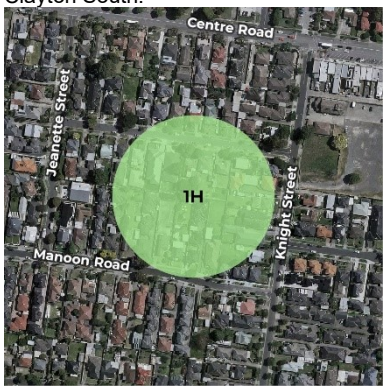
7.4.1 NEW OPEN SPACES

TABLE 7.19 CLAYTON - NEW OPEN SPACES

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
1A	New public realm / civic space around SRL station 	Land to be acquired for SRL East Project. Includes partial closure of Carinish Road. Purpose is to provide a new public space at the SRL station environs.	PLANNED (by SRL Rail and Infrastructure works) • Land use: public open space under rail viaduct, Carinish Road (partial closure), commercial buildings. • Ownership: VicTrack and private landowners • Existing or proposed open space: existing and proposed • Committed or potential: committed.	Catchment: Local pocket park Function: Civic space Size: 1330 m^2 Fixed (subject to SRL East approved rail scope)	**Is it required to address a gap in open space provision?** No. Not located within a gap in open space provision. A new urban place is proposed within the SRL East Urban Design Strategy to be delivered as part of the SRL East rail and infrastructure works. The space will create an appropriate connection and setting for the new SRL station entrance, including urban greening and shading to offer visual relief from surrounding built form and hard paced areas. This supports liveability outcomes through the delivery of accessible, high quality open space interfacing with the SRL station at Clayton.
1B	Proposed new open space in PMP Printing development site, Carinish / Browns Rd 	Former industrial land proposed to be developed as mixed-use Structure Plan Area including public open spaces.	PLANNED (by private developer) • Land use: former industrial land proposed for a mixed-use development (residential and commercial) • Ownership: private • Existing or proposed open space: proposed • Committed or potential: committed.	Catchment: Local neighbourhood park (1), Local pocket park (2) Function: Community parks (2) and Civic space (1) Size: 8600 m^2 total (5300 m^2, 1900 m^2, 1400 m^2)	**Is it required to address a gap in open space provision?** Yes. Located on the western edge of a significant gap in open space provision within the eastern portion of the Clayton Structure Plan Area. The development is proposed to include two 'local parks' (Central Park 5300 m^2, Browns Rd Park 1900 m^2), and an 'urban plaza' (Town Square 1400 m^2). It will provide a total of 8600 m^2 public open space.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
1C	Planned new play space on the corner of Centre Road and Carinish Road, to be constructed by City of Monash and Level Crossing Removal Authority 	Land next to rail viaduct. Playspace to be located to the west of existing sports courts on the corner of Centre Road and Carinish Road.	PLANNED (by Level Crossing Removal Authority / City of Monash) • Land use: grassed open space / land under rail viaduct • Ownership: Victorian Government / VicTrack • Existing or proposed open space: proposed • Committed or potential: committed.	Catchment: Local pocket park (indicative size 0.1-0.2ha) – TBC by the Council Function: Community park Size: approx. 1000 m^2 (fixed)	**Is it required to address a gap in open space provision?** No. Not located within a gap in open space provision. Centre Road Skyrail Playspace is to be delivered by the Level Crossing Removal Authority and City of Monash in the next 1 to 3 years. Located adjacent to the rail viaduct to the west of existing sports courts on the corner of Centre and Carinish Roads, Clayton, a play space, picnic setting, concrete path and planting of additional trees is proposed.
1D	Potential new open space around Cooke Street, Clayton 	Purpose is to provide a local pocket or neighbourhood park in an area with a gap in walkable access to public open space. This could serve both residences (to the west) and worker populations (from nearby Clayton Road).	PROPOSED • Land use: commercial and community land uses, car parking • Ownership: private landowners / City of Monash • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 - 3000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space in this area (south-western section of Clayton Structure Plan Area). Depending on the exact location of the proposed public open space, there is a co-location opportunity with the nearby Clayton Community Hub. A new public open space in this area would provide for nearby residents and workers from Clayton Road and support liveability outcomes with the provision of easily accessible high quality open space.
1E	Potential new open space around Madeleine Road, Oakleigh East	Purpose is to provide a local pocket park in an area with a gap in access to public open space. This could serve residential and worker	PROPOSED • Land use: residential • Ownership: private landowners	Catchment: Local neighbourhood park Function: Community park	**Is it required to address a gap in open space provision?** Yes**.** There is a significant gap in walkable access to public open space in this area that could be addressed with a potential

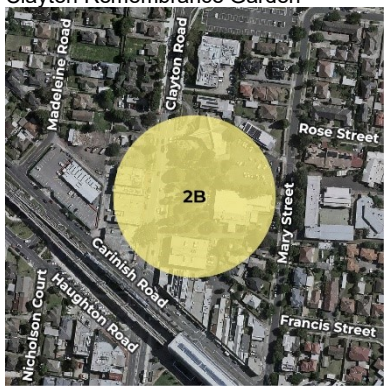
MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
		populations (from nearby Clayton Road).	• Existing or proposed open space: proposed • Committed or potential: potential.	Size: 3000 - 5000 m^2 recommended	new local neighbourhood community park. This gap in open space provision is located near the restricted open space at Clayton North Primary School (corner Clayton Rd / North Rd) in the northern section of the Clayton Structure Plan Area. There is an opportunity for opening restricted open space (outside school hours) to supplement the proposed new open space to further address this gap.
1F	Potential new open space around Eva Street and Ormond Road, Clayton. 	Purpose is to provide a local pocket park in an area with a gap in access to public open space. This could serve the surrounding residential population.	PROPOSED • Land use: residential • Ownership: private landowners • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 - 3000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space in this area (western section of Clayton Structure Plan Area). This area is identified as a gap in 400 m walkable access to community open space within the *City of Monash Open Space Strategy 2021*. A new public open space in this area would provide for nearby residents and workers and support liveability outcomes with the provision of easily accessible high quality open space.
1G	Potential new open space between Fulton Street and Manton Road, Clayton.	Purpose is to increase provision of open space in the Clayton Structure Plan Area with a new local pocket park.	PROPOSED • Land use: residential • Ownership: private landowners • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 - 3000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space in this area (north-western corner of the Clayton Structure Plan Area). A new public open space in this area would provide for nearby residents and workers and support liveability outcomes with the provision of easily accessible high quality open space.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
					
1H	Potential new open space between Springfield Avenue and Manoon Road, Clayton South. 	Purpose is to increase provision of open space in the Clayton Structure Plan Area with a new local pocket park.	PROPOSED • Land use: residential • Ownership: private landowners • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: Local pocket / neighbourhood park Function: Community park Size: 1000 -3000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space to the south of Centre Road (in the southwestern section of the Clayton Structure Plan Area). A new public open space in this area would provide for nearby residents and workers and support liveability outcomes with the provision of easily accessible high quality open space.

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
1l	Potential new open space around Wright Street and Kanooka Grove, Clayton 	Purpose is to increase provision of open space in the Clayton Structure Plan Area with a new local neighbourhood park.	PROPOSED • Land use: residential • Ownership: private landowners • Existing or proposed open space: proposed • Committed or potential: potential.	Catchment: Local neighbourhood park Function: Community park Size: 3000 – 5000 m^2 recommended	**Is it required to address a gap in open space provision?** Yes. There is a significant gap in walkable access to public open space in the eastern section of the Clayton Structure Plan Area, near the Monash health precinct. A new public open space in this area would provide for nearby residents and workers and support liveability outcomes with the provision of easily accessible high quality open space.

7.4.2 ENHANCED OPEN SPACES

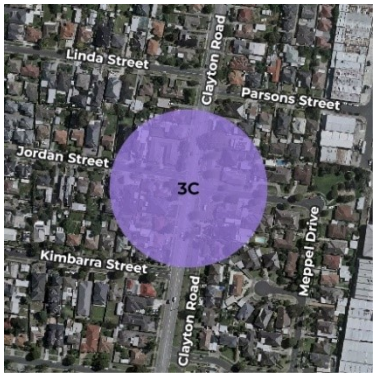
TABLE 7.20 CLAYTON – ENHANCED OPEN SPACES

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX. SIZE	RATIONALE
2A	Meppel Drive Reserve 	Quality improvement upgrade	PROPOSED • Upgrade existing public open space.	Catchment: Local Pocket Function: Community park Size: 1682 m^2	**Is it required to address a gap in open space provision?** No. It is the location of existing open space. Meppel Drive Reserve could benefit from a redesign and upgrade of facilities. It has a lower quality rating and a high site potential rating, indicating this is a priority site for quality improvement.
2B	Clayton Remembrance Garden 	Improve amenity and sensitively integrate new works associated with SRL rail and infrastructure works into the existing space.	PLANNED (by SRL Rail and Infrastructure works) • Land use: existing public open space • Ownership: Whitehorse City Council • Existing or proposed open space: Existing – will be impacted by the SRL East rail and infrastructure works. Once construction is complete, Remembrance Gardens will be enhanced and reinstated • Committed or potential: committed.	Catchment: Neighbourhood Function: Landscape park Size: To be confirmed. Current size of 3292 m^2 may be reduced by approximately 12% once the SRL station at Clayton is constructed = 2897 m^2).	**Is it required to address a gap in open space provision?** No. There is existing open space in this location. However, Clayton Remembrance Gardens could benefit from a redesign and upgrade of facilities. It has a medium quality rating and will be enhanced according to commitments within the SRL East Urban Design Strategy. The enhanced space will retain the existing 'garden' quality and provide a comfortable location for respite that includes canopy trees, improved amenity and sensitive integration with new works associated with SRL East.

7.4.3 NEW / ENHANCED PEDESTRIAN LINKS

TABLE 7.21 CLAYTON – NEW / ENHANCED PEDESTRIAN LINKS

MAP REF.	LOCATION	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
3A	Potential new link connecting with Meppel Drive Reserve from Audsley Street. 	PROPOSED • Land use: commercial, industrial • Ownership: private landowners • Existing or proposed open space: proposed pedestrian links Committed or potential: potential.	Pedestrian access link Size: approx. 150 m long recommended	**Is it required to address a gap in open space provision?** Yes. A significant gap in 400 m walkable access to public open space is located to the east of Meppel Drive, surrounding Audsley Street. This gap is predominantly due to the large street blocks with limited through connections in this area. A pedestrian access link between Meppel Drive Reserve and Audsley Street (through a commercial / industrial area) would improve access and optimise use of existing public open space. Due to the large industrial buildings in the proposed link location and potential lack of passive surveillance, an appropriate location and design that considers crime prevention and safety will need to be considered for this link.
3B	Potential new link for crossing over Clayton Road near Hourigan Avenue. 	PROPOSED • Land use: road • Ownership: Transport for Victoria • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link over Clayton Road Size: approx. 15 m long recommended	**Is it required to address a gap in open space provision?** Yes. A significant gap in 400 m walkable access to public open space is located around Clayton Road. A new public open space on the western side of Clayton Road can partially address the gap, although the addition of strategically located safe pedestrian crossing at Clayton Road will further address the gap to the east.

MAP REF.	LOCATION	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
3C	Potential new link for crossing over Clayton Road near Meppel Drive, Clayton South. 	PROPOSED • Land use: road • Ownership: Transport for Victoria • Existing or proposed open space: proposed • Committed or potential: potential.	Pedestrian link at Clayton Road Size: approx. 15 m long recommended	**Is it required to address a gap in open space provision?** Yes. A significant gap in 400 m walkable access to public open space is located around the western side of Clayton Road. A strategically located safe pedestrian crossing at Clayton Road will assist in addressing the gap, improving access to Meppel Drive Reserve (which is identified as open space to be enhanced).

7.4.4 TEMPORARY OPEN SPACES

TABLE 7.22 CLAYTON - TEMPORARY OPEN SPACES

MAP REF.	LOCATION	PURPOSE	CURRENT STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
4A	Proposed temporary open space to offset impacts to the Clayton Community Space, located adjacent to the rail viaduct on Haughton Road, Clayton. 	Purpose is to relocate equipment from existing Clayton Community Space (which is within the footprint of the SRL station at Clayton) and develop two adjoining public open spaces to offset impacts during construction of SRL East.	FUTURE OPPORTUNITY (temporary public open space delivered by SRL Rail and Infrastructure works) • Land use: grassed open space (next to rail viaduct near existing Clayton station) • Ownership: VicTrack • Proposed open space • Committed as a temporary open space to offset impacts to Clayton Community Space due to SRL East. Opportunity for this to become permanent public open space.	Catchment: Local pocket park, connected by Djerring Trail. Function: community park. Size: 4A is 1456 m^2	**Is it required to address a gap in open space provision?** No. Not located within an area with a gap in open space provision. Two adjoining temporary public open spaces (4A and 4B) are proposed to offset impacts to the existing Clayton Community Space that will be impacted by SRL East Rail and Infrastructure works. Although the proposed temporary public open spaces are not located in an area without open space access, there is an opportunity to make these spaces permanent as they would contribute positively to the Clayton open space network in an area that is projected to be higher density. It is recommended to be retained.
4B	Proposed temporary open space to offset impacts to the Clayton Community Space, located adjacent to the rail viaduct on Haughton Road, Clayton. 	Purpose is to relocate equipment from existing Clayton Community Space (which is within the footprint of the SRL station at Clayton) and develop two adjoining public open spaces to offset impacts during construction of SRL East.	FUTURE OPPORTUNITY (temporary public open space delivered by SRL Rail and Infrastructure works) • Land use: grassed open space (next to rail viaduct near the existing Clayton Station) • Ownership: VicTrack • Proposed open space • Committed as a temporary open space to offset impacts to Clayton Community Space due to SRL East. Opportunity for this to become permanent public open space.	Catchment: Local pocket park, connected by Djerring Trail. Function: community park Size: 4B is 826 m^2	**Is it required to address a gap in open space provision?** No. Not located within an area with a gap in open space provision. Two adjoining temporary public open spaces (4A and 4B) are proposed to offset impacts to the existing Clayton Community Space that will be impacted by the SRL East rail and infrastructure works. Although the proposed temporary public open spaces are not located in an area without open space access, there is opportunity to make these spaces permanent as they would contribute positively to the Clayton open space network in an area that is projected to be higher density. It is recommended to be retained.

7.4.5 INNOVATIVE OPEN SPACE OPPORTUNITIES FOR CLAYTON

7.4.5.1 Improving existing public open space

The following are potential sites with opportunities for innovation in improving open spaces subject to detailed design, funding and maintenance considerations:

- Three new pedestrian linkages to improve connectivity and permeability to existing public open spaces
- Opportunity for enhancements to existing public open spaces within the Structure Plan Area (beyond those identified in this technical assessment) to meet future community needs. The demand on public open spaces should be monitored over time as the populations grow and urban environments change in the Structure Plan Areas.

7.4.5.2 Creating new public open space

The following are potential sites and locations with opportunities for innovation in creating new open spaces subject to detailed design, funding and maintenance considerations:

- New high quality civic space around the new SRL station, including partial closure of Carinish Road to integrate public realm works with the new station
- New public open space could be provided under rail viaducts and other underutilised land
- New higher density private developments could provide open space for public use
- Thomas Street car park site – due to its proximity to a small gap in walkable access to public open space to the east of Clayton Road, there is an opportunity to investigate the potential development of the Thomas Street car park site, including a portion of the land to be used as public open space (likely a pocket community park). This is a potential future opportunity.

7.5 Findings

This section summarises the open space assessment for the Clayton Structure Plan Area. Recommendations to consider when developing the Structure Plan for Clayton are provided.

There are 13 public open space areas in the Clayton Structure Plan Area. They have a diversity of functions including community parks, landscape parks, linear parks and sports parks. The largest public open spaces are Fregon Reserve and Jack Meade Oval, both large sports parks which also cater for informal recreation.

The open space network across the 1.6-kilometre radius from the SRL station at Clayton is characterised by several key features:

- The Djerring Trail shared use pathway aligns with the Cranbourne / Packenham Line and runs through the centre of the 1.6-kilometre station radius. The Djerring Trail caters to a range of active and passive recreational activities. It provides a connector link between open spaces including the Clayton Station West Multi-Sports Area, Clayton Urban Park Courts, and Haughton Road Fenced Dog Park, and an open space linkage to surrounding suburbs
- A number of larger public open spaces around the edge of the 1.6-kilometre radius, including Princes Highway Reserve, Davies Reserve, Talbot Park, Bald Hill Park, Namatjira Park, and Keeley Park, most of which are sports parks.

The resident population in the Clayton Structure Plan Area is projected to increase 89 per cent by 2041. This will increase demand on the open space network.

The planned and recommended changes to the open space network within the Structure Plan Area are:

- Five planned new open spaces – one by SRLA around the SRL station at Clayton, three on the former PMP Printing site, and a new play space at the corner of Centre Road and Carinish Road which the City of Monash and the Level Crossing Removal Authority will construct in partnership by 2027
- Six proposed new public open spaces – to address gaps in the 400-metre walkable access to public open space. Four local pocket or neighbourhood parks and two neighbourhood parks are proposed with potential functions as community parks
- One public open space is recommended for priority quality enhancement and a second open space, Clayton Remembrance Gardens, will be reinstated and enhanced once the SRL station at Clayton is constructed
- Three new pedestrian linkages are recommended – to improve permeability and access to existing public open space
- Two adjoining temporary public open spaces are planned by SRLA – to offset impacts to open space from construction of SRL East. These temporary spaces are suitable to become permanent open spaces. They are not located in a gap in access to walkable open space, but would increase public open space provision in the Clayton Structure Plan Area.

The five planned new open spaces will add a combined 10,930 m^2 of public open space to the Clayton Structure Plan Area. The six proposed new open spaces would add a combined 10,000 m^2 of public open space as a minimum. These eleven planned and proposed open spaces would add a combined 20,930 m^2 of public open space to the Clayton Structure Plan Area. Making the two temporary open spaces permanent after construction of SRL East would contribute an additional 2,282 m^2 of public open space in the Clayton Structure Plan Area.

Adding the planned and proposed open space to the Clayton Structure Plan Area would achieve the following metrics and performance indicators:

- **Access** – achieving 95 per cent walkable access coverage within 400 metres to public open space for residents and workers and improved 200-metre walkable access to public open space in the highest projected density areas
- **Quality** – enhancing low-quality public open space to optimise potential and subsequent staged quality upgrades will help achieve the need for high-quality open space
- **Diversity** – the proposed new open spaces will improve the diversity and distribution of public open spaces across the Structure Plan Area
- **Provision** – achieving a 2041 projected open space provision ratio of 5 m^2/person (including planned and proposed new public open space). Although this is below the indicator ration of 9 m^2/person, the wider 1.6-kilometre station radius has a projected provision of 15.5 m^2/person, which will help offset the provision ratio.

7.5.1 OUTCOMES IN RELATION TO ACCESS

Most of the planned and proposed new open spaces and quality enhancements in the Clayton Structure Plan Area are located in the highest density areas, connecting quality public open space with the high density living locations.

Implementing the planned and proposed changes to the public open space network would increase the coverage of 200-metre walkable access to public open space in the highest projected density areas (greater than 10,000 persons per square kilometre) from 40 per cent to 66 per cent.

Refer Appendix G which shows the 200-metre walkability coverage of the existing and proposed open space network in relation to the future projected residential population density. It demonstrates that most (66 per cent) of the highest projected density areas would have a 200-metre walk to public open space, a bonus improvement on the 400-metre walkable access metric.

In applying the planned new open spaces, and the recommendations for proposed new open spaces and enhanced pedestrian linkages, the projected proportion of the Clayton Structure Plan Area with 400-metre walkable access to public open space is 95 per cent, as shown in Table 7.23.

The number of existing addresses in the Structure Plan Area with 400-metre walkable access to public open space would increase from 5860 to 9254, which is a 57 per cent increase.

The remaining gap areas primarily relate to:

- The Monash health precinct between Dixon Street and Wright Street, which includes some areas of private and restricted open space
- Residential pockets to the north of the Monash health precinct, between Dixon Street and Wellington Road
- Residential pockets between Browns Road and Jaguar Drive on the eastern side of the Structure Plan Area.

As a significant portion of the Clayton Structure Plan Area is occupied by the Monash health precinct, which has its own areas of private open space, this site was excluded from calculations of 400-metre walkable access to public open space.

In this context, 95 per cent coverage of 400-metre walkable access to public open space is considered an acceptable outcome for the Structure Plan Area.

TABLE 7.23 PROJECTED PROPORTION OF STRUCTURE PLAN AREA WITH 400-METRE WALKABLE ACCESS TO PUBLIC OPEN SPACE (EXCLUDING MONASH HEALTH PRECINCT)

STRUCTURE PLAN AREA	STRUCTURE PLAN AREA (M^2)	400-METRE WALKABLE COVERAGE AREA (M^2)	PROPORTION OF STRUCTURE PLAN AREA WITH 400-METRE WALKABLE ACCESS
Clayton	3,626,829	3,437,087	95%

7.5.2 OUTCOMES IN RELATION TO QUALITY

Of the 13 existing public open spaces in the Structure Plan Area, 10 have a higher quality rating (4 or 5). This means the Clayton Structure Plan Area has the highest ratio of higher quality public open spaces of all SRL East Structure Plan Areas.

The priority for quality improvement is Meppel Drive Reserve, which could benefit from a redesign to open up sightlines, upgrade facilities such as the playground, furniture and paths, and improve landscaping. Improving the quality of Meppel Drive Reserve and progressively focusing on the other lower-quality ratings will improve the overall capacity of the existing public open space network.

The locations with the highest projected residential population density in 2041 in the Structure Plan Area are centred around the SRL station core and major arterial roads such as Clayton Road.

Most of the planned and proposed new open spaces and the quality enhancements for the Clayton Structure Plan Area are located in the highest density areas, connecting quality public open space with the high density living locations.

7.5.3 OUTCOMES IN RELATION TO DIVERSITY

The Clayton Structure Plan Area has an above average rating for diversity of existing public open space. There are no nature parks or civic spaces, however, other functions are present. All catchment classifications except district spaces are located within the Clayton Structure Plan Area (district spaces sit on the southern edge of the 1.6-kilometre station radius). A significant portion of the Structure Plan Area is occupied by the Monash health precinct.

Delivering the five planned and six proposed new public open spaces (shown in red text in Table 7.24) would improve the diversity and distribution of public open spaces in the Structure Plan Area. Three of the proposed pocket public open spaces and two neighbourhood spaces are located in areas of low diversity. The proposed public open spaces could be pocket, neighbourhood or community spaces, depending on the feasibility and opportunities at each location. The functions have been suggested as community parks, however, the optimal function for each space should be evaluated through future planning processes and consideration of community preferences.

Note that this excludes the two temporary public open spaces.

TABLE 7.24 PRIMARY FUNCTION AND CATCHMENT CLASSIFICATION OF FUTURE PUBLIC OPEN SPACES IN CLAYTON STRUCTURE PLAN AREA

CLAYTON STRUCTURE PLAN AREA	COMMUNITY PARK	LANDSCAPE PARK	NATURE PARK	LINEAR PARK	SPORTS PARK	CIVIC SPACE
POCKET	1 +5					2
NEIGHBOURHOOD	4 +4	1		1	1	
COMMUNITY	2				3	
DISTRICT						

7.5.4 OUTCOMES IN RELATION TO PROVISION

The existing provision of public open space in the 1.6-kilometre station radius is 27.9 m^2/person, and the projected 2041 provision ratio is 15.5 m^2/person (assuming no change in quantum of open space).

As the changes to public open space in this Technical Report are focused within the Structure Plan Area (not the entire 1.6-kilometre station radius) only the current open space provision is included in Table 7.25.

It's likely that some changes to public open space will occur within the 1.6-kilometre station radius (in addition to those planned and proposed in the Structure Plan Area) between 2024 and 2041 but as these changes are unknown and excluded from the recommendations, they are excluded from Table 7.25.

TABLE 7.25 PROJECTED PUBLIC OPEN SPACE PER PERSON FOR 2041 – 1.6 KM STATION RADIUS

1.6 KM STATION RADIUS	CURRENT STATE PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	628,804	40,500	15.5

The current provision of public open space in the Clayton Structure Plan Area is 7.9 m^2/person. Once the planned and proposed new public open space is applied against the 2041 population projection, this results in a projected minimum provision of 5 m^2/person, as shown in Table 7.26. This is below the indicator ratio of 9 m^2/person. If the two temporary open spaces in the Clayton Structure Plan Area were made permanent, the projected provision would increase slightly to 5.1m^2/person.

TABLE 7.26 PROJECTED PUBLIC OPEN SPACE PER PERSON FOR 2041 INCLUDING PLANNED AND PROPOSED PUBLIC OPEN SPACE

STRUCTURE PLAN AREA	PROJECTED PUBLIC OPEN SPACE (M^2)	PROJECTED POPULATION 2041	PUBLIC OPEN SPACE PER PERSON (M^2)
Clayton	133,809	26,900	5

As noted in section 7.3.7, a total of 242,100 m^2 of public open space would be required to provide 9m^2/person in 2041. The planned and proposed additions to the public open space network within this report reduce the shortfall to a total of 108,291m^2 to meet this ratio (if the minimum suggested size of proposed public open spaces are adopted). Given the constraints of providing substantial swathes of new public open space in urban areas, a variety of strategies to maintain liveability in the Structure Plan Area should be considered. This includes prioritising walkable access to new and existing public open space, high quality and multifunctional spaces and innovative approaches to providing additional public open spaces. These approaches could be opening up private open space for public access, unlocking underused spaces such as under rail viaducts and encouraging developers to provide communal open spaces for public use.

As the public open space ratio per person across the 1.6-kilometre station radius exceeds the 9m^2/person indicator (at 15.5m^2/person), the spaces just outside of the Structure Plan Area boundary can support the provision of open space for residents within the Structure Plan Area.

7.6 Recommendations

7.6.1 STRUCTURE PLANNING

Recommendations to inform the development of the Clayton Structure Plan are listed in Table 7.27. The map references in the table relate to Figure 7.11 (in Section 7.4 above).

Proposed new open spaces, enhanced open spaces and links are recommended to meet future open space demand in the Structure Plan Area.

Recommendations are classified as one of the following:

- **Proposed** – a new public open space, a new or enhanced pedestrian link, or an enhanced or upgraded existing public open space is proposed. The locations and size of proposed new open spaces or links are not fixed, and an alternative location that addresses walkability gaps could be considered
- **Future opportunity** – the site should be considered if the opportunity for delivery arises in future and would contribute appropriately to the existing and future open space network in the Structure Plan Area.

Future opportunities for general consideration are detailed in Table 7.28.

TABLE 7.27 RECOMMENDATIONS FOR CLAYTON STRUCTURE PLAN AREA

CATEGORY		LOCATION	STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
1	New open space	Around Cooke Street (map ref 1D)	Proposed	Catchment: Pocket / neighbourhood Function: Community park Size: 1000 - 3000 m^2	To address a gap in 400 m walkable access to POS.
2	New open space	Around Madeleine Road, Oakleigh East (map ref 1E)	Proposed	Catchment: Neighbourhood / community Function: Community park Size: 3000 - 5000 m^2	To address a gap in 400 m walkable access to POS.
3	New open space	Around Eva Street and Ormond Road (map ref 1F)	Proposed	Catchment: Pocket / neighbourhood Function: Community park Size: 1000 - 3000 m^2	To address a gap in 400 m walkable access to POS.
4	New open space	Potential new open space between Fulton Street and Manton Road, Clayton. (map ref 1G)	Proposed	Catchment: Pocket / neighbourhood Function: Community park Size: 1000 - 3000 m^2	To address a gap in 400 m walkable access to POS.
5	New open space	Potential new open space between Fulton Street and Manoon Road and Springfield Avenue. (map ref 1H)	Proposed	Catchment: Pocket / neighbourhood Function: Community park Size: 1000 -3000 m^2	To address a gap in 400 m walkable access to POS.
6	New open space	Potential new open space around Wright Street and Kanooka Grove (map ref 1I)	Proposed	Catchment: Neighbourhood / community Function: Community park Size: 3000 - 5000 m2	To address a gap in 400 m walkable access to POS.
7	Enhanced open space	Meppel Drive Reserve (map ref 2A)	Proposed	Catchment: Pocket Function: Community park Size: 1682 m^2	Priority site for quality improvement with lower quality rating and higher site potential rating.
8	New / enhanced pedestrian links	New pedestrian link connecting Meppel Drive Reserve with Audsley St (map ref 3A)	Proposed	Pedestrian access link Size: approx.150 m long recommended	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.
9	New / enhanced pedestrian links	New pedestrian crossing at Clayton Road near Hourigan Avenue (map ref 3B)	Proposed	Pedestrian link at Clayton Road Size: approx.15 m long recommended	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.

CATEGORY		LOCATION	STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
10	New / enhanced pedestrian links	New pedestrian crossing at Clayton Road near Meppel Drive (map ref 3C)	Proposed	Pedestrian link at Clayton Road Size: approx.15 recommended	To improve pedestrian connectivity and permeability where there is a gap in 400 m walkable access to public open space.

7.6.2 FUTURE OPPORTUNITIES

TABLE 7.28 FUTURE OPPORTUNITIES

	CATEGORY	LOCATION	STATUS	PROPOSED CLASSIFICATION AND APPROX SIZE	RATIONALE
11	Temporary open space to be made permanent	Two temporary open spaces to offset impacts to the Clayton Community Space, located adjacent to the rail viaduct on Haughton Road, Clayton (map ref 4A and 4B)	Future opportunity	2 x local neighbourhood parks (connected by Djerring Trail) 4A = 1456 m^2 4B = 826 m^2 Size: 2282 m^2 total (fixed)	Although these are temporary open spaces to offset the impacts to Clayton Community Space that will be impacted by SRL East Rail and Infrastructure works, these centrally located sites would be a valuable addition to public open space in Clayton.
12	Facilitate development that will provide new public open space	Thomas Street car park - potential pocket park	Future opportunity	N/A	Due to its proximity to a small gap in walkable access to public open space to the east of Clayton Road, there is an opportunity to investigate the potential development of the Thomas Street car park site, including a portion of the land to be used as public open space (likely a pocket community park).
13	Enhancements to existing public open spaces (beyond those identified)	Existing public open spaces within the Structure Plan Area	Future opportunity	N/A	Opportunity for enhancements to existing public open spaces within the Structure Plan Area (beyond those identified in this technical assessment) to meet future community needs. The demand on public open spaces should be monitored over time as the populations grow and urban environments change in the Structure Plan Areas.