Suburban Rail Loop East

Urban Design Strategy

September 2025

PLANNING AND ENVIRONMENT ACT 1987

BAYSIDE PLANNING SCHEME
KINGSTON PLANNING SCHEME
MONASH PLANNING SCHEME
WHITEHORSE PLANNING SCHEME

SUBURBAN RAIL LOOP EAST INCORPORATED DOCUMENT AUGUST 2022
CONDITION 4.6.5

AMENDED REPORT

SHEET1 to 117 (ENTIRE DOCUMENT)

SIGNED.....

FOR
MINISTER FOR PLANNING

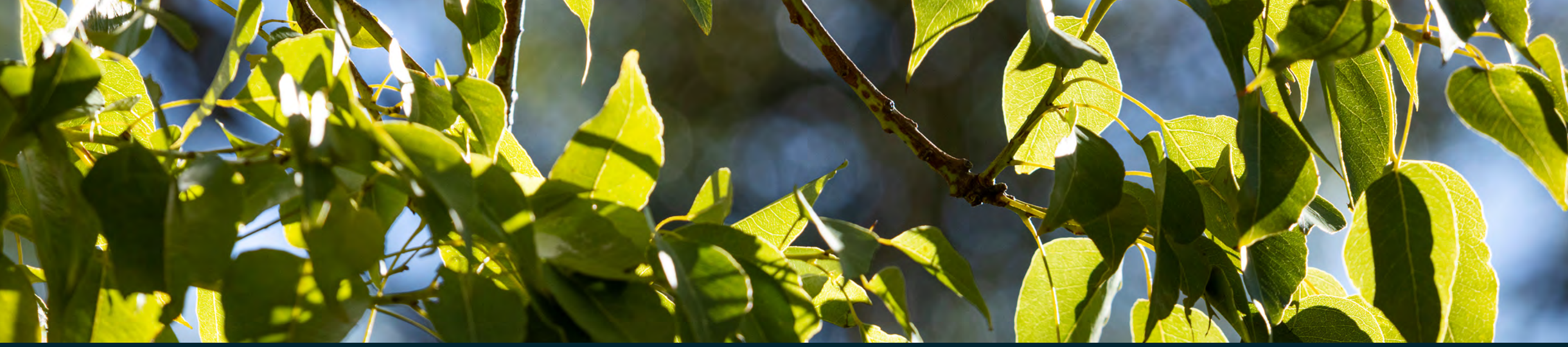
22 December 2025

DATE.....

SUBURBAN RAIL LOOP

VICTORIA'S BIG BUILD

VICTORIA State Government



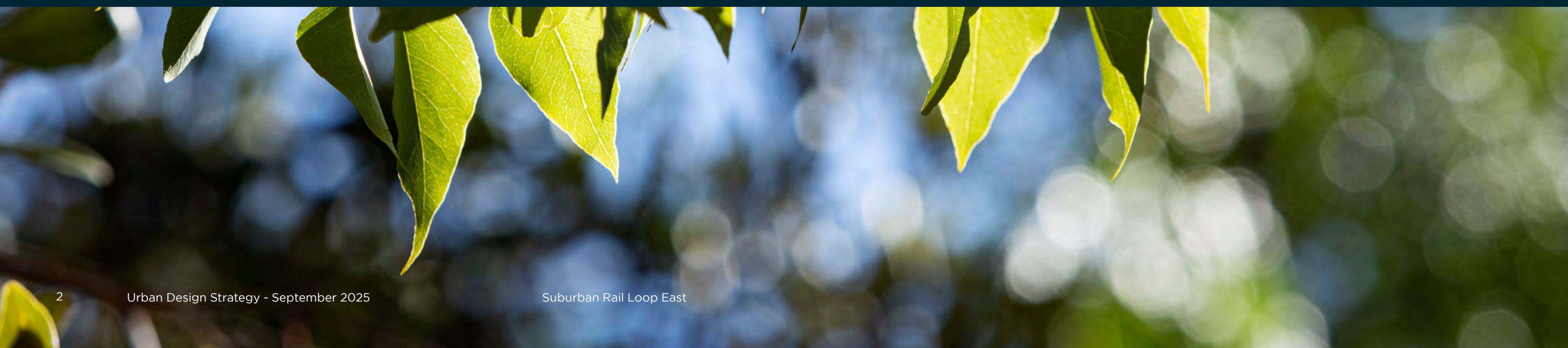
Acknowledgement of Country

Suburban Rail Loop is located on the traditional lands of the Wurundjeri Woi Wurrung People to the north and the Bunurong People to the south.

The Traditional Owners have lived sustainably in the region for thousands of years, moving within their lands while making use of seasonal plant and animal resources and sharing similarities in speech, burial practices, initiation, kinship marriage ties and religious beliefs.

The Traditional Owners continue to be custodians of the region today, maintaining their connection to their Country.

Suburban Rail Loop Authority acknowledges the Wurundjeri Woi Wurrung Traditional Owners, Bunurong Traditional Owners and all Traditional Owners of the land on which we stand. We respect their connection to Country as continuing custodians; acknowledge their Elders – past, present and emerging – and their connection to the waterways, land and stories of this Country.



Contents

Photo credit: Dianna Snape

Frankie Carroll
Chief Executive Officer
Suburban Rail Loop Authority

Foreword from the CEO

Suburban Rail Loop will help shape the growth of Melbourne and Victoria over decades.

New initiatives, exciting opportunities, and investment in the neighbourhoods near the new underground stations will bring enormous benefits to Melbourne's already thriving middle suburbs.

Suburban Rail Loop will change how we move around our city, connecting people to key destinations – health, education, employment centres, Melbourne Airport, and our growing regions – but also to friends, family and each other.

Building a new rail network will have a direct and enduring impact on the public realm where vital infrastructure connects our communities.

It will create a long pipeline of jobs, attract clusters of new businesses, and generate new community-focused possibilities to help constrain our city's urban sprawl, as well as delivering more jobs closer to home.

To achieve this ambition, Suburban Rail Loop's Urban Design Strategy will promote urban design excellence, ensure lasting value, and address the catalytic role of the project in ensuring we continue to build on the qualities that make Melbourne one of the world's most liveable cities.

It acknowledges the existing character of neighbourhoods and how they have evolved over time with the input of local communities and stakeholders, while supporting Melbourne in adapting to the change required by growth.

To achieve good design outcomes, the stations and associated infrastructure will be driven by the best engineering solutions as well as integrated design-led approaches by all disciplines, including engineering, architecture, urban design, landscape architecture and the creative arts.

Beyond the benefits of supporting new transport infrastructure, this Urban Design Strategy responds to government and community needs for enduring projects that bolster civic pride and create great places for people to live, work and travel.

Suburban Rail Loop East

Jill Garner
Victorian Government Architect,
Office of the Victorian
Government Architect

Foreword from the OVGA

History shows that railway lines and stations play a significant role in the structure and identity of a city. They are a universal symbol of mobility and community connection to places, people, facilities and services. Stations are often a local landmark and can be the genesis or enabler of an establishing, growing or regenerating locale.

Suburban Rail Loop is a game-changer for Melbourne. It will transform the way we move and engage with our local neighbourhoods and provide opportunities to respond to changing lifestyles, shifting business models and evolving retail. It has the capacity to introduce hubs for transport connection and reduce our city's car dependency.

Good design does not just happen. It is the outcome of aspirations, principles and processes that support a project vision.

One of SRL's greatest opportunities is realising 'legacy'; promoting long-lasting, high quality outcomes for each new station and its precinct, while ensuring the locally distinctive, liveable nature of our city is protected and enhanced.

The Urban Design Strategy offers considered guidance. It describes a vision of place that reminds us we are building on the qualities of existing neighbourhoods. It identifies urban design aspirations through a set of adaptable principles to ensure a design melds high quality user experience and operation. It defines objectives to promote positive environmental, social, cultural and economic outcomes, including improved conditions of safety, accessibility and sustainability.

An important legacy for any government is evident in the quality and design of the public projects they deliver. Well-designed buildings, infrastructure and public places work well and feel good, promoting community pride, identity and adding a valuable long-term asset to their locale.

The SRL Urban Design Strategy calls for integrated, place-based design that is enduring, diverse, connected, accessible and liveable. I encourage all those involved in the project – designers, stakeholders, clients and community, to affirm these ambitions.

Photo credit: Dianna Snape

1.0 Introduction

1.1 Suburban Rail Loop

Suburban Rail Loop (SRL) is a city and state-shaping project that will transform Victoria's public transport system and support vibrant suburbs across Melbourne. It includes a new underground rail link connecting our suburbs and creating jobs, healthcare, education, housing and retail opportunities in great places.

Construction on SRL East between Cheltenham and Box Hill starts in 2022.

Realised over decades, SRL will deliver sustained job creation and investment in Melbourne's already thriving middle suburbs in the medium to long-term, galvanising our reputation as one of the world's most liveable cities and ensuring the State's ongoing prosperity.

The 90-kilometre rail link will connect every major rail line from the Frankston rail line to the Werribee rail line, via Melbourne Airport, better connecting Victorians to jobs, retail, education, health services and each other. It will ease congestion and take pressure off the existing transport network. Three transport super hubs at Clayton, Broadmeadows and Sunshine will connect regional services to SRL, so passengers outside Melbourne won't have to travel through the CBD to easily access employment, world-class hospitals and universities in the suburbs.

As well as delivering significant transport benefits, SRL provides an opportunity to plan the services, amenity and infrastructure we're going to need outside the CBD for future generations.

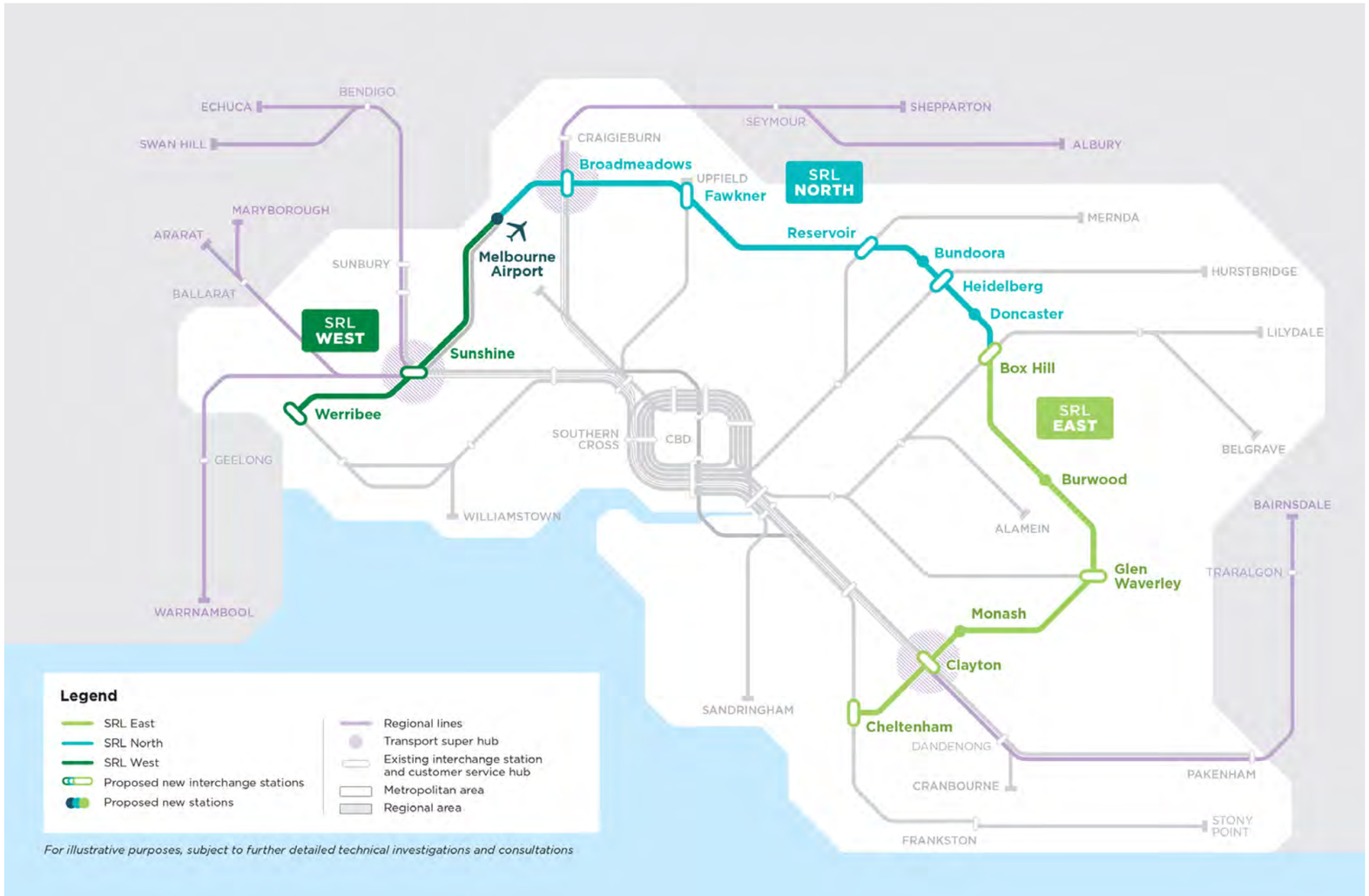


Figure 1 : Suburban Rail Loop

Photo credit: Dianna Snape

1.2 Strategic context

Victoria is expected to grow to 11.2 million people by 2056 and Greater Melbourne will reach around nine million people – a similar size to London today.* SRL will transform Victoria's public transport system and deliver enormous social benefits.

The following Victorian Government strategies and plans recognise SRL as a major project of state significance:

**SRL Business and Investment Case August 2021*

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 include a growing population; remaining competitive in a changing economy; housing that is affordable and accessible; keeping up with the growing transport needs; and the need for climate mitigation and adaptation.

Plan Melbourne 2017-2050: Addendum 2019 was prepared to update growth projections for Melbourne and identifies the need for:

- An additional 1.8 million jobs and 1.6 million dwellings to support Melbourne's growth by 2051
- A transport network able to cope with an extra 11.8 million trips per day by 2050.

The Addendum recognises that Melbourne's public transport network needs to develop to support the distribution of population and employment in line with growth estimates, stating that: 'Melbourne needs a huge, well-planned investment that enables the city to grow while meeting these transport challenges'. The Addendum sees SRL as providing an opportunity to create a direct rail connection between Melbourne's major employment, health, and education precincts and activity centres outside the CBD; and recognises the role of 20-minute neighbourhoods in making Melbourne a city of inclusive, vibrant and healthy neighbourhoods.

SRL will deliver the outcomes set by Plan Melbourne:

- Melbourne is a productive city that attracts investment, supports innovation and creates jobs
- Melbourne provides housing choice in locations close to jobs and services
- Melbourne has an integrated transport system that connects people to jobs and services and goods to market
- Melbourne is a distinctive and liveable city with quality design and amenity
- Melbourne is a city of inclusive, vibrant and healthy neighbourhoods
- Melbourne is a sustainable and resilient city
- Regional Victoria is productive, sustainable and supports jobs and economic growth.

Planning Policy Framework

The Planning Policy Framework (PPF) comprises the state and regional planning policies relating to settlement, environment values and risks, natural resource management, built environment and heritage, housing, economic development, transport and infrastructure. The PPF content is common across all Victorian planning schemes. The PPF specifically references SRL at:

Clause 11.01-1R (Settlement) – The strategy seeks to 'develop the Suburban Rail Loop through Melbourne's middle suburbs to facilitate substantial growth and change in major employment, health and education precincts and activity centres beyond the central city at an appropriate scale to address the needs of Melbourne's rapidly growing population'.

Clause 72.08 (Background Documents) includes Plan Melbourne 2017-2050: Addendum 2019 as a reference document.

Victoria's Infrastructure Strategy 2021 – 2051

Victoria's Infrastructure Strategy 2021-2050 provides an update to the 2016 iteration which outlines the next stages of delivery for planned infrastructure within Victoria. The 30-year strategy seeks to address existing infrastructure pressures, demand on existing infrastructure and assist in planning the timing and location of required and necessary new infrastructure.

The strategy places strong emphasis on improving public and active transport connections in established areas through improving pedestrian, tram, bus and train infrastructure. Recommendations also focus on improving the connection and integration between these nodes of travel. SRL will address this by connecting activity centres, providing economic growth opportunities and improving access between work and home.

Victorian Infrastructure Plan 2017

The Victorian Infrastructure Plan 2017 responds to the 30-Year Infrastructure Strategy outlining a number of different infrastructure priorities and 'future directions' including identifying SRL as a key transport project in building for Melbourne's future. The Victorian Infrastructure Plan also identifies how middle suburbs will need to be supported to accommodate greater diversity in the future, while Melbourne's growth areas will require new public transport, as well as other infrastructure investments such as schools and hospitals. SRL will address this by providing transport infrastructure through middle ring suburbs to connect Victorians to health, education and employment centres.

Photo credit: Dianna Snape

1.3 What is urban design?

Urban design is the practice of shaping the built environment to improve the quality of design and overall liveability, productivity and connectivity of cities. While built form is a key contributor, urban design is about more than just appearance of the built environment. Urban design also relates to functional, environmental, economic and social outcomes of a project.

Urban design operates at a variety of scales, from precinct and neighbourhood planning to the design of a station forecourt or public park.

Achieving high-quality design requires good processes and guidance that optimise outcomes and value for money. High-quality design is authentic, contextual and site-specific — it does not need to cost more.

Good urban design processes and outcomes are important because they improve:

- Functionality, character and spirit of public places for individuals and communities
- Levels of comfort, accessibility, safety and inclusiveness of places
- Expression of social and cultural values associated with places and people
- Socio-economic composition, diversity and economic vibrancy of urban areas
- Ecological systems, sustainability and the resilience of urban environments
- Community connectedness, health and wellbeing, and pride of place.

SRL is complex and long term. Embedding urban design thinking at the outset of the planning and design process will optimise project benefits.

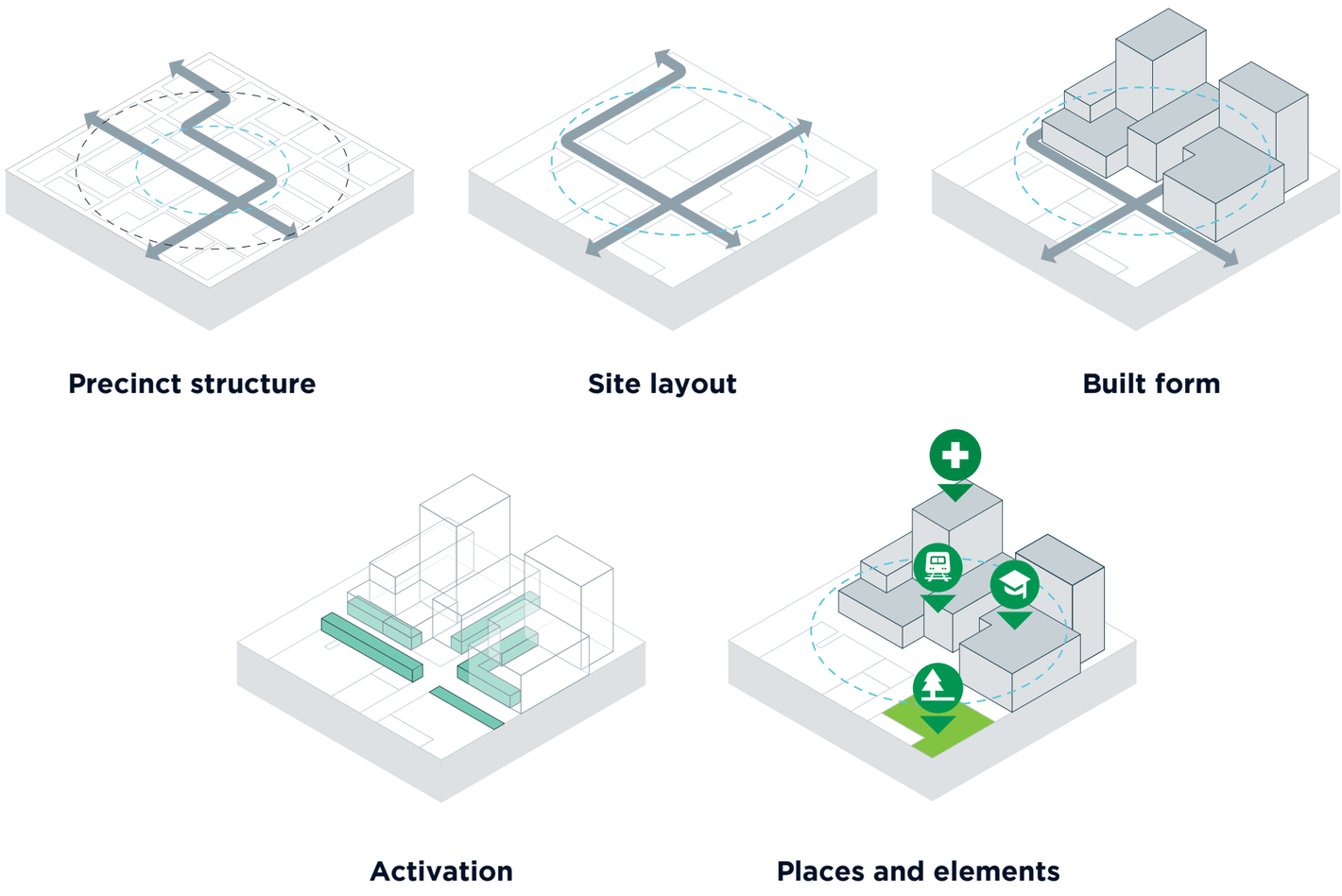


Figure 2: How urban design works across different scales of a project

Good urban design requires a multi-disciplinary approach with the input, collaboration and coordination of specialists in many different areas including planning, architecture, engineering, heritage, user-centric design, sustainability, land use planning and landscape architecture, amongst others.

Photo credit: Level Crossing Removal Project

2.0
About this document

2.1 Purpose of this document

The purpose of the Suburban Rail Loop East Urban Design Strategy is to establish the Victorian Government requirements for SRL East (the Project).

The Urban Design Strategy:

- Sets out what contractors and delivery partners must achieve through the Project Design (the Design)
- Seeks to ensure consistently high-quality urban design and context appropriate urban design outcomes
- Provides a performance-based design brief that drives high-quality design and offers opportunities for innovation in response to criteria
- Provides a design quality assessment and evaluation tool.

The Urban Design Strategy has been developed to ensure:

- Positive outcomes that benefit places and communities
- Avoidance, minimisation and mitigation of impacts arising from the Project.

The Urban Design Strategy was developed and exhibited as part of the SRL East Environment Effects Statement (EES) and was subject to review through the public hearing convened by the SRL East Inquiry and Advisory Committee. The SRL East Incorporated Document, in the Bayside, Kingston, Monash and Whitehorse Planning Schemes facilitates the use and development of land for the SRL East. The SRL East Incorporated Document requires an Urban Design Strategy to be prepared to the satisfaction of the Minister for Planning. The use and development of land for SRL East must be carried out in accordance with the approved Urban Design Strategy.

Contractors are required to prepare Urban Design and Landscape Plans (UDLPs) in the manner set out within the SRL East Incorporated Document to the satisfaction of the Minister for Planning. These plans need to demonstrate that they meet the requirements of the approved Urban Design Strategy.

2.2 Engagement and technical inputs

The Urban Design Strategy has been informed by the following:

- National, state and local government policies, legislation, strategies and guidelines relevant to the affected area
- Urban design context and background analysis, and the identification of issues and opportunities
- The findings from community and stakeholder engagement and user-centric research
- Urban design peer review
- Technical impact assessments undertaken as part of the EES for the Project, for example studies on heritage, land use, infrastructure, social and community, ecology, landscape and visual impact.

A comprehensive engagement program has been implemented to keep community and stakeholders informed about the Project, seek their input on its design and development, and respond to their feedback. Engagement activities and tools have included community surveys, Project update letters and e-news letters, an information line and virtual engagement room, direct engagement with community members and stakeholder workshops and meetings.

Input into the Urban Design Strategy has also been provided by the Bunurong Land Council Aboriginal Corporation and the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation.

The involvement of Traditional Owners is critical to the success of the Project and SRLA is committed to working with the Wurundjeri Woi Wurrung Traditional Owners and the Bunurong Traditional Owners beyond the development of the Urban Design Strategy to further understand, acknowledge and embed Aboriginal knowledge and culture into the Project life cycle.

2.3 What must be achieved?

The hierarchy of requirements in the Urban Design Strategy are outlined on this page.

Chapter 3.3 provides additional information on some of the focus areas that contractors and delivery partners will need to consider to achieve optimal outcomes.

Collaborative, multi-disciplinary thinking that integrates wider opportunities into the resolution of technical requirements must be evident in the Design. Creative thinking is also expected for all aspects and stages of the Project to ensure exemplary design results that realise the full potential of the Project.

Urban design principles and objectives

Find these in Chapter 4

These provide the overarching urban design principles and objectives with which the Design and its execution **must** be aligned.

Urban design principles outline the expected results of good urban design.

Urban design objectives describe what is required to align with the urban design principles.

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Project-wide requirements and benchmarks

Find these in Chapter 5

These provide Project-wide performance requirements and quality benchmarks the Design and its execution **must** achieve.

Project-wide requirements provide performance requirements as the basis to develop and evaluate the Design and its execution.

Benchmark photographs and text complement the requirements, and illustrate the minimum standard of design quality expected for the Project.

For information on how Project-wide requirements and benchmarks will be used to assess the Design and its execution refer to page 28 *User guide: Project-wide requirements and benchmarks.*

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Key urban design outcomes and place-specific requirements

Find these in Chapter 6

These provide outcomes and requirements specific to each place with which the Design and its execution **must** demonstrate compliance.

Key urban design outcomes support the realisation of urban design principles and objectives in local places.

Place-specific requirements provide contextually responsive requirements to communicate how the Design and its execution is informed and evaluated in local places.

For information on how key urban design outcomes and place-specific requirements will be used to assess the Design and its execution refer to page 59 *User guide: Key urban design outcomes and Place-specific requirements.*

Figure 3: Urban design requirements

3.0
Framing the Project

3.1 Vision & urban design aspirations

Connecting our suburbs and Victorians to housing, jobs, health and education, Suburban Rail Loop is a transformational investment that will change the way people move around Melbourne and enhance the liveability of key growth areas.

The following urban design aspirations support the SRL vision:

- Quality and integrated design will deliver a legacy of great precincts and help transform the way Victorians live, work and travel
- Design will be used to help deliver stations and precincts that evoke civic pride while being sensitive and appropriate to their location and responsive to the change that will occur over time
- Creating benefits while minimising negative impacts will ensure SRL is a catalyst for positive change for the community
- Innovative and balanced solutions will be delivered through multi-disciplinary collaborative design-led processes and technical approaches
- Design will allow for communities, systems and places to adapt and evolve over time to meet changing needs and cultural, economic and technological shifts
- Urban design process is embedded in our project delivery and policy development to enable opportunities, protect quality and maximise the potential of SRL.

The Urban Design Strategy will support the Project in achieving the vision and urban design aspirations.

Photo credit: Dianna Snape

3.2 Project scope

The Project comprises:

- A rapid rail service from Cheltenham to Box Hill consisting of approximately 26 kilometres of twin-bore rail tunnels from Cheltenham to the Stabling Facility in Heatherton, and from the Stabling Facility to Box Hill, travelling beneath Clayton, Monash University, Monash Freeway, Glen Waverley, Burwood and Box Hill
- Six new underground train stations at Cheltenham, Clayton, Monash, Glen Waverley, Burwood and Box Hill, with interchanges to existing stations at Cheltenham, Clayton, Glen Waverley and Box Hill, to the existing tram network at Burwood and Box Hill and to existing bus interchanges at Cheltenham, Clayton, Glen Waverley and Box Hill.
- A Stabling Facility to provide train stabling and maintenance including an operational control centre and associated facilities such as a train wash and electricity substation
- Rail tunnel portals at either side of the Stabling Facility comprising dive structures and a tunnel portal at the interface with the rail tunnels
- An electrical substation in the vicinity of the proposed SRL station at Burwood
- An Emergency Support Facility located in Mount Waverley.

What's not included

Planning for the wider precincts surrounding SRL station locations and future development sites immediately adjacent to SRL station locations do not form part of the Project approvals under the Planning and Environment Act 1987 (P&E Act). These sites will be subject to future precinct planning processes and are therefore not addressed in the Urban Design Strategy. However, the Project will have an influence on future development and must plan for and support its successful realisation by:

- Defining appropriate urban structure and minimising other limitations imposed on future development
- Enabling high-quality public realm interfaces with future development

Where to find more information

For more information go to www.suburbanrailloop.vic.gov.au

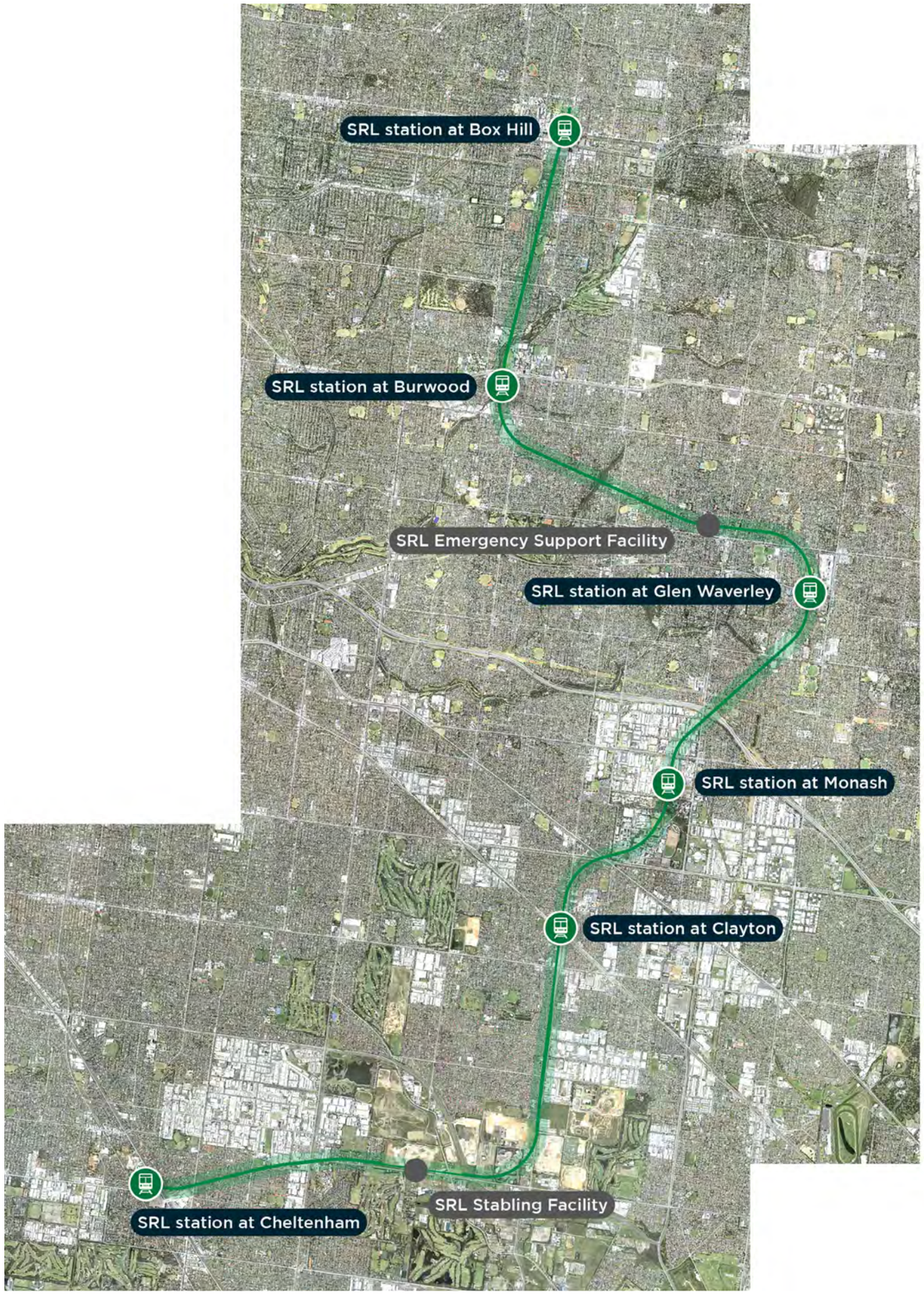


Figure 4: SRL East context

3.3 Areas of focus

This section outlines some of the focus areas that contractors and delivery partners will need to consider to achieve optimal outcomes.

3.3.1 Balance design objectives

Balance linewide and contextual design objectives

The Project must function as an integrated system; so while there will be requirements for linewide consistency in its design, it must also fit seamlessly into sites and connect to surrounding communities. Therefore an approach to balance linewide and contextual design objectives is required.

The Project will move through the Country of the Wurundjeri Woi Wurrung People and the Bunurong People, through a variety of landscapes, topographies and conditions, largely underground, through Melbourne's south east.

Each SRL station will allow people to connect with local neighbourhoods and interchange with other transport modes to locations beyond. It is important that the unique circumstances and context of each location strongly informs and contributes to the built form outcomes for each station as well as the surrounding public realm, and that this expression of place can evolve with the surrounding areas and needs of transport users and community members. It is also important to provide a level of consistency that creates an experience for transport users that is familiar, inviting and enhances community pride in SRL.

To achieve a balance between contextual and linewide objectives, the Project will adopt an integrated design approach which combines standard station components used consistently across the whole line, with elements used to express a highly contextual approach to the station design, particularly at the ground level.

Within station environs, above-ground place-specific components will be informed by, and be well-integrated with, the local urban context. Place-specific components will provide opportunities to recognise and celebrate the unique characteristics of each place including its shared Indigenous and non-Indigenous cultural heritage and the people that live and work there. Linewide station components, generally located below ground, will adopt a common identity to create a coherent SRL image and memorable transport experience. A third category of integrating components located above and below ground will establish connections between the SRL journey and the local place, reinforcing the individual expression of each station.

All structures will need to be carefully integrated into their local setting in an appropriate and considered manner that uses spatial design thinking to overcome the unique challenges of each site such as flooding, local topography and environmental conditions. The Design must also support best practice principles of local living and provide great experiences for diverse community members, supporting great local places.

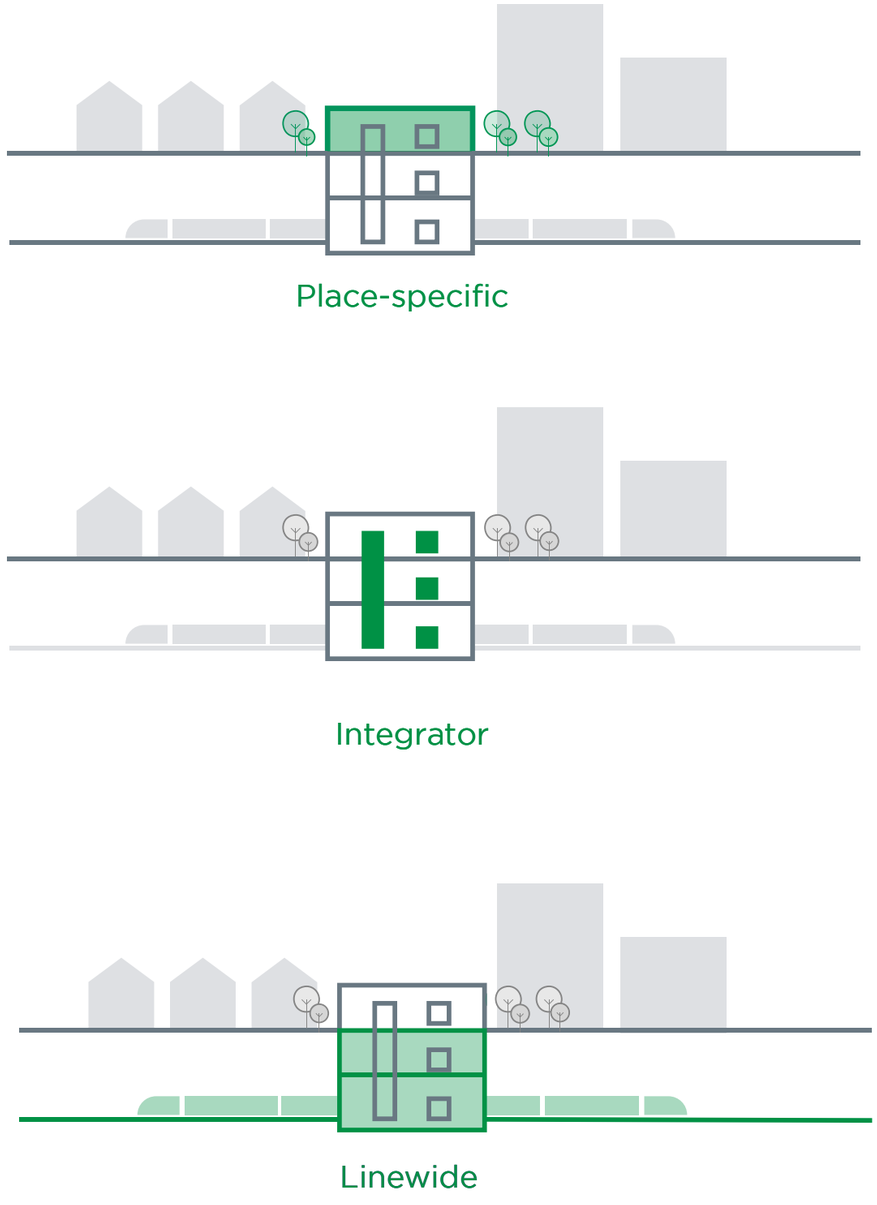


Figure 5: A design that balances linewide and contextual design objectives

Balance competing functional objectives

The long-term goal to see more intensive development and activity within the station precincts will result in increased pressure on streets and other public spaces to accommodate various uses and infrastructure. Therefore an approach to balance competing functional objectives is required.

The Project will be a catalyst for development in the station precincts, which will in turn increase pressure on streets and public spaces. As this will largely occur within existing spaces, it is likely to result in competition between transport and other functional objectives set for the Project. While walking, cycling and public transport connectivity are strong place qualities which provide high value, the potential impacts of cars needs to be carefully managed.

A key method to manage this competition will be through defining classifications, and addressing the associated outcomes for movement and place, road safety and environment for each street, path and interchange. Understanding the desired set of classifications and associated performance requirements will result in designs that cater for the most important uses in the most appropriate places, integrating transport and planning aspirations.

The focus of designing public space should be to create usable and pleasant places that generally prioritise active use over occupying space with static objects – whether Project infrastructure, parked cars or sculptures. Notwithstanding this focus on active uses, it is acknowledged that support for positive environmental and place outcomes will demand space to accommodate planting.

Balancing competing functional objectives demands an integrated, multi-disciplinary and collaborative design approach.

A balanced design approach is needed to meet the requirements set out in the Urban Design Strategy and achieve the best outcomes for places.

Photo credit: Dianna Snape

3.3.2 Thinking beyond the Project

Consider the whole journey

Existing transport networks beyond the Project boundary must be considered to support simple, connected journeys.

The Design must recognise that the 'journey' often starts before the point of public transport access and that some journeys comprise multiple stages or modes of travel.

The Design must demonstrate how it creates connections to routes inside and outside the Project boundary, to contribute to positive 'first and last mile' journey experiences for all members of the community, which considers the walk or cycle to and from the train station, tram or bus stop from home, work or university and between key destinations. The Design must also provide and contribute to a public realm that supports positive interchange and mode change experiences for users and simple, connected journeys as they access different transport networks and modes of travel within the station environs and adjacent centres of activity.

Facilities for some modal interchanges will be created as part of the Project, while others will occur beyond the Project site, but nonetheless must be supported by providing safe, convenient and direct walking and cycle connections. In addition, there is a need to coordinate the Design with planned future changes to connecting transport services and infrastructure.

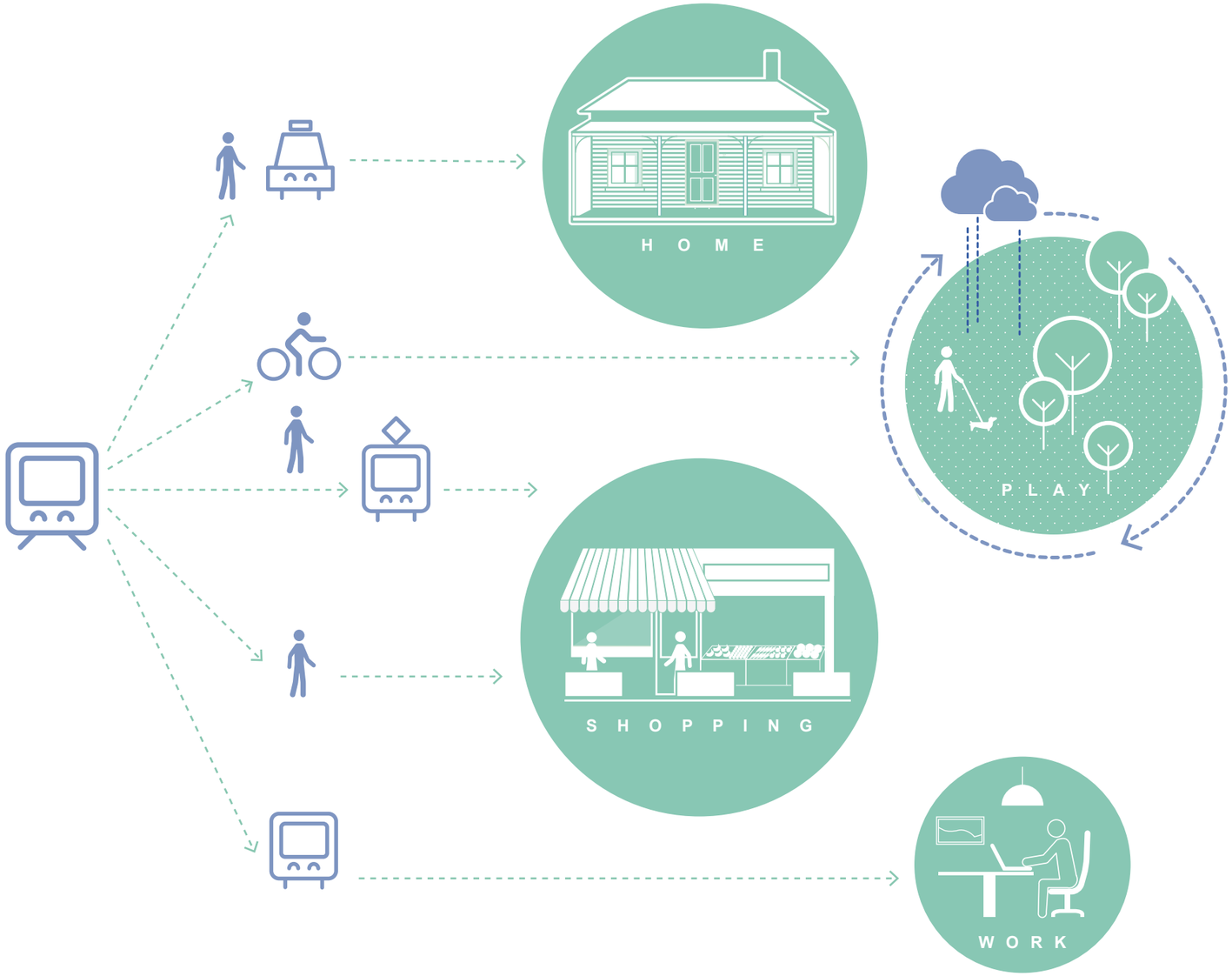


Figure 6: Consider the whole journey

Support change and growth

The Project is intended to support change and development beyond its scope. The Design must support this in surrounding areas and facilitate development over stations and on adjacent sites where appropriate.

The Project will be a catalyst for new development near and around the stations. The Design must give consideration to future uses other than SRL rail, on land assembled for the Project. While this land is subject to future precinct planning process, the Design must demonstrate that appropriate options for future development will be supported. The Project also requires consideration of potential impacts on development of nearby sites that are not within its boundary.

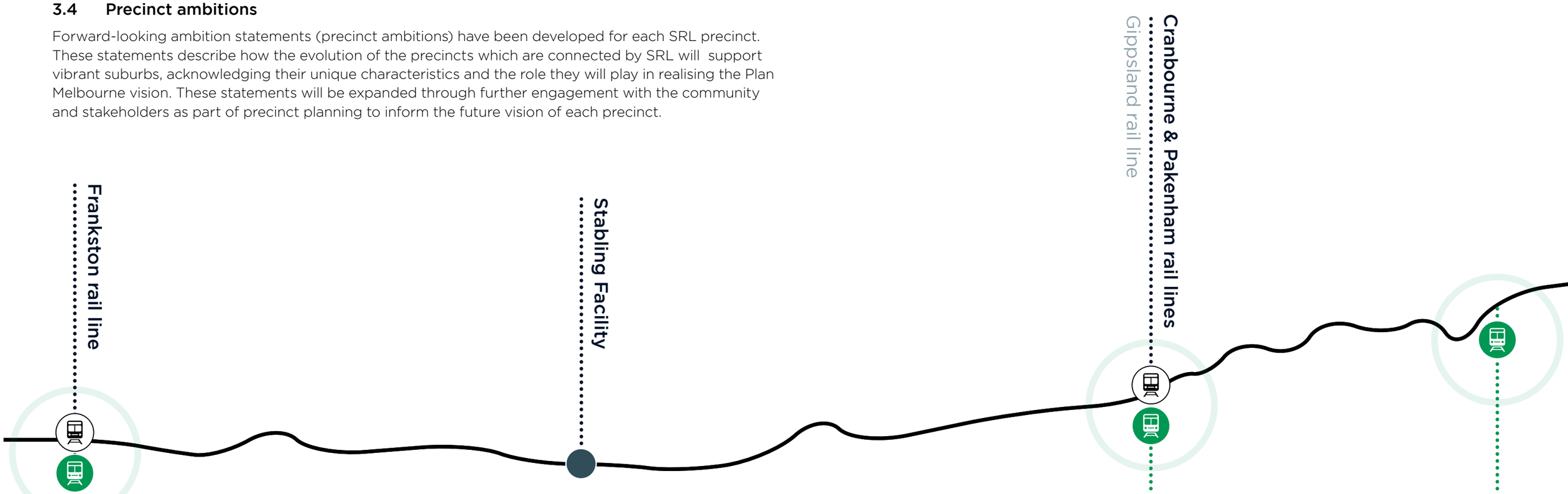
The Project will also be instrumental in establishing the 'place' values that will set the stage for future communities. The Design must draw on integrated, multi-disciplinary design processes and solutions for the creation of good urban places.

The Design needs to consider factors outside the Project boundary to ensure it works effectively in the current context, and factors beyond the Project timescale, so that it works well in the future.

Photo credit: Dianna Snape

3.4 Precinct ambitions

Forward-looking ambition statements (precinct ambitions) have been developed for each SRL precinct. These statements describe how the evolution of the precincts which are connected by SRL will support vibrant suburbs, acknowledging their unique characteristics and the role they will play in realising the Plan Melbourne vision. These statements will be expanded through further engagement with the community and stakeholders as part of precinct planning to inform the future vision of each precinct.



Cheltenham

Cheltenham will become an integrated centre of connected shopping, employment and housing opportunities supported by a thriving community and entertainment hub with an attractive public realm for its workers and residents, as the southern gateway to the SRL corridor.

Clayton

Clayton will be both a leading health cluster and 'transport super hub' for Melbourne's southern metropolitan and Gippsland region. Home to world-standard healthcare and leading-edge commercialised research and development innovations, it will also be a hub for local living services and maintain a high amenity environment.

Monash

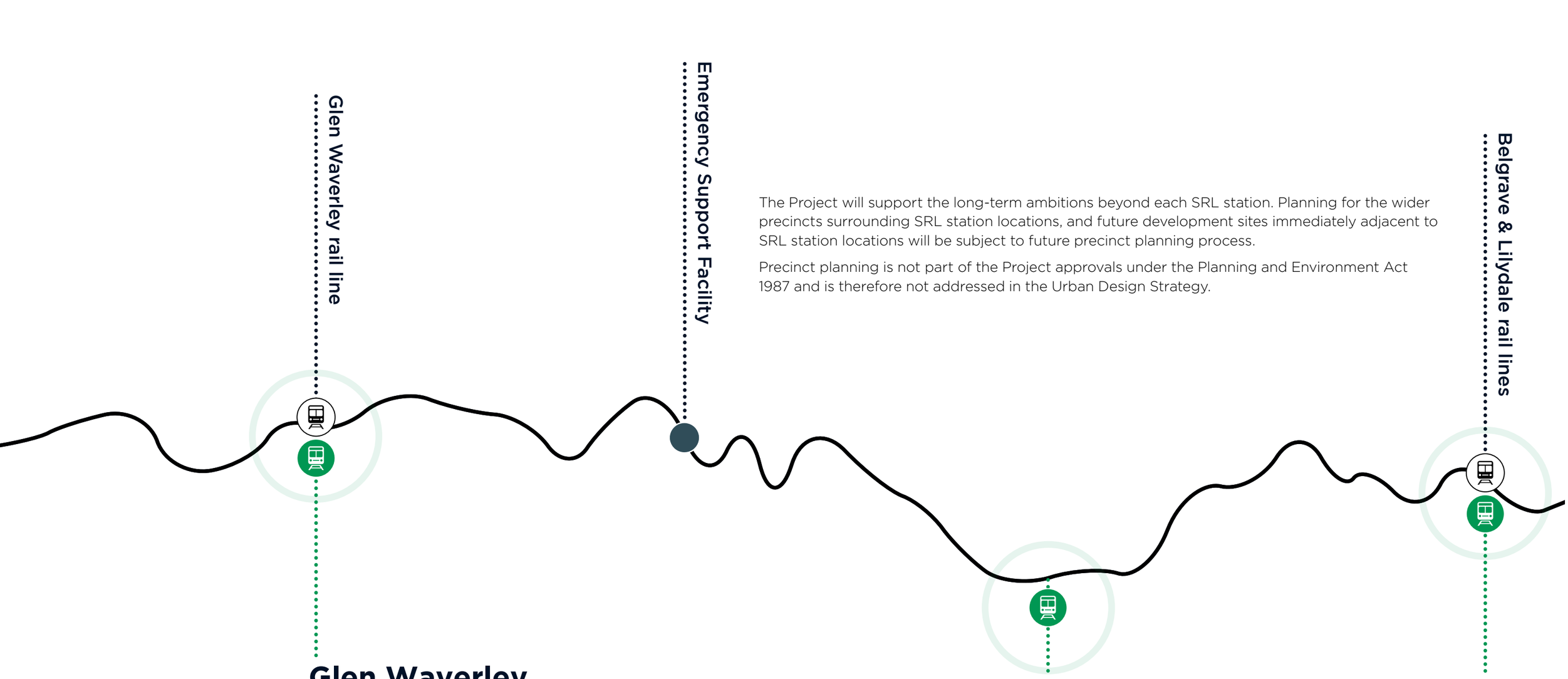
Monash Precinct will be known globally for innovation, building on Monash University's strengths in science, technology, engineering and mathematics (STEM) to attract and retain leading global firms. Significant employment growth will be supported by an attractive public realm, comprehensive walking, cycling and public transport networks, and a diverse lifestyle and hospitality offering.

Monash National Employment and Innovation Cluster

City of Kingston

Bunurong Land Council Aboriginal Corporation Registered Aboriginal Party

Figure 7 : Diagram of long section and SRL Precinct ambitions.



The Project will support the long-term ambitions beyond each SRL station. Planning for the wider precincts surrounding SRL station locations, and future development sites immediately adjacent to SRL station locations will be subject to future precinct planning process.

Precinct planning is not part of the Project approvals under the Planning and Environment Act 1987 and is therefore not addressed in the Urban Design Strategy.

Glen Waverley

Glen Waverley will be a centre for workers, students and residents, accessible from across the eastern metropolitan region and anchored by a vibrant multicultural core. Central Glen Waverley will grow through an intensified mix of businesses, retail, services and entertainment uses, within a pedestrian- and cycling-friendly local environment.

Burwood

Burwood will have significant mixed-use activity areas and be a major education precinct for Victoria, anchored by Deakin University's strengths as a leader in technology and commerce. An activated public realm along the Burwood Highway corridor will support more jobs and residents and enhanced access to Gardiners Creek will be supported by comprehensive walking and cycling links.

Box Hill

Box Hill will continue to grow as a Metropolitan Activity Centre and strategic multi-modal transport hub for Melbourne's east. Growth in health and public sector jobs will be supported by continued mixed-use development and high-quality landscaped central areas that are attractive for pedestrians. The precinct will remain a multicultural hub, providing amenity and community infrastructure for its diverse population.

City of Monash

City of Whitehorse

Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation Registered Aboriginal Party

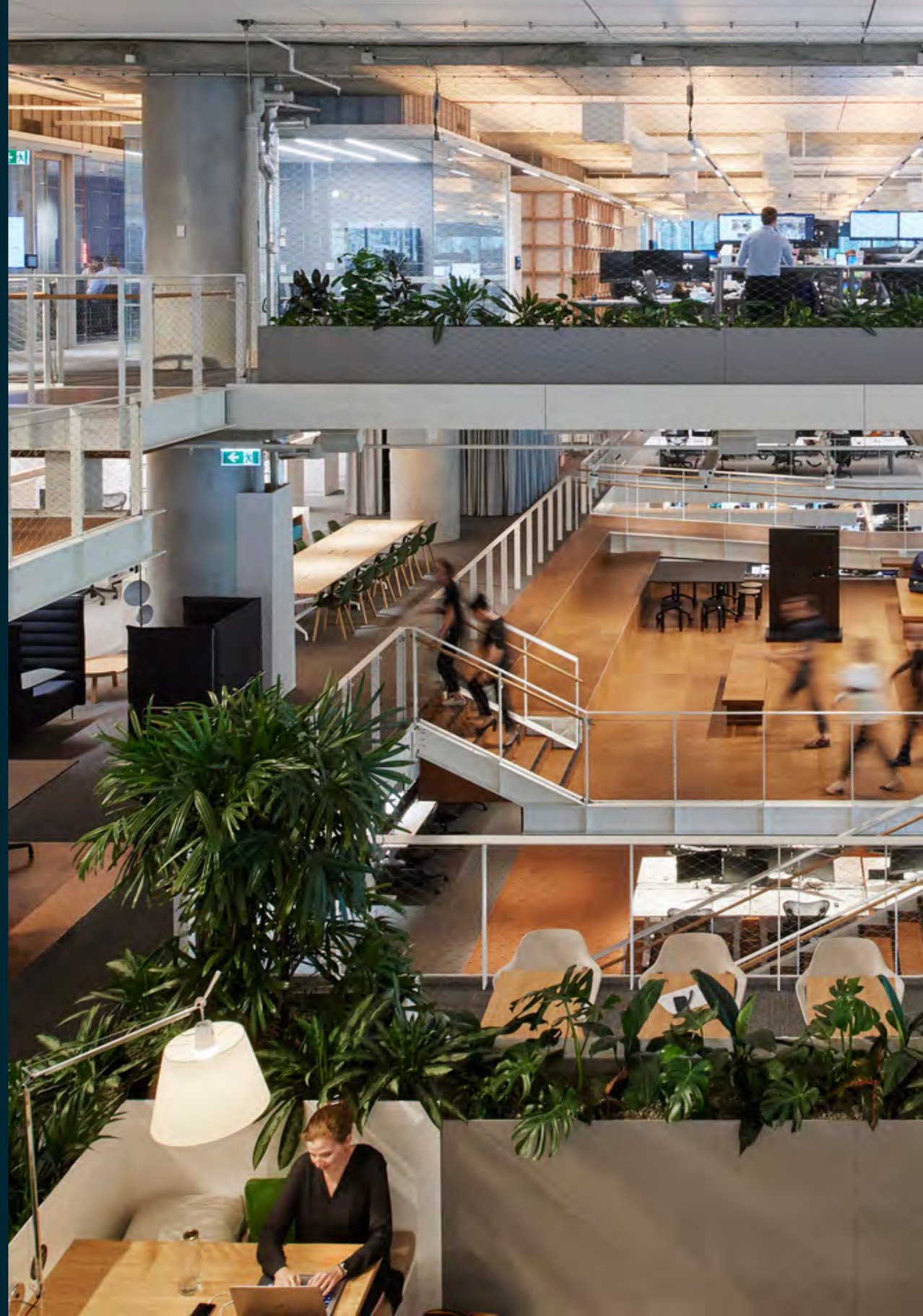
4.0
Urban design principles & objectives

The urban design principles and objectives establish important foundational ideas for SRL. They guide the approach to urban design and define what must be achieved, to ensure SRL precincts will continue to be great places for people to live, visit and work as Melbourne grows.

Framed around the three SRL objectives of ‘productivity’, ‘connectivity’ and ‘liveability’, SRL urban design principles and objectives have been adapted from Creating Places for People - an urban design protocol for Australian cities, 2011.

The urban design principles and objectives adopt a holistic design approach to promote positive environmental, social, cultural and economic outcomes. Best practice Transit Oriented Development (TOD) principles, safer design principles, cultural and gender safety considerations, accessibility, sustainability and other concerns are embedded throughout the SRL urban design principles and objectives.

The Design and its execution must support all the urban design principles and achieve all of its objectives, through an integrated design approach.



4.1 Productivity

To support population growth and a focus on jobs and investment closer to where people live; strengthen access to, and investment in regional Victoria.

Photo credit: Hassell and Earl Carter

UD1 Urban Design Principle 1 Enduring

Places that are functional now and for generations to come

Objective UD1.1 Legacy

Create a design that is enduring and functional for generations to come, is easy to maintain and manage, is adaptable to changing uses with minimal reconstruction, and will age gracefully in concept and detail.

Objective UD1.2 Future ready

Ensure the design catalyses urban renewal, encouraging the evolution of the precincts and changing uses over time.

Objective UD1.3 Resilient

Ensure the infrastructure, buildings and places can survive, adapt and thrive when subjected to stresses and acute shocks such as changes in climate and technology, and extreme events.

Objective UD1.4 Environmentally sustainable

Optimise environmental performance and embed sustainability initiatives into the design response of the infrastructure project and surrounding precinct.

UD2 Urban Design Principle 2 Diverse

Places that are inclusive and offer a diverse range of experiences

Objective UD2.1 Strategic alignment

Facilitate integrated land use and transport solutions that respond to the precinct ambition and strategic transport and land use planning.

Objective UD2.2 Functional urban structure

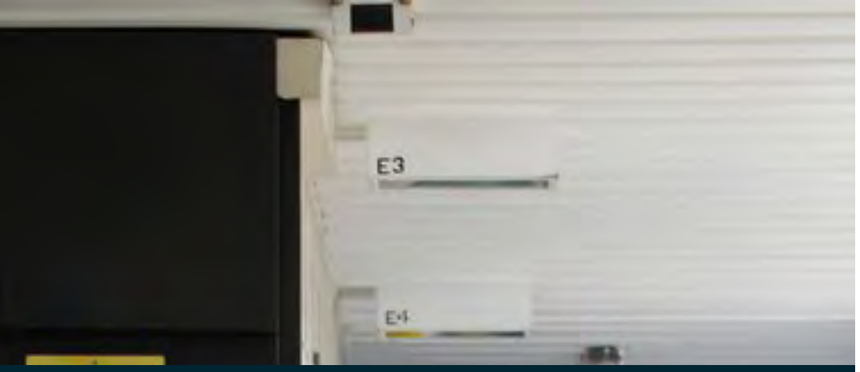
Create an urban structure that ensures the adequate provision of public spaces that support a complementary mix of activities.

Objective UD2.3 Integration with context

Ensure new works accommodate travel routes and activities that connect to, integrate with and complement those in the wider precinct.

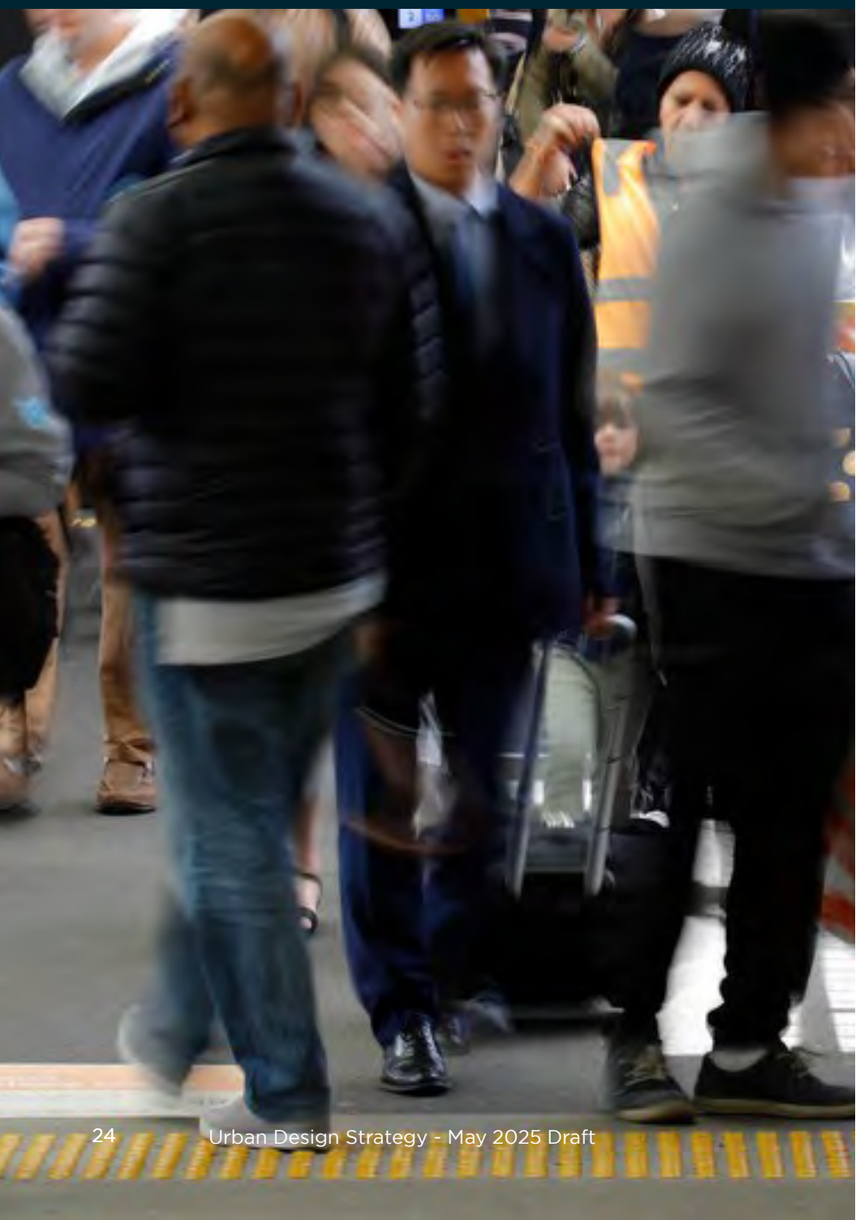
Objective UD2.4 Welcoming

Design places and movement networks that are welcoming, inclusive and pleasant for the whole community and encourage diverse social and cultural interaction within public spaces.



4.2 Connectivity

To support the development of an integrated transport network that increases travel options and access to places, and enhances the passenger experience.



UD3 Urban Design Principle 3 Connected

Places that are connected physically and spatially

Objective UD3.1 Linkages

Improve people's ability to walk, cycle and access public transport within a permeable urban structure that offers safe and efficient links and reduces barriers to movement.

Objective UD3.2 Transport integration

Facilitate seamless intermodal transfers prioritising public transport, walking and cycling networks, and design movement networks for safe interactions between transport modes.

Objective UD3.3 Legible

Reflect walking and cycling desire lines, promote intuitive wayfinding, reduce reliance on signage and minimise visual clutter and obstructions to key views.

Objective UD3.4 Green network

Facilitate green networks that link public and private open space and support urban ecology, biodiversity and cooling.

UD4 Urban Design Principle 4 Accessible

Places that are socially connected, enjoyable and easy to walk and wheel around

Objective UD4.1 Universally inclusive

Enable all people to access, understand, use and enjoy spaces across the project area and surrounding precincts regardless of their age, size, ability or disability. To the greatest extent possible, move beyond baseline accessibility compliance towards support for genuine dignity, equity, social inclusion and independent mobility in the use of public places.

Objective UD4.2 Twenty-minute neighbourhoods

Support and enhance convenient and desirable access to everyday services, facilities and key destinations within a 20-minute walking distance from home.

Objective UD4.3 Active transport

Encourage walking and cycling for transport and recreation with integrated active transport infrastructure that can accommodate future growth and connects seamlessly with surrounding networks and with existing and proposed infrastructure.

Objective UD4.4 Safer design

Design places that feel safe for the community using them. Increase passive surveillance and decrease barriers to participation in public space by acknowledging and accommodating the specific needs and experiences of all population groups within the community.

4.3 Liveability

To create more sustainable and resilient precincts in Melbourne's suburbs to generate new social and economic opportunities.

Photo credit: Dianna Snape

UD5 Urban Design Principle 5 Enhancing

Places that enhance the local environment and community

Objective UD5.1 Heritage

Celebrate, respect and respond to Indigenous and non-Indigenous cultural heritage, values and local history.

Objective UD5.2 Responsive

Design to respond, connect and build on the unique and valued social, cultural, physical and economic aspects of the precinct.

Objective UD5.3 Sensitive

Sensitively enhance landscape and urban realm outcomes; and minimise negative physical and visual impacts associated with the new infrastructure.

Objective UD5.4 Healthy

Design infrastructure and green networks, spaces and places that support active lifestyles, and encourage social interaction to improve physical and mental health.

Objective UD5.5 Quality design

Create a high-quality design that makes a positive contribution to the local built and natural environment.

UD6 Urban Design Principle 6 Liveable

Places that are comfortable and welcoming

Objective UD6.1 Amenity

Improve urban amenity by realising site specific opportunities to enhance environmental comfort and create pleasant and attractive places that feel safe and are safe for people to move through and spend time in.

Objective UD6.2 Landscape values

Create a coherent and engaging landscape response that embraces natural qualities, community and cultural values.

Objective UD6.3 User experience

Enhance the journey and precinct experience for local communities, visitors and transport users.

Objective UD6.4 Places for people

Create inviting, people-friendly streets, open spaces and public places, and maximise the opportunities to create green places.

Objective UD6.5 Activation

Create activated, memorable and diverse places in the short and long term; manage interfaces and encourage a range of activities to deliver vibrant mixed-use neighbourhoods.

5.0
Project-wide requirements and benchmarks

The Design must recognise the significance of architecture and public realm design, and draw on the critical interplay between them to achieve high-quality urban design outcomes. Together, Project-wide requirements and benchmarks establish the minimum standard of design quality expected to be achieved by the many contributing components of successful public places. They also define how the Design and its execution will be evaluated to establish whether those quality expectations have been achieved.

Project-wide requirements and benchmarks apply in combination with other relevant technical standards and requirements.

The Design and its execution must meet or exceed all relevant Project-wide requirements and benchmarks.

5.1 Station public areas and station environs
5.2 Substations and ancillary structures
5.3 Public spaces
5.4 Green infrastructure
5.5 Creative works
5.6 Lighting
5.7 Walking and cycling
5.8 Streets, laneways and arcades
5.9 Bridges, elevated crossings and underpasses
5.10 Materials and finishes
5.11 Parking
5.12 Construction phase
5.13 Development outside Project scope

The order in which the above elements are presented in the Urban Design Strategy is not an indication of importance.

Photo credit: Dianna Snape, Design Urban Initiatives

This user guide explains how the Urban Design Strategy has named and structured Project-wide requirements and benchmarks, and explains how they will be used to assess the Design and its execution.

Each requirement has been given a unique number to be used for reference.

Project-wide requirements adopt a performance-based approach to communicate the outcomes required to achieve the urban design principles and objectives. They provide the basis on which the Design will be informed, evaluated and delivered.

Benchmark photographs and text, drawn from other projects, complement the Project-wide requirements and illustrate the minimum standard of design quality expected for Project elements to meet the requirements in terms of conceptual and detailed design integration, innovation and resolution.

Each benchmark has been given a unique number to be used for reference

The relevant aspects of the benchmarks with respect to the Project are noted underneath the photographs (not all aspects of the projects shown may be relevant).

User guide

Project-wide requirements and benchmarks

5.10.1. Materials are of high quality and are used to:

a. Create atmosphere and contribute to amenity

b. Establish or enhance a sense of identity that responds to local context

c. Make the place memorable and contribute to a positive user experience.

QB41- Greville Street Precinct, Prahran, VIC
Demonstrates well-executed public realm using the selection of materials and arrangement of public realm elements to support transitions between pedestrian and shared mode spaces.
Design: Rush Wright Associates. Photographer: John Gollings.

Figure 8: User guide: Project-wide requirements and benchmarks

5.1
Station public areas and station environs

These requirements apply to the area around stations and to any public transport related buildings that have a public use or function. For public transport buildings that do not have a direct public use or function, refer to 5.2.

5.1.1. Station environs are well-designed, with a high level of integration between architecture and public realm that support the creation of good urban places including:

a. Offering good amenity and legibility for public transport users and others

b. Maximising the activation of public space by promoting pedestrian activity, and helping to define patterns of pedestrian movement and gathering, that contribute to vibrancy and pedestrian connectivity

c. Providing a special character to the urban environment that reflects the unique aspects of that local place and community, while responding to and enhancing the surrounding public realm

d. Integrating opportunities for the interpretation of themes, places and stories of Indigenous and non-Indigenous cultural heritage significance

e. Providing a positive built-form contribution to the local area and avoiding negative amenity impacts on nearby residents, adjacent land uses and future development.

5.1.2. Station buildings are well-designed to:

a. Express their civic identity

b. Respond to existing heritage fabric and valued urban form

c. Break down the scale of long frontages and provide a good transition to the human scale at street interfaces

d. Create built form that contributes to a positive experience of the street wall when viewed from a pedestrian view point and experienced at a pedestrian pace

e. Use a rich material palette drawn from the context

f. Provide comfortable edges and thresholds at entrances and other critical points

g. Contribute to perceptions of safety of adjacent spaces and streets

QB01 - Green Square Library, Sydney, NSW
Demonstrates a welcoming entrance into a building that is clearly identifiable as having a public function.
Design: Stewart Hollenstein in association with Stewart Architecture. Photographer: Tom Roe.

QB02 - Cherrybrook station, Metro North West, Cherrybrook, NSW
Demonstrates a welcoming station entrance that is attractive and comfortable for users.
Design: Hassell. Photographer: Ian Hobbs.

h. Present well to views from all directions including from future development that may overlook the station buildings

i. Use built form to express themes and/or narratives that have enduring local, cultural significance and relevance.

5.1.3. Station entrances are:

a. Located on circulation routes and are oriented towards public streets

b. Easy to identify during the day and at night, and do not rely entirely on directional and other signage for wayfinding

c. Open, spacious, welcoming, safe and apply universal access principles

d. Clearly identifiable as being accessible to the general public

e. Well-integrated with adjacent streets and public spaces.

5.1.4. New and existing stations and interchanges are well-integrated through the following (in order of priority):

a. Proximity

b. Physical connectivity

c. Visual connectivity.

5.1.5. New stations and interchanges are located to maximise opportunities to activate adjacent activity centres.

5.1.6. The design and execution of the station environs:

a. Responds to and is well-integrated with existing public transport interchanges

b. Includes well-integrated taxi, ride share, pick up and drop off facilities

c. Provides a positive user experience that addresses user needs including reliability, travel time, accessibility, comfort and convenience at the completion of the Project and during the redevelopment phase

d. Functions well at peak and off-peak times

QB03 - Monash bus interchange, Monash University, Clayton, VIC
Demonstrates a design that provides a special character and contributes to positive place outcomes.
Design: John Wardle Architects. Photographer: John Gollings.

e. Includes station access stairs, escalators and lifts that distribute pedestrians safely in relation to the capacity of surrounding routes

f. Considers requirements for service maintenance vehicle access as an integral part of the Design.

5.1.7. Transfers between public transport systems and transport modes:

a. Are direct, efficient, comfortable, safe and legible

b. Optimise outcomes particularly for cycling, walking and public transport

c. Maximise neighbourhood connectivity and cater for walking and cycling desire lines including those connecting to cycle parking

d. Are supported by appropriate wayfinding signage and sufficient space and lighting levels to assist wayfinding.

5.1.8. The location, layout and footprint of interchange facilities minimise impacts on public realm quality, pedestrian connectivity, safety, experience and nearby land uses.

5.1.9. Waiting areas:

a. Have good visual permeability

b. Feel welcoming and easy to use

c. Provide amenity, comfort and protection from weather

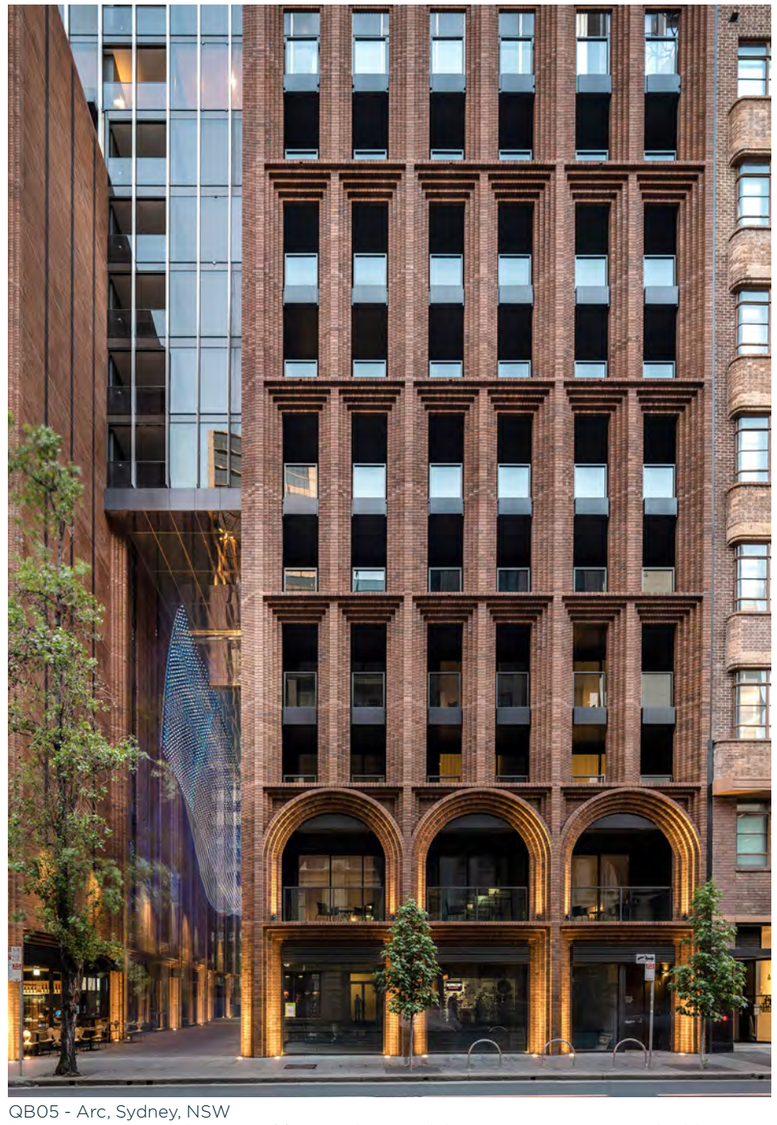
d. Maximise opportunities for natural light and ventilation

e. Are co-located with other facilities

f. Are located adjacent to main circulation areas and kiosks while avoiding conflict with movement areas

g. Are located so that passengers have line of sight to arriving and departing services.

QB04- Barrack Place, Sydney, NSW
Demonstrates the use of a rich material palette to break down the sense of scale on a street frontage.
Design: Architectus. Photographer: Brett Boardman.



QB05 - Arc, Sydney, NSW
Demonstrates a combination of form and material that creates an attractive building identity and also contributes to the creation of a positive public realm experience for the pedestrian.
Design: Koichi Takada Architects. Photographer: Martin Siegner.

5.1.10. Safer Design principles are incorporated to deter anti-social behaviour and create a welcoming user experience and safe environment that:

a. Has regard to existing and planned land uses when locating public transport facilities to maximise visibility and passive surveillance opportunities

b. Does not create dead ends and potential entrapment spaces, and sharp bends that conceal views

c. Maximises natural light and openness, particularly in undercroft areas

d. Maximises passive surveillance between public transport modes (for users and staff) to improve overall precinct safety.

5.1.11. Ease of wayfinding is supported through:

a. Clear, uncluttered sight lines and direct paths of travel to decision points

b. The use of materials to direct movement and prioritise modes

c. The design and assembly of public realm elements to guide movement and ease congestion

d. Designing new stations to capitalise on view lines to existing local landmarks and natural features that will assist with orientation

e. The use of wayfinding signage where appropriate and creation of new visual markers and treatments that assist with orientation and navigation.

5.1.12. The need for tactile indicators is minimised by:

a. Providing logical and direct paths of travel

b. The use of buildings and other public realm elements as 'shore lines' to aid navigation

c. Avoiding obstacles that obstruct the path of travel.

5.1.13. Signage:

a. Is designed and located to avoid the creation of visual clutter, and can be read from a range of distances, lighting conditions, and speeds

b. Is clear, consistent and easy to follow, responding to the particular local requirements and destinations

c. Establishes appropriate links between signage provided as part of the Project and directional signage used in surrounding local government areas.

5.1.14. New infrastructure is designed and implemented to support SRLA's sustainability strategy and associated targets.

5.1.15. Complementary land use and activation opportunities such as commercial, retail and community facilities are maximised.

5.1.16. Station environs and interchange facilities have demonstrated capacity to support future service changes and technological advances.

QB06 - Christchurch Transport Interchange, Christchurch, New Zealand
Demonstrates a high amenity and comfortable waiting area that is protected from the weather while also permitting good access to natural light.
Design: Architectus. Photographer: Simon Devitt.

5.2
Substations and ancillary structures

5.2.1. A hierarchy of considerations has been applied to minimise the negative impact of substations and ancillary structures, and maximise their potential to make a positive contribution to places. In order of importance, those considerations are:

a. Siting – optimising location with respect to public realm and open space, trees and other vegetation, significant buildings and monuments, view lines, nearby uses, existing and future land use and critical interfaces

b. Building mass – minimising the footprint and bulk of above ground service buildings and rail infrastructure to minimise their visual impact

c. Design – improving place outcomes.

5.2.2. Activation of substations and ancillary structures is maximised through a combination of:

a. 'Sleeving' with active building uses

b. Elevating infrastructure and locating active uses at the street level below

c. Locating active uses on top of the infrastructure.

5.2.3. The number and size of 'smaller scale' ancillary structures including skylights and access stairs located within the public realm is minimised, and where not avoidable:

a. Are well-integrated to minimise visual clutter within the public realm

b. Are non-intrusive and do not impede circulation or limit maintenance or other access

c. Do not limit the comfort or enjoyment of public space

d. Contribute to the delivery of an integrated public realm with a well-considered palette of materials and finishes.

QB07 - Communique Headquarters, Seoul, South Korea
Demonstrates an active and well-integrated street level use located within an ancillary building.
Design: DaeWha Kang Design. Photographer: Kyungsub Shin.

5.2.4. Substations and ‘larger-scale’ ancillary structures such as ventilation structures, excluding tunnel portals and dive structures:

a. Are sensitively sited and well-integrated to minimise negative impact on the surrounding area and adjacent communities

b. Are well-designed and make a positive contribution to the identity of the local area through their architectural form, texture, colour and lighting

c. Maintain the quality of design detailing and material selection to all visible elevations, acknowledging that buildings and structures will be viewed from numerous locations within the broader context including from the public realm and surrounding development

d. Comprise elements that are well-coordinated, neat and attractive while minimising opportunities for vandalism

e. Minimise their visual bulk through the use of landform and vegetation, articulation of facades and roof forms, and innovative design.

5.2.5. Where not avoidable, blank walls visible from the public realm:

a. Are minimised, especially between ground and first floor levels

b. Are designed and executed as an integrated three-dimensional component of the building

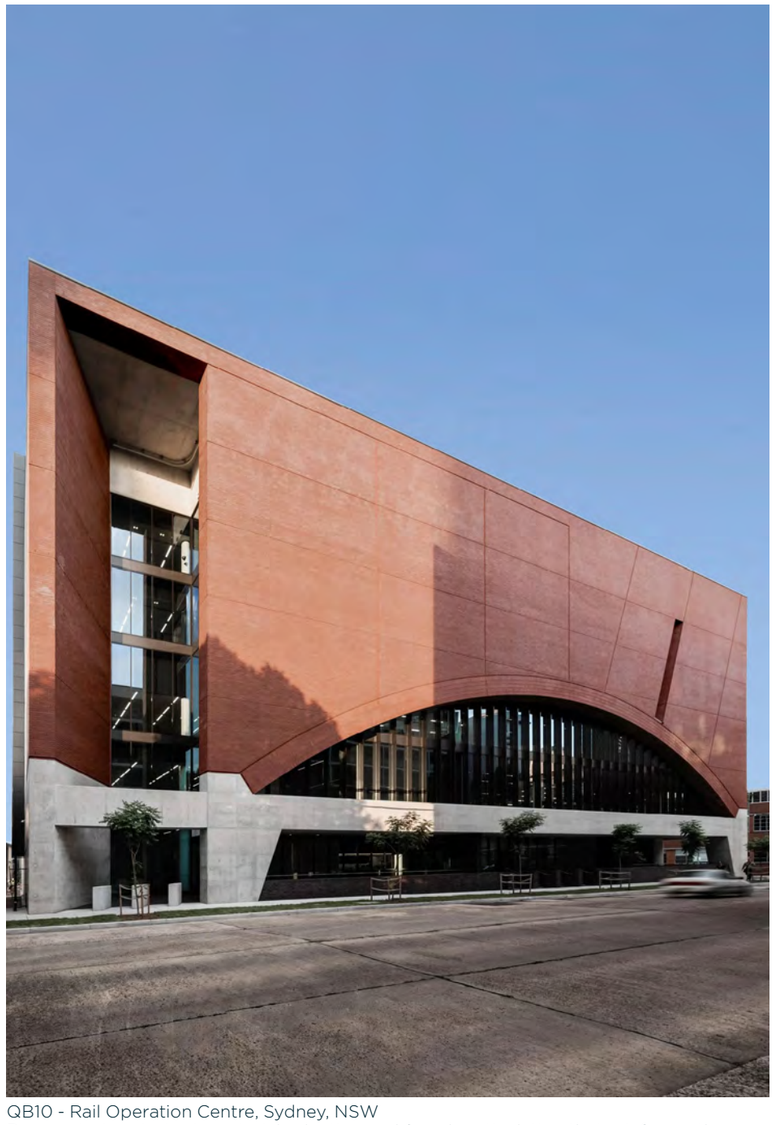
c. Employ tactile and visually interesting materials near the public interface, and durable, low maintenance materials in the higher parts of the building

d. Reinforce the human scale by integrating elements at door, window and floor heights

e. Integrate lighting as part of the overall architectural response to make a positive contribution to night-time amenity and place identity.

QB08 - Albert Park Office and Depot, Melbourne, VIC
Demonstrates a well-designed building that sits comfortably in its context and contributes to positive place outcomes.
Design: Archier, Harrison and White. Photographer: Peter Bennetts.

QB09 - Brunswick Power Terminal Station, Brunswick, VIC
Demonstrates a well-designed site boundary treatment and a public realm interface that is comfortable and attractive for pedestrians.
Design: Beca Pty Ltd. Photographer: Marcus Enno Photography.



QB10 - Rail Operation Centre, Sydney, NSW
Demonstrates strategic material selection and facade articulation that reinforces the pedestrian scale at street interfaces.
Design: Jacobs, Smart Design Studio. Photographer: Martin Siegner.

5.2.6. Substations and ancillary structures are designed to:

a. Accommodate access requirements while minimising impact on the amenity and functionality of the public realm

b. Integrate elements such as vents, openings, doors and hatches, into the architectural scheme.

5.2.7. Architectural finishes and other treatments to service buildings, that will be wholly or partly embedded within future built form, are robust and well-designed, and contribute positively to the public realm.

5.2.8. Walls, fences or other barriers are well-designed and:

a. Use robust and durable materials

b. Are well-integrated with the surrounding structures, landscape and urban elements

c. Minimise the potential for vandalism and graffiti through material selection, detailing and positioning

d. Eliminate potential concealment places and entrapment spaces, and maximise perceptions of safety and security

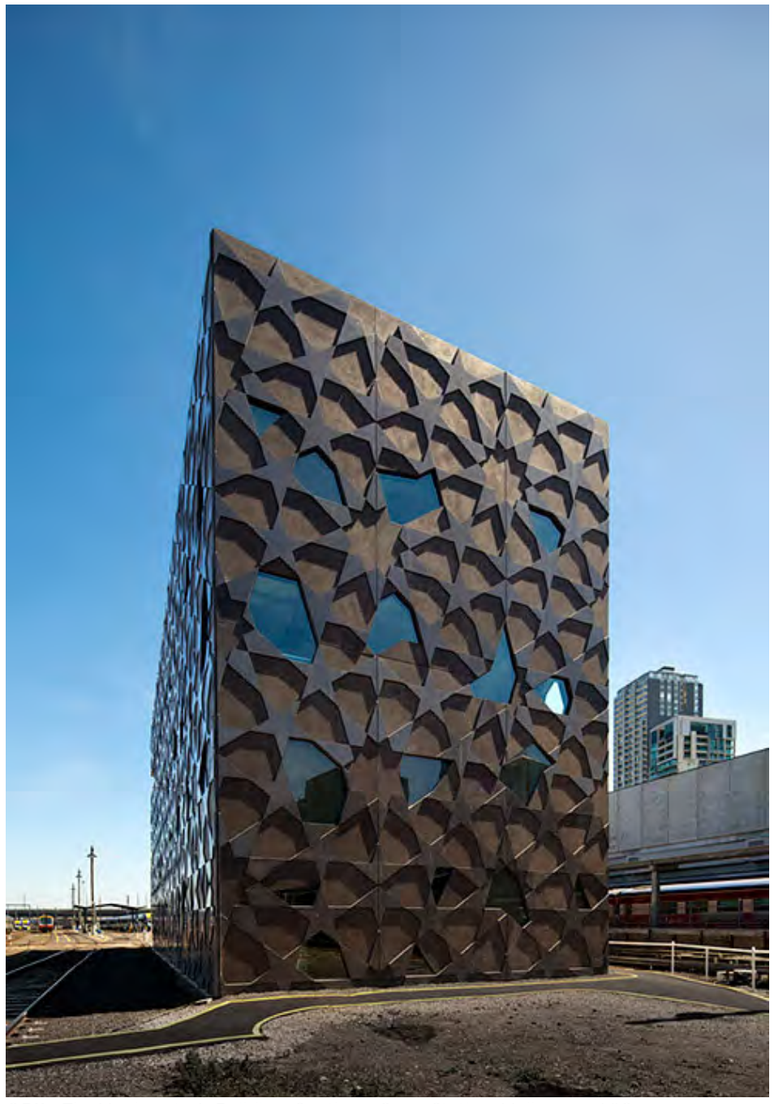
e. Have consistently high levels of presentation to all elevations visible from the public realm

f. Ensure that any noise mitigation or security aspects are well-integrated

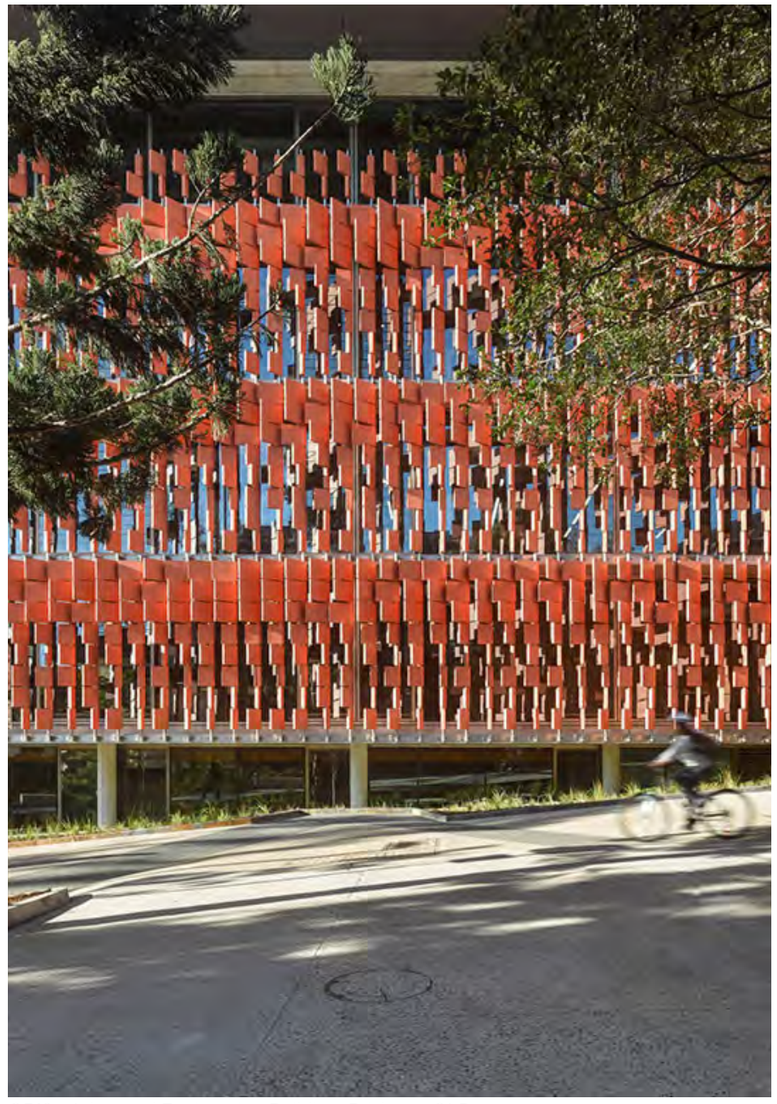
g. Manage negative impacts on privacy and amenity for adjacent uses when located on boundaries shared with the Project.

5.2.9. Where screen planting or green walls are proposed to manage impacts of service buildings or other structures including construction hoardings, adequate space and conditions are allowed for the healthy growth and maintenance of vegetation to achieve effective screening.

5.2.10. New infrastructure is designed and implemented to support SRLA's sustainability strategy and associated targets.



QB11 - The Yardmaster's Building, Southern Cross Station, Melbourne, VIC
Demonstrates a visually interesting design that maintains a high quality treatment to views from all directions.
Design: McBride Charles Ryan. Photographer: John Gollings.



QB12 - Advanced Engineering Building, Brisbane, QLD
Demonstrates a well-designed and executed screen element that adds texture and interest to the building's interface with the public realm.
Design: KIRK, Hassell. Photographer: Peter Bennetts.

5.3
Public spaces

5.3.1. Public spaces are of high amenity and are well-designed and executed to:

a. Foster a sense of community, encourage social interaction, be inviting and comfortable to spend time in

b. Feel welcoming and freely accessible to the public

c. Have a sense of openness with views to the sky

d. Have active edges and be adequately lit to support the function and activities of the space

e. Have good access to sunshine and shade with space for large canopy trees wherever possible

f. Reduce the effects of wind and urban heat island on user comfort

g. Provide places to rest, pause and rehydrate at regular intervals along pedestrian movement corridors

h. Support a diverse range of community activities and existing and emerging needs.

i. Support extended hours of use to encourage socialising, recreation and outdoor activity

j. Reflect the character of the local physical and cultural context

k. Have regard for valued heritage character and consider opportunities to integrate Indigenous and non-Indigenous cultural heritage interpretation

l. Be child-friendly, with opportunities for children to play and find points and routes of interest and learning

m. Discourage anti-social behaviour.

5.3.2. Opportunities are incorporated to reduce the impact of existing barriers to accessing public spaces.

5.3.3. New public spaces are located and designed as part of a hierarchy to meet objectives and functions that support and relate to the broader area.

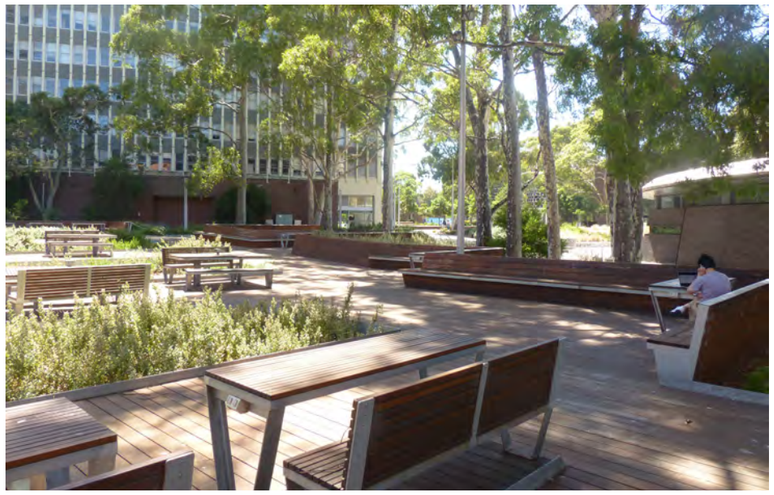
5.3.4. The design of public spaces:

a. Reflects local council service requirements

QB13 - Harmony Square, Dandenong, VIC
Demonstrates a flexible public space that supports a diverse range of community activities and needs.
Design: Rush Wright Associates. Image: Greater Dandenong City Council.

QB14 - Darling Square, Sydney, NSW
Demonstrates a comfortable public space that provides respite along a pedestrian movement corridor.
Design: ASPECT Studios. Photographer: Brett Boardman.

QB15 - The Coal Loader, Waverton, NSW
Demonstrates cultural heritage interpretation elements that are well integrated with public realm and contribute to its enjoyment and activation.
Design: CLOUSTON Associates.



QB16 - Southern Precinct Landscape, Monash University, Clayton, VIC
Demonstrates a public space designed to support outdoor collaboration.
Design: ASPECT Studios.

QB17 - Northern Plaza, Monash University, Clayton, VIC
Demonstrates a welcoming public space that provides a choice of sunny or shaded areas and a variety of seating options.
Design: TCL, Photographer: Ben Wrigley.

b. Is coordinated with and complements local council and other asset managers' approved furniture and fixtures, material palettes, standards and guidelines

c. Is in line with community aspirations.

5.3.5. Designs for public spaces affected by the Project are resolved and coordinated in a holistic way, reducing clutter and addressing all new and existing elements as part of a coordinated design. These elements include light and traffic signal poles, safety elements, meter boxes, statutory and wayfinding signage, street furniture and other infrastructure elements within the space.

5.3.6. The Design supports management of public spaces to a high standard to:

a. Ensure the spaces are able to be accessed, maintained and operated in line with community expectations and the requirements of the ultimate asset owner

b. Reflect ownership areas and extents of maintenance responsibilities

c. Avoid abrupt changes in materials and quality of finishes at maintenance boundaries.

QB18 - Fairbridge Children's Park, Molong, NSW
Demonstrates the integration of cultural heritage interpretation elements that provide a point of interest and learning opportunity.
Design: Clouston Associates, Photographer: Brenton Cox.

QB19 - Karrum Karrum Bridge, Carrum, VIC
Demonstrates the sensitive integration and interpretation of indigenous themes at a key location within the movement network.
Design: Rush Wright Associates, Photographer: Latitude Photography/Peter Clarke.

5.4
Green infrastructure

5.4.1. The Design adopts a holistic and integrated approach to green infrastructure outcomes to support resilient and adaptable places.

5.4.2. The design of new infrastructure and the siting of elements:

a. Minimises removal of mature trees, planted and remnant native trees, particularly large amenity trees and those within or connected to public reserves and parks

b. Manages negative impacts on native vegetation from removal or disturbance

c. Minimises loss of significant landscapes and parkland

d. Minimises potential for impacts on waterways, identified biodiversity and fauna habitat corridors and sites

e. Maximises natural gravity potential of water flows in drainage for water quality treatment, re-use potential and irrigation of parkland and vegetation.

5.4.3. The Design optimises the number of trees and extent of tree canopy and landscaping.

5.4.4. Planting design and execution:

a. Ensures plantings in and around the station environs are of high quality

b. Provides sufficient space and conditions, soil depth and volume for new and existing trees and vegetation to maintain plant health and growth; and employs innovative design and technical approaches to support this

c. Supports biodiversity

d. Incorporates permeable surfaces to allow infiltration of air and water into the soil

e. Is responsive to the local context, climate and soil conditions and will achieve a low maintenance, thriving and enduring outcome

f. Integrates opportunities for the interpretation of themes, places and stories of cultural heritage significance including Indigenous and non-Indigenous

QB20 - Rosanna station, VIC
Demonstrates successful planting design that provides an enduring result in a high profile location.
Design: Outlines Landscape Architecture Image: Level Crossing Removal Project.

g. Takes into account predicted future changes in climate

h. Is consistent with state and local government standards

i. Uses species appropriate to the scale of their location and are able to be accessed for maintenance.

5.4.5. The Design places a high priority on tree planting to achieve positive above-ground amenity and place outcomes, demonstrating consideration of criteria that may affect the tree planting design including:

a. Requirements for clear paths of travel, sight lines at intersections and driveways

b. Any setbacks for safety as relating to traffic speed limits, emergency access, underground services

c. The depths and locations of any underground structures

d. The location and extent of canopies for weather protection, building overhangs or other overhead structures.

5.4.6. Opportunities to create fauna habitat and links and enhance biodiversity are maximised.

5.4.7. Habitat is created and biodiversity enhanced to complement connected and adjoining sites:

a. Extending the range of native species existing in the broader area

b. Establishing new, or reinforcing existing, habitat corridors for native fauna to move more easily through the urban landscape.

5.4.8. Use of potentially invasive environmental weed species is avoided throughout the Project.

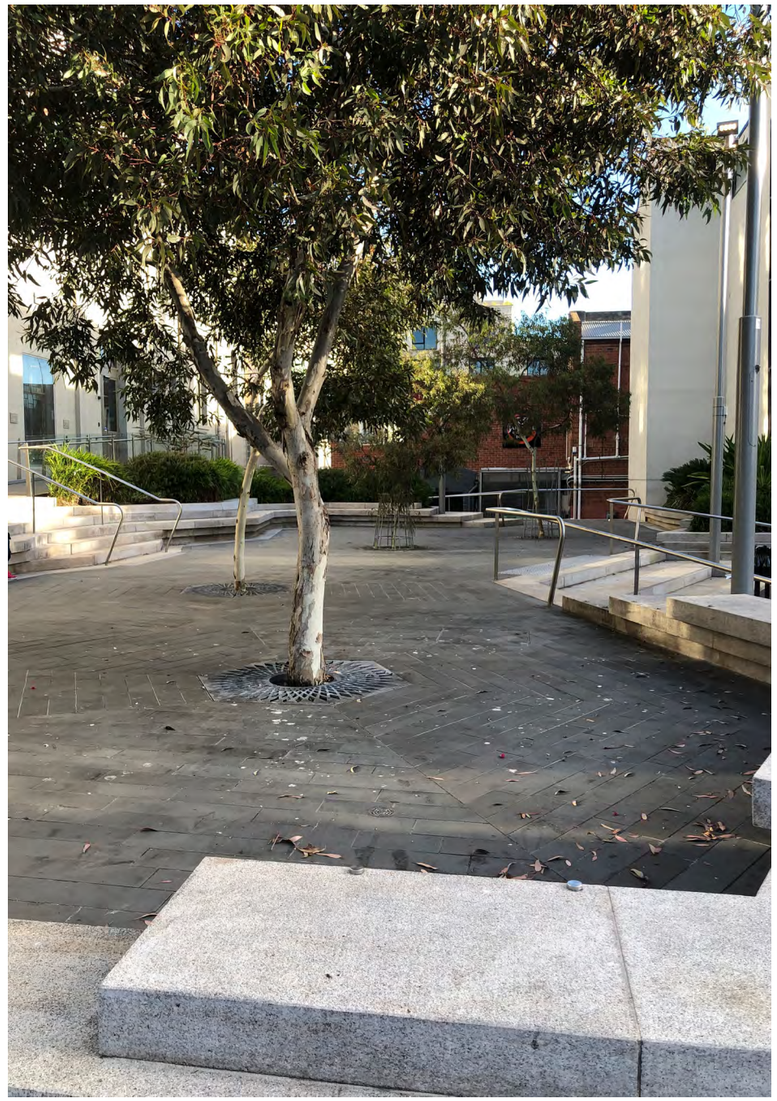
5.4.9. Canopy tree planting and vegetation:

a. Is prioritised within the Project to provide natural shade, support the urban forest and help counteract the urban heat island effect including in areas accessed by workers.

b. Is maximised around seating areas and pause points, along pedestrian and cycle routes and within paved areas to improve amenity and user comfort.

QB21 - Hawkstowe station, VIC
Demonstrates locally responsive planting design that requires low maintenance.
Design: Woods Bagot. Image: Level Crossing Removal Project.

QB22- Yarra River Link, VIC
Demonstrates context responsive public realm interface and planting design to support biodiversity.
Design: McGregor Coxall.



QB23 - Hawthorn Art Civics Centre, Hawthorn, VIC
Demonstrates an innovative design to support healthy plant and growth through providing sufficient space and conditions, soil depth and volume for new trees located over structure.
Design: Site Office.

5.4.10. The use of potable water for irrigation is minimised and designs supporting passive irrigation are maximised. Where active irrigation is included, it is used strategically to support:

a. Trees and other vegetation for the achievement of urban cooling outcomes
b. Feature planting beds in high profile locations
c. Raised planting beds or other locations to which passive irrigation cannot be provided.

5.4.11. Landscape buffers:

a. Are a suitable width to support healthy plant growth with low maintenance requirements
b. Include low planting in combination with tall plants and trees to mitigate visual impacts, filter and enhance views.

5.4.12. The Design considers incorporation of innovative green infrastructure solutions. Where green walls or green roofs are proposed, appropriate locations are selected, and adequate conditions are allowed for the healthy growth and maintenance of plants.

5.4.13. Landscaped areas minimise the steepness of the grade to support long-term plant establishment and growth, and to minimise mulch and soil loss.

5.4.14. Planting is selected, located and able to be maintained to achieve clear sight lines for safety and wayfinding.

5.4.15. Landscape areas are clearly defined and are not left-over and undesirable spaces.

5.4.16. A 'water-sensitive urban design' (WSUD) approach is used to support water management objectives and achieve a broad range of community and environmental benefits.

5.4.17. Integrated water management (IWM) is considered in collaboration with relevant stakeholders to ensure a holistic approach to the water cycle is inherent within the Design.

QB24 - Bendigo Hospital, Bendigo, VIC
Demonstrates a rich planting design informed by local ecology and reflecting on the precinct's cultural heritage.
Design: Bates Smart, Oculus, Silver Thomas Hanely. Photographer: Peter Clarke.

5.4.18. WSUD infrastructure is prioritised where there are opportunities for water harvesting, treatment and reuse that support community facilities.

5.4.19. Drainage and WSUD infrastructure including retarding basins is well located and integrated into the design of the public realm and does not adversely impact on the primary functions of the space, nor limit the ability to:

a. Provide trees and landscaping to manage visual impacts and provide amenity

b. Enhance recreational values and contribute positively to the quality and function of the open space

c. Maximises opportunities to replicate natural processes in the treatment of water, and enhances stormwater management outcomes, as well as broader urban design and ecological values.

5.4.20. In flood prone areas, building entrances are:

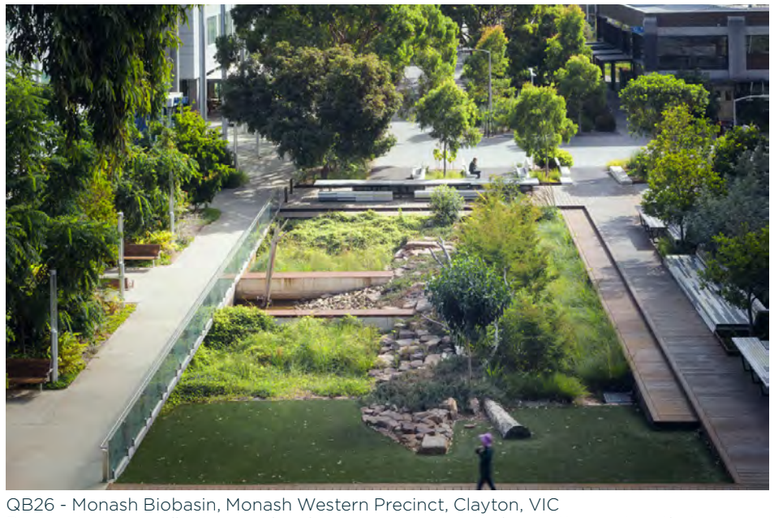
a. Located with consideration to supporting good public realm outcomes

b. Designed to maximise opportunities for levels at entrances to marry into adjacent public realm levels and support appropriate grading of the public realm

c. Designed to reduce reliance on ramps and stairs within the public realm and to minimise transitions in floor levels between interior and exterior spaces.

5.4.21. In flood prone areas, pathways are located and designed to be protected from flooding based on their role and frequency of flooding, and the existence of safe alternative routes in the event of flooding.

QB25 - Brunswick Town Hall, Brunswick, VIC
Demonstrates well-integrated WSUD infrastructure and landscaping that is well-integrated with the streetscape.
Design: Moreland City Council Image: Moreland City Council



QB26 - Monash Biobasin, Monash Western Precinct, Clayton, VIC
Demonstrates a well-integrated and compact stormwater harvesting system that captures, treats and stores stormwater for irrigation reuse.
Design: Rush Wright Associates. Photographer: John Gollings.

QB27 - Royal Park Wetland, Melbourne, VIC
Demonstrates attractive stormwater harvesting and water quality treatment in a constructed wetland.
Design: Rush Wright Associates. Photographer: Michael Wright

5.5
Creative works

5.5.1. Any creative works and initiatives:

a. Are well-integrated into built outcomes and surrounding context

b. Are appropriately located and do not impede pedestrian circulation, lines of sight, maintenance, service or emergency vehicle access

c. Are located and designed to support interchange user information cognition and experience

d. Are responsive to the local environment, culture and sense of place

e. Embrace opportunities for the contemporary interpretation and celebration of Indigenous and non-Indigenous history and cultural heritage

f. Are responsive to the architectural and public realm design

g. Are of appropriate scale.

5.5.2. Public spaces identified for programming and events are appropriately designed to support these activities.

5.5.3. Lighting and other media are:

a. Well-integrated into creative works or the adjacent buildings, infrastructure and public realm

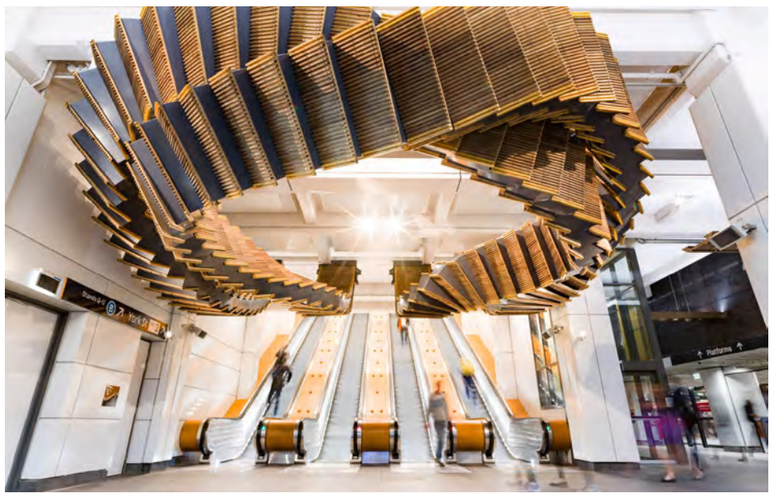
b. Coordinated with area lighting and other services to minimise clutter in the public realm

c. Energy efficient and low maintenance.

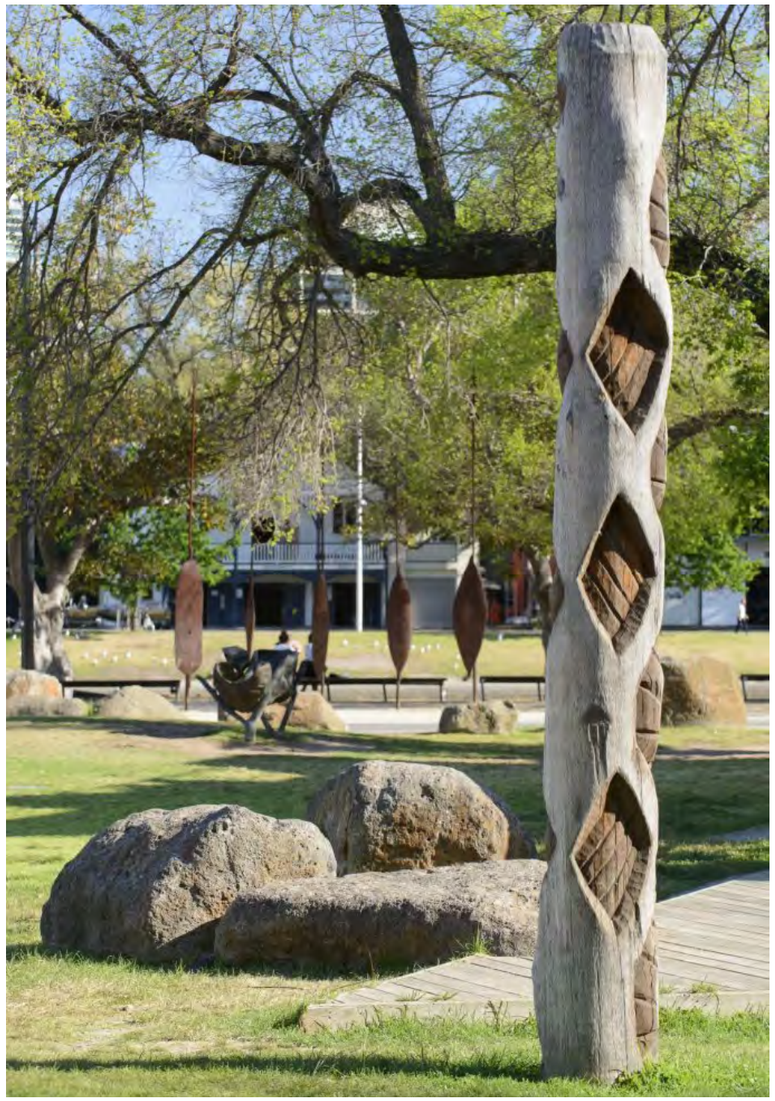
5.5.4. The location and design of creative works:

a. Minimises risk of damage from routine uses and maintenance activities

b. Allows them to be accessed, maintained and operated in line with community expectations and the requirements of the ultimate asset owner.



QB28- 'Interloop' - Wynyard Station, Sydney, NSW
Demonstrates public art that is well integrated and celebrates cultural heritage. The looping form is made of 1930s OTIS escalator treads salvaged from the site.
Artist: Chris Fox Design: Cox Architecture. Photographer: Josh Raymond.



QB29 - 'Birrarung Wilam' (Common Ground), Melbourne, VIC
Demonstrates a well-executed environmental art project that celebrates the physical and spiritual connections between Aboriginal people and place.
Artist/maker: COUZENS, Vicki (Kirrae Wurrong/Gunditjmara); DARROCH, Lee (Yorta Yorta, Mutti Mutti and Trawlwoolway); HAMM, Treahna (Yorta Yorta)
Image: Melbourne City Council

5.6
Lighting

5.6.1. Lighting enhances the user experience, increases safety, and makes the station environs and access routes easy and enjoyable to walk and cycle around.

5.6.2. Appropriate levels of consistent and layered lighting is used to maximise safety and perceived safety for all members of the community.

5.6.3. Lighting is used to create a cohesive nightscape with smooth transitions between areas of different illumination levels.

5.6.4. Lighting supports way finding, orientation and legibility to:

a. Convey a hierarchy of routes and public spaces
b. Define pedestrian and cycle connections to public transport and other destinations
c. Contribute to a sense of arrival at destinations.

5.6.5. Lighting is well-designed and integrated to minimise:

a. Clutter in the public realm
b. Conflicts with trees (locations and mature size)
c. Adverse impacts from glare, light spill and sky glow.

5.6.6. Lighting is used in interior, accessible spaces below structures, or undercroft spaces to increase safety, comfort and amenity where natural light is limited.

5.6.7. Pedestrianised streets and thoroughfares are well-lit and inviting for use at night.

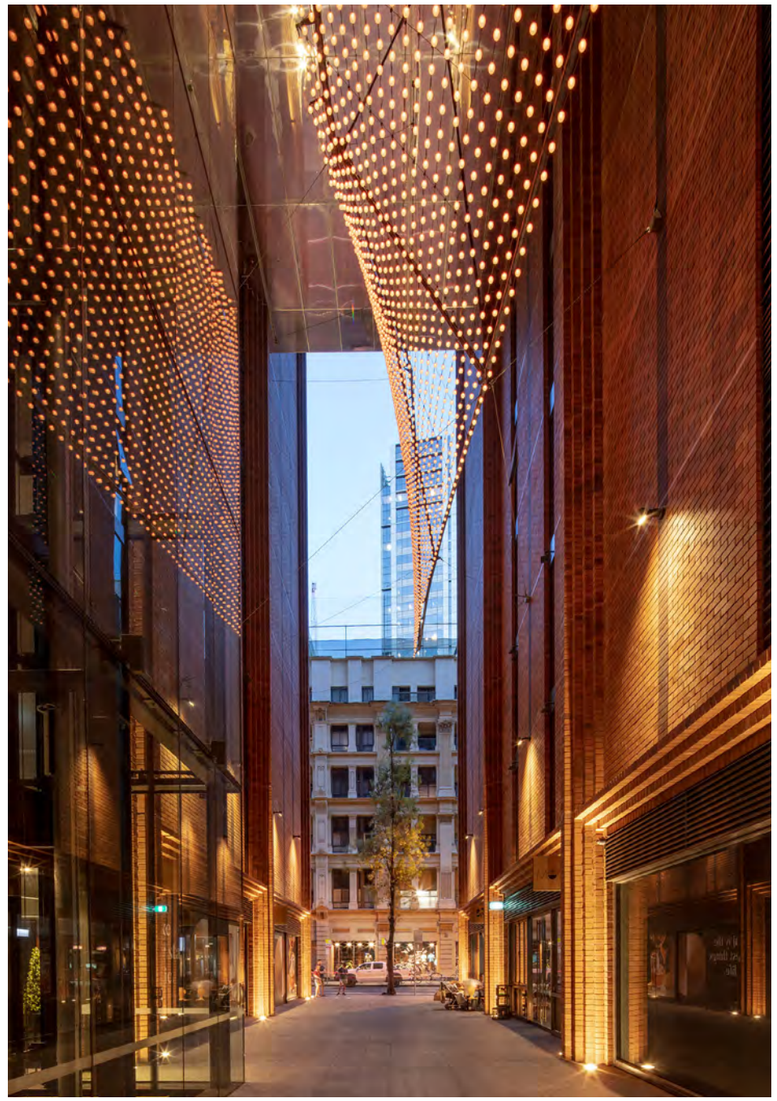
5.6.8. Lighting is used to support and enhance the diverse uses and activities in the public realm.

5.6.9. Feature lighting is used to contribute to the creation and enhancement of a sense of place.

5.6.10. Light fixtures are energy efficient, vandal resistant, easily maintained and easily managed to optimise lighting outcomes and energy use.

QB30 - University of Sydney Darling Campus, Sydney, NSW
Demonstrates well-designed lighting that enhances user experience and defines key routes.
Design: TCL. Photographer: Brett Boardman.

QB31 - Coburg station, VIC
Demonstrates the use of lighting to contribute to a distinctive sense of place.
Design: Wood Marsh. Image: Level Crossing Removal Project.



QB32 - Arc, Sydney, NSW
Demonstrates lighting that contributes to making a pedestrian connection attractive and welcoming at night.
Design: Koichi Takada Architects. Photographer: Simon Wood.

5.7
Walking and cycling

QB33 - Richmond Terrace, Richmond, VIC
Demonstrates generous allowance for pedestrian circulation that is well-integrated into the design of a public space.
Design: Hansen Partnership. Photographer: Andrew Lloyd.

QB34 - Southbank Boulevard, Melbourne, VIC
Demonstrates successful integration of cycle route into coherent streetscape design.
Design: Melbourne City Council. Image: Augustus Brown.

5.7.1. Walking and cycling routes are attractive and desirable to use, comfortable and convenient, safe, and perceived to be safe.

5.7.2. The design of walking and cycling routes reflect appropriate transport modes, hierarchies and space allocation requirements to encourage the safe use of all public and active transport modes.

5.7.3. Site planning and the design of pedestrian and cycling networks:

a. Demonstrate positive user outcomes for safety, directness, coherence, comfort and attractiveness

b. Maintain and enhance the walking and cycling network within station environs, particularly Strategic Cycling Corridors (SCC), municipal routes, the Principal Pedestrian Network (PPN) and pedestrian priority areas

c. Maximise opportunities for new walking and cycling routes that extend local connectivity for all users including linking to existing or new community facilities, open spaces, urban renewal areas or National Employment Innovation Clusters

QB35 - RMIT New Academic Street, Melbourne, VIC
Demonstrates well-designed architectural solutions integrated into the public realm to increase pedestrian comfort.
Design: Harrison and White, Lyons, Maddison Architects, MvS Architects, NMBW Architecture Studio, TCL. Photographer: Peter Bennetts.

QB36 - Hobbemakade, Amsterdam
Demonstrates a safe and legible cycle path with potential pedestrian conflict points clearly marked.

QB37 - Neue Meile, Böblingen, Germany
Demonstrates a holistic public realm design that is inclusive of all groups and members of the community.
Urban planning and landscape: bauchplan).(Photographer: Clemens Franke.

d. Ensure good integration with broader movement networks to support high-quality public realm outcomes.

5.7.4. A holistic design approach is adopted that is inclusive of all groups and members of the community.

5.7.5. Links are provided through long street blocks to achieve a fine-grained pedestrian network, especially near station entrances.

5.7.6. Issues and barriers for walking and cycling connections are addressed with well-designed routes that minimise:

a. Walking and cycling route intersections with motorised vehicle traffic

b. The exposure of walking and cycling route users, and other public open space users, to motorised vehicle traffic.

5.7.7. Separated walking and cycling paths and crossings are used as appropriate to their location and hierarchy, to provide more inclusive, functional and comfortable conditions for pedestrians and cyclists.

5.7.8. Connectivity, continuity and directness of on-road and off-road walking and cycling routes are maintained and enhanced.

5.7.9. Opportunities are maximised for off-road walking and cycling paths that are suitably wide, functional and aligned appropriately.

5.7.10. Walking routes follow logical and direct alignments that enable people with visual impairments to navigate areas without relying on extensive use of Tactile Ground Surface Indicators (TGSIs).

5.7.11. Pedestrian and cycling crossings are provided at strategic points and at regular intervals to support highly accessible places.

5.7.12. Pedestrian and cycling crossings are designed to:

a. Minimise kerb to kerb distances

b. Maximise safety and priority of pedestrian and cyclists.

5.7.13. Waiting times for pedestrians and cyclists at signalised intersections are minimised to the greatest extent possible.

5.7.14. Pedestrian walkways are free from obstructions and have a smooth surface.

5.7.15. Risk of movement conflicts around vertical transport elements and path intersections are managed through:

a. Adequate waiting space and width provision

b. The cycling path being located to avoid or minimise potentially conflicting user movements.

5.7.16. The design and dimension of the public realm is generous and provides capacity for more than what is required to accommodate for future pedestrian movements.

5.8
Streets, laneways and arcades

5.8.1. The local movement network meets people's travel needs with a user focus that supports sustainability, health and liveability, and:

a. Is safe, permeable, legible and accessible

b. Is logically integrated with its context and extends on, and aligns with, the surrounding street network

c. Has a clear hierarchy of routes to ensure that places function well, routes are efficient and safe, and meet the current and identified future active transport needs

d. Maximises opportunities for direct and convenient pedestrian connections that align with other pedestrian connections

e. Provides convenient, regular and universally accessible road crossings

f. Allows for future connections to the surrounding street networks, and does not preclude the provision of desirable mid-block connections in future development

g. Is supported by development that enhances and improves connectivity throughout the station environs, linking directly to SRL station entrances and other important destinations.

h. Maintains capacity for introduction of future on road public transport where this is projected.

5.8.2. The movement network supports the operation and maintenance of the SRL station and associated public transport functions from the completion of the Project.

5.8.3. Opportunities are maximised to create new connections that:

a. Enhance and extend existing connections with pedestrian areas, community and recreation facilities, public open spaces, identified future developments and activity centres

b. Increase the potential for interaction between people and communities.

QB38 - Lonsdale Street, Dandenong, VIC
Demonstrates a well-designed street that provides generous space for pedestrians and canopy trees and other planting contributing to a shady green public realm.
Design: BKK Architects, TCL. Photographer: John Gollings.

QB39 - Malop Street Green Spine, Geelong, VIC
Demonstrates a generous green planted edge that creates a comfortable environment for pedestrians and cyclists.
Design: Outlines Landscape Architecture. Image: Greater Geelong City Council.

5.8.4. Streets, laneways and arcades are comfortable, safe, inclusive, pleasant and welcoming to the community.

5.8.5. Streets, laneways and arcades are well-designed and contribute positively to the function, amenity and character of the area by:

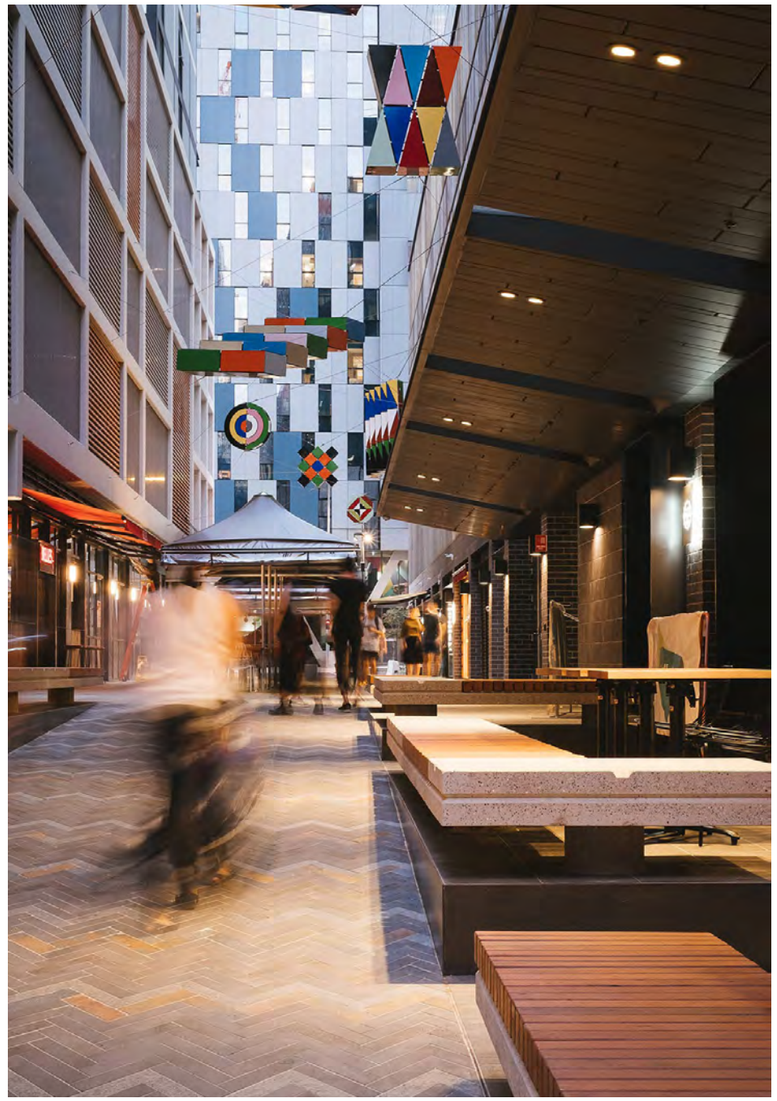
a. Providing a coherent and continuous public realm

b. Providing generous space for pedestrians, cyclists and canopy trees and other planting, contributing to shady green spaces for people

c. Accommodating community needs and uses during the day and night.

5.8.6. Streets, laneways and arcades support an intensity of activation proportional to their hierarchy (ranging from pedestrian orientated connections through to more vehicle-focused accessways).

QB40 - Afghan Bazaar Cultural Precinct, Dandenong, VIC
Demonstrates a generous streetscape that is comfortable and welcoming to the community.
Design: Hassell. Photographer: Andrew Lloyd.



QB41 - Steam Mill Lane, Sydney, NSW
Demonstrates well-resolved levels to support a coherent public realm design.
Design: ASPECT Studios, Denton Corker Marshall, Woods Bagot. Photographer: Simon London.

QB42 - Wulugul Walk, Barangaroo South, NSW
Demonstrates an activated pedestrian environment with public realm elements defining movement and pause points.
Design: ASPECT Studios and Oculus in collaboration with Rogers Stirk Harbour and Lendlease. Photographer: Simon London.

5.8.7. Routes with less active ground floor building uses are activated in other ways.

5.8.8. Footpaths are provided that are appropriately scaled to allow for a variety of stationary activities and furniture to delineate zones of movement and activity.

5.8.9. A high standard of presentation and appropriate interface is achieved with adjacent existing streets.

5.8.10. Elements constructed to provide noise and weather protection are integrated, well-designed architectural solutions.

5.8.11. The Design provides a clear transition and shift in mode hierarchy for users when moving between pedestrianised streets and vehicle routes.

5.8.12. The design of laneways supports the management of their use for service and maintenance to optimise access and amenity for the broader community during peak times.

QB43 - Greville Street Precinct, Prahran, VIC
Demonstrates well-executed public realm using the selections of materials and arrangement of public realm elements to support transitions between pedestrian and shared mode spaces.
Design: Rush Wright Associates. Photographer: John Gollings.

5.9
Bridges, elevated crossings and underpasses

5.9.1. Pedestrian and cycling bridges, elevated crossings and underpasses:

a. Have a sense of openness at the approach, with a clearly identifiable entry and clear views through to the exit to provide an unobstructed and safe journey

b. Are generously proportioned to provide ample space for users traveling in both directions and to provide a high level of passive surveillance that improves perception of safety

c. Meet access standards and enhance universal access

d. Are located at strategic points to improve any gaps in the existing path network, connecting with local parklands, open space trails and paths, and the existing and proposed street and cycle networks.

5.9.2. Pedestrian and cycling bridges and elevated crossings:

a. Are high quality, well designed and proportioned and are visually appealing design elements

b. Are located and designed to contribute to identity and legibility during day and night

c. Are structurally expressive and durable and the need to enhance the appearance of the bridge by use of cladding is avoided.

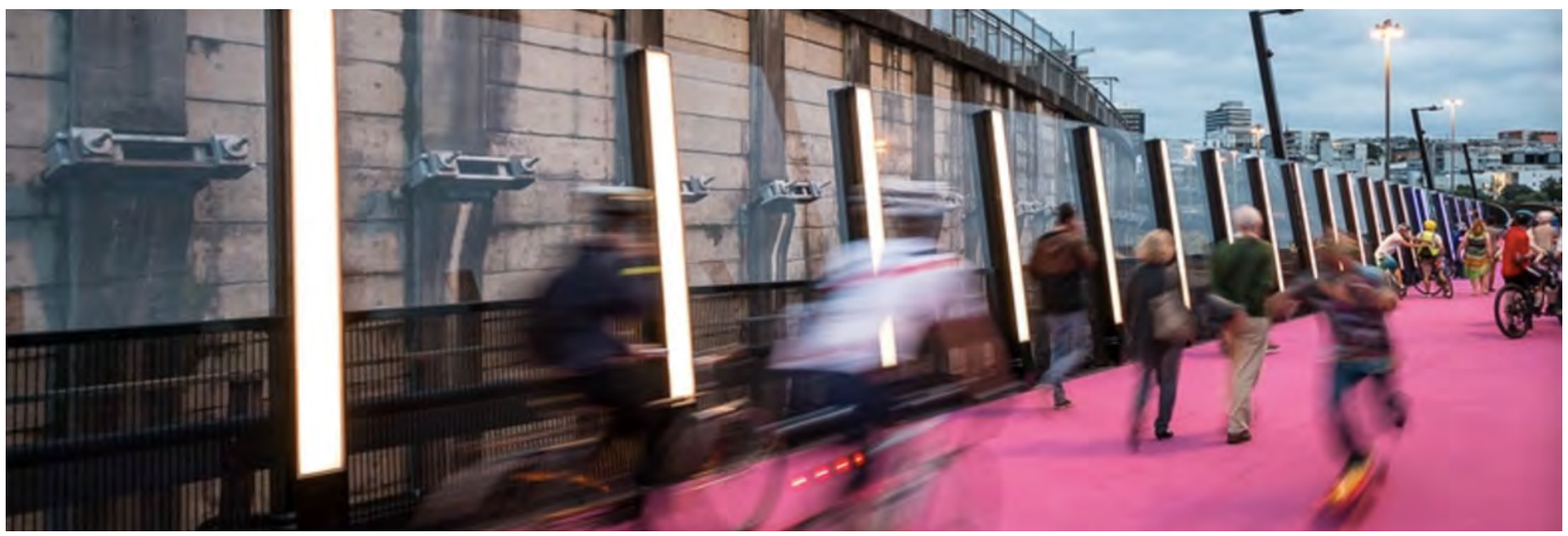
5.9.3. All the elements of a bridge or elevated structure including superstructure, piers, beams, barriers and screens, conduits, drainage and fixtures are designed as integrated elements to:

a. Ensure a well-proportioned structure

b. Minimise visual clutter and align with the urban design requirements and concepts

c. Minimise the visual and spatial impact of all services associated with elevated structures.

QB44 - Burwood Link, Burwood, VIC
Demonstrates a structurally expressive bridge structure that is contextually sensitive.
Design: watson architecture+design. Photographer: Lisbeth Grosmann.



QB45 - The Lightpath / Te Ara i Whiti, Auckland, New Zealand
Demonstrates an elegant bridge design which contributes to identity and legibility through visually appealing design elements.
Design: LandLAB, Monk MacKenzie Architects. Photographer: Russ Flatt.

QB46 - Tanderrum Bridge, Melbourne, VIC
Demonstrates a well-designed bridge with a sense of openness at the approach and generous proportions.
Design: John Wardle Architects, Oculus. Image: HiVis Pictures

5.9.4. Spaces below elevated structures are designed to enhance safety, inclusiveness and amenity and ensure uses of spaces below:

a. Are appropriate and complementary to surrounding and emerging land uses

b. Allow for good visual connections and passive surveillance

c. Optimise access to natural light.

5.9.5. Pedestrian and cycling underpasses:

a. Are minimised in length and have clear visual connections through to the streetscape and public spaces on either side

b. Maximise opportunities to incorporate openings for natural daylight to improve lighting, reduce operating costs and enhance orientation and wayfinding.

QB47 - Sussex Street pedestrian bridge, Sydney, NSW
Demonstrates space below an elevated structure that enhances place outcomes and feelings of safety in the public realm.
Design: Wood Bagot. Image: Good Vibes Only.

5.10
Materials and finishes

5.10.1. Built form and public realm materials are of high quality and are used to:

a. Create atmosphere and contribute to amenity

b. Establish or enhance a sense of identity that responds to local context, expresses local history and character

c. Make the place memorable and contribute to a positive user experience.

5.10.2. A simple and cohesive public realm material palette assists intuitive wayfinding for pedestrians and cyclists, and contributes to enhancing local identity.

5.10.3. The construction methodology, materials, finishes, furniture and other elements used in the Project are fit for purpose and support a durable, safe and robust public realm that:

a. Is easy to maintain, and replace with minimal impact on the integrity of finishes

b. Will weather and age well over time.

5.10.4. Selection and application of materials and finishes discourages and minimises the potential for vandalism including graffiti.

5.10.5. Opportunities are maximised to use materials that are recycled, recovered, have lower embodied energy and are ethically sourced.

5.10.6. New materials and finishes minimise:

a. Light pollution in the surrounding areas from reflectivity

b. Contribution to the urban heat island effect.

5.10.7. Construction methodology supports well-designed detailing and durable finishes.

5.10.8. The palette of hard and soft landscape elements is coordinated with any local government strategy, guideline or palette where relevant.

QB48 - Carrum station, VIC
Demonstrates the use of public realm materials to define space allocation for different transport modes.
Design: Rush Wright Associates. Image: Level Crossing Removal Project.

QB49 - Windsor station plaza, Windsor, VIC
Demonstrates a palette of materials that enhances local place identity and supports wayfinding to destinations.
Design: ASPECT Studios. Photographer: Andrew Lloyd

QB50 - Reservoir station, VIC
Demonstrates the use of materials to express sense of place that reinforces local identity.
Design Genton, McGregor Coxall. Image: Level Crossing Removal Project.

QB51 - Mentone station, VIC
Demonstrates the use of recycled materials that is both attractive and robust.
Manufacturer: Draffin Manufacturing.

5.11
Parking

5.11.1. Any parking is:

a. Integrated as part of the urban design response

b. Designed for space efficiency and to minimise land take

c. Located to optimise space for landscape and community

d. Balanced against other uses

e. Designed to support and is adaptable to changing technologies.

5.11.2. The Design:

a. Enables intuitive wayfinding and provides legible signage for easy navigation to cycle parking, drop-off, pick-up, ride share and car parking locations and existing parking structures and facilities

b. Considers delivery vehicle parking.

5.11.3. Access points to walking and cycling paths from drop-off areas are clearly defined and are separate from vehicle movements.

5.11.4. Drop-off, pick-up and ride/car share areas are accessible, safe and comfortable, address ease of wayfinding and are located:

a. Conveniently near station entrances but without overriding the identified modal priorities

b. To support the ease of movement for pedestrians and cyclists and avoid or minimise the potential for conflict between modes including with vehicles

c. Away from sensitive areas and interfaces

d. To maximise passive surveillance with clear sight lines for pedestrians and cyclists and feel safe during the day and night-time.

5.11.5. Cycle parking within the public realm is located to have natural surveillance, to minimise impact on the public realm, and avoid clutter and conflict with pedestrian movement and other activities.

5.11.6. Station cycle parking is primarily provided through well-designed consolidated cycle hubs that:

a. Are prominently located and easily accessible to maximise convenience for all ages and abilities

b. Are visible from public areas to maximise opportunities for passive surveillance

c. Support and encourage the use of this mode for interchange access.

QB52 - Utrecht Railway Station cycle parking, Utrecht, Netherlands
Demonstrates easily accessible cycle parking integrated within a train station.
Design: Ector Hoogstad Architecten The Netherlands. Photographer: Petra Appelhof.

QB53 - Park Street, Carlton North, VIC
Demonstrates well-located cycle parking enabling good passive surveillance and minimising conflicts with pedestrian movement.
Photographer: Amy Whitfield.

5.12
Construction phase

5.12.1. The quality of enclosures, hoardings, screens and temporary barriers increase in proportion to the time they will be present on site and their proximity to residences.

5.12.2. Enclosures, hoardings, screens and temporary barriers:

a. Are neat, respect the character of their setting, mitigate visual impacts on the surrounds and contribute to positive public realm presentation

b. Are designed to assist in minimising graffiti, billposting and unauthorised material

c. Are designed to address the type of activity and the distance from which they will be viewed (for example, whether seen at close range by pedestrians and residents or at high speed from a road)

d. Consider opportunities to incorporate signage that showcase business events and nearby or adjacent businesses affected by construction activities

e. Consider opportunities to communicate aspects of the Project and its progress with the community

f. Consider opportunities for the community to safely view the construction process

g. Consider opportunities to communicate community events, aspects of place and local cultural heritage, and provide activation to the station environs.

5.12.3. Early landscape buffer and tree planting is used to optimise growth and for its ability to enhance amenity and provide visual screening (where practical and appropriate).

5.12.4. Wayfinding during the construction phase:

a. Is addressed as part of the overall wayfinding approach for the Project

b. Ensures that alternative pedestrian and cycling routes are redirected and clearly signed

c. Provides temporary signage and directional signs to give information and directions to businesses and community facilities affected by construction activities.

5.12.5. Accessible, relatively direct and safe connections are provided around construction activities with particular care taken that pedestrian access and user experience is considered.

5.12.6. Temporary landscape treatments, features or screening are reused across the Project, where appropriate.

5.12.7. Opportunities to recycle and reuse excavated materials, site materials, site elements (including demolition materials), and any trees removed as part of the Project, are maximised to create new valued design outcomes.

5.12.8. Trees and other vegetation to be retained are protected from damage, and are able to be maintained and thrive during the construction phase.

5.12.9. Heritage places to be retained are protected from construction activities and restored as appropriate and in consultation with relevant stakeholders.

5.12.10. Memorials, plaques, monuments and artworks are protected in-situ if possible and, if required to be moved, are temporarily dismantled, removed, restored and reinstated or relocated as appropriate and in consultation with relevant stakeholders.

QB54 - 'Metropolitan Tiles' by Katy Smits, Melbourne, VIC
Demonstrates a high-quality treatment of site hoardings improving visual presentation of construction site and providing a high amenity interface with the public realm.
Creator: Katy Smits. Photographer: Charlie Kinross. Image. Metro Tunnel Creative Program.

QB55 - Cenotaph, Clayton, VIC
Demonstrates a successful memorial relocation undertaken in consultation with stakeholders which is well-integrated into the design of new public realm.
Image: Level Crossing Removal Project.

5.13
Development outside Project scope

The Project scope, which includes construction of new tunnels, stations and other rail infrastructure, will require the acquisition of sites to facilitate the construction and ongoing operation of the rail infrastructure. The land utilised for construction, but not required for rail operations, represents an opportunity for the State to realise Value Capture and Creation outcomes. Development of these sites for those other purposes will be subject to future precinct planning process. They will include developments that will be entirely clear of the finished rail infrastructure, sites over tunnels and other underground infrastructure, and sites that will be partially occupied by infrastructure that can be embedded within larger buildings. While the ultimate determination of land uses and the design and construction of buildings or other development on these sites is outside the Project scope, critical factors that will shape and affect development must be handled in a way that reflects the considerable opportunities to make a positive contribution to place.

With respect to requirements for development outside the Project scope and subject to future precinct planning process, the Design refers to its role in facilitating and responding to that future development and context.

5.13.1. For sites subject to future precinct planning the Design does not preclude:

a. Desirable public open space and public realm outcomes

b. Opportunities for land use and transport integration, to create positive public realm experiences, economic opportunities and highly desirable streets and frontages

c. Investment in the new rail infrastructure to be capitalised on in the future to meet the increasing demand for well-located residential, commercial, retail, community and institutional activities

d. Opportunities for optimised floodplain, drainage and IWM outcomes.

5.13.2. The location and form of rail infrastructure:

a. Ensures developments subject to future precinct planning process are able to provide efficient, adaptable floor plates that can meet a variety of potential uses over the long term

b. Makes, for future developments, the appropriate allowances for vertical transport, structural integration, mechanical and electrical plant, and ongoing building serviceability requirements

c. Does not encumber any developments adjacent to stations that are subject future precinct planning process

d. Makes specific allowances for developments over rail infrastructure

e. Enables all future developments subject to future precinct planning process to be serviced, constructed, maintained and accessed by users/owners from streets or routes that minimise conflict with other public realm outcomes

f. Enables separation of land titles for rail infrastructure from other development and use

g. Provides opportunities for public realm to support future development and adjacent uses.

5.13.3. The Design does not preclude the implementation of an interim use strategy for sites subject to future precinct planning process that:

a. Allows for interim uses or landscaping to support the activation and amenity of the station environs and make a positive contribution to the precincts during the redevelopment phase

b. Ensures good standards of presentation of the station environs that also consider amenity of surrounding land uses and potential views from above

c. Ensures the quality and type of interim use is appropriate for the length of time it is likely to be present

d. Provides service and maintenance access to interim use sites

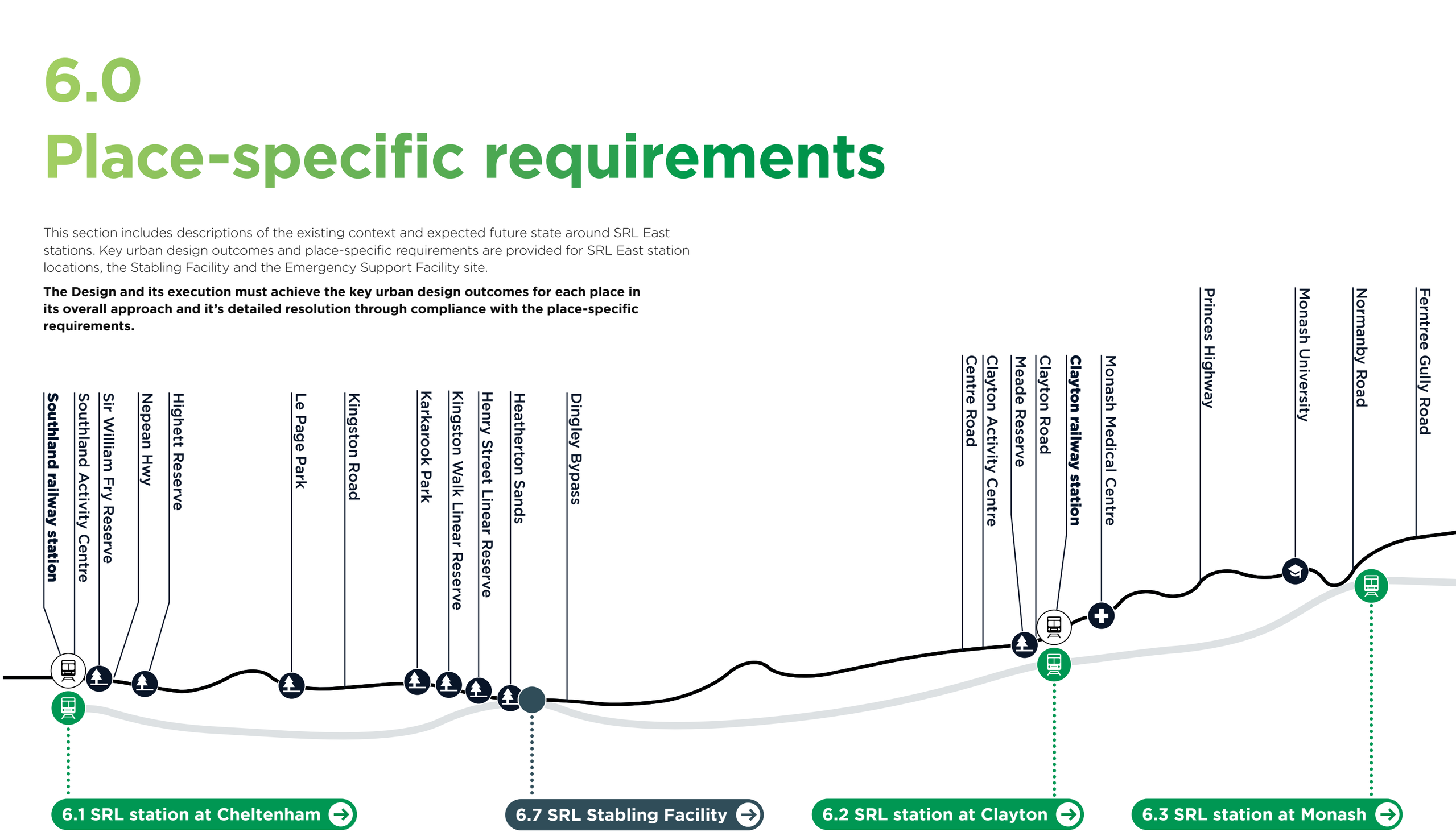
e. Does not prevent the redevelopment of sites for alternative uses at the appropriate times as determined by the land owner.

Photo credit: Dianna Snape

6.0
Place-specific requirements

This section includes descriptions of the existing context and expected future state around SRL East stations. Key urban design outcomes and place-specific requirements are provided for SRL East station locations, the Stabling Facility and the Emergency Support Facility site.

The Design and its execution must achieve the key urban design outcomes for each place in its overall approach and it's detailed resolution through compliance with the place-specific requirements.

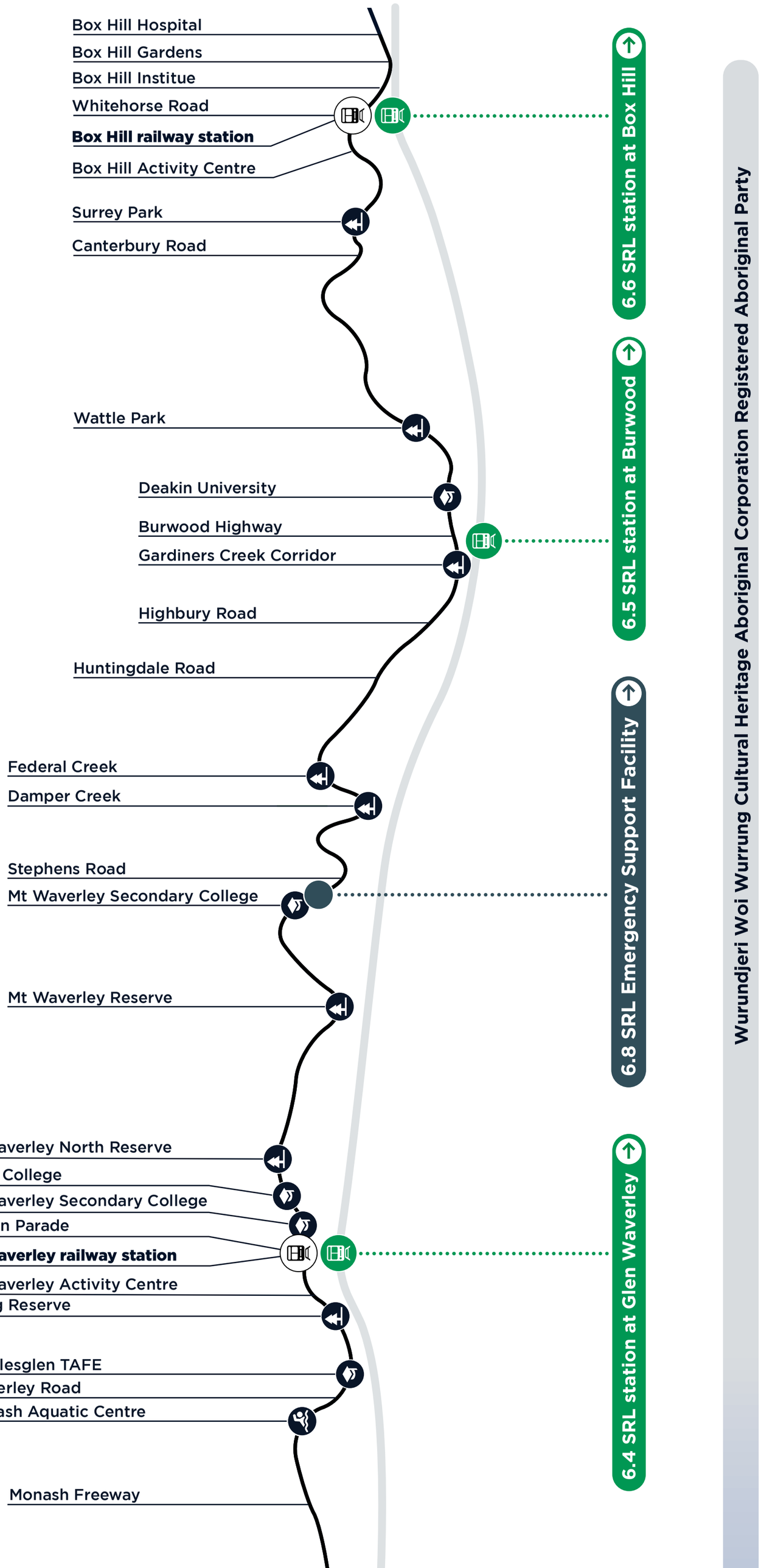


Click to jump to this place

Bunurong Land Council Aboriginal Corporation Registered Aboriginal Party

Figure 9: Diagram of long section and key landmarks.

*Does not represent actual alignment.


Box Hill Hospital
Box Hill Gardens
Box Hill Institue
Whitehorse Road
Box Hill railway station
Box Hill Activity Centre
Surrey Park
Canterbury Road
Wattle Park
Deakin University
Burwood Highway
Gardiners Creek Corridor
Highbury Road
Huntingdale Road
Federal Creek
Damper Creek
Stephens Road
Mt Waverley Secondary College
Mt Waverley Reserve
Glen Waverley North Reserve
Wesley College
Glen Waverley Secondary College
Coleman Parade
Glen Waverley railway station
Glen Waverley Activity Centre
Bogong Reserve
Homlesglen TAFE
Waverley Road
Monash Aquatic Centre
Monash Freeway
6.6 SRL station at Box Hill
6.5 SRL station at Burwood
6.8 SRL Emergency Support Facility
6.4 SRL station at Glen Waverley
Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation Registered Aboriginal Party

The Project is located on the traditional lands of the Wurundjeri Woi Wurrung People to the north and the Bunurong People to the south.

The Traditional Owners have lived in, and cared for, this Country for thousands of years. The Aboriginal way of life saw family groups travelling together through Country for ceremonial gatherings, for marriage exchange, trade and the settling of disputes. Natural landscape features served an important function as markers of clan boundaries and locations for gatherings and ceremonies. Movement of people through Country also occurred seasonally in response to resource availability. To the north, the Wurundjeri Woi Wurrung People utilised waterways including the Darebin, Merri, Gardiners and Scotchmans Creeks and the Yarra River during the summer months, and moved to higher ground during wetter periods. To the south, the coast and associated landscapes provided abundant resources for the Bunurong People. These landscapes played an essential role in sustaining both the population and a way of life that was rooted in a deep knowledge of country.

The Traditional Owners continue to be custodians of the land, and although vast and rapid change has taken place, their relationship with Country remains deep and personal.

The design must seek and provide opportunities to represent the knowledge, insights and Connections to Country of the Traditional Owners who continue to be custodians of the land, via a meaningful, authentic and collaborative process.

This user guide explains how the Urban Design Strategy has named and structured key urban design outcomes and place-specific requirements, and explains how they will be used to assess the Design and its execution.

A place reference links each key urban design outcome to a specific location. For example, use this when referring to key urban design outcome 4 for Box Hill.
Key urban design outcomes support the realisation of urban design principles and objectives in local places.

A descriptive statement provides more information on the intent of the key urban design outcome.

Each place-specific requirement has been assigned a number, which together with the place reference, forms a unique identification code.
For example, this place-specific requirement is referred to as BOX4a.

Place-specific requirements provide contextually responsive requirements to communicate how the Design and its execution is informed and evaluated in local places. The Design and its execution must demonstrate compliance with place-specific requirements including all sub-clauses of the place-specific requirements. Some place-specific requirements describe what is expected to be provided as part of the Project, while other requirements describe projects that will be provided by others and must be acknowledged and responded to by the Design.

User guide

Key urban design outcomes and place-specific requirements

Outcome BOX4

Enhanced urban greening and tree canopy within the heart of Box Hill, prioritising the creation of shady, cool connections to key destinations.

On Whitehorse Road, existing established trees are supplemented with new planting reducing the urban heat island effect, and improving amenity and comfort for all users. In other locations throughout the station environs, new canopy street trees and other planting build on existing streetscape vegetation to provide a leafy green heart for Box Hill.

4a Integrate retained trees into the Whitehorse Road boulevard design. Supplement retained trees with new canopy and other planting, to maximise comfort and amenity for pedestrians and cyclists, and to provide separation from vehicle traffic.

Figure 10: User guide: Key urban design outcomes and Place-specific requirements

6.1 Cheltenham

Understanding context

The Bunurong Land Council Aboriginal Corporation is the Registered Aboriginal Party for the station environs at Cheltenham.*

The SRL Cheltenham Precinct is recognised as a 'gateway to the Bay', valued for its established lifestyle and service offering, including a range of community uses, retail, hospitality and entertainment options. The precinct is home to significant employment and industrial areas, and interfaces with the regionally significant industrial area in Moorabbin and the Bayside Business District. The SRL Cheltenham Precinct also accommodates large format retail along Nepean Highway.

South of the SRL station at Cheltenham, across Bay Road, is the Southland Shopping Centre, a major attraction for locals and the broader community. The shopping centre has extensive multi-level and surface carparking fronting the streets and is built on two sides of Nepean Highway linked by a multi-storey retail bridge. It is serviced by the existing Southland railway station on the western side of the highway and a bus interchange on the eastern side.

The SRL station environs are currently well-served by high-capacity road and rail links, but key public transport connections and routes are dispersed, and the walking and cycling transport network is incomplete and disrupted in places. East west connectivity is disrupted by the existing Frankston rail line and Nepean Highway which pose significant barriers to movement, isolating the area between them. North south pedestrian and cycling connectivity between Highett, Southland and Cheltenham shopping centres is limited. While the area is generally well-serviced by open space, the lack of connections across these barriers makes them less accessible.

Cheltenham consists of mostly detached, one to two storey, post-war housing with landscaped front gardens and some town houses and multi-unit lot development closer to Southland Shopping Centre. However, there is higher density apartment development emerging along Nepean Highway, particularly between Sir William Fry Reserve and the Moorabbin Justice Centre, and on the eastern side of Nepean Highway. To the east and north of the Justice Centre is the former large Highett Gasworks site which is awaiting redevelopment.

Sir William Fry Reserve, originally part of the former Highett Gasworks site, is directly adjacent to the SRL station at Cheltenham. This regionally-enjoyed open space is used for recreation such as walking, a playground, a skate park and also community events such as the Kingston Farmers Market. It is characterised by its gently undulating topography, open grassy areas and a lake. Large eucalypts provide significant canopy cover and contribute to the well-established landscape. Bay Road, Nepean Highway and the existing Frankston rail line currently present barriers to accessing the reserve.

People living in the precinct include people establishing their home environment and growing their careers, people approaching retirement and looking to enjoy life more and retirees actively engaged in community and activities.

** In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

Photo credit: Dianna Snape

Cheltenham will become an integrated centre of connected shopping, employment and housing opportunities supported by a thriving community and entertainment hub with an attractive public realm for its workers and residents, as the southern gateway to the SRL corridor.

Future state

Strategically co-located with the existing Southland railway station and a newly-relocated bus interchange, the SRL station, and broader precinct will become a hub of activity featuring a dense mixed-use core creating a unique sense of arrival featuring a leafy green public realm that complements Sir William Fry Reserve. The precinct will be supported by a choice of public transport alternatives within a comfortable walking distance. The SRL station will catalyse development in its immediate vicinity, supporting the growth of the Cheltenham-Southland Major Activity Centre by providing new local housing types and diverse employment opportunities within easy access to a variety of open space.

Complementing improved crossings of Nepean Highway and the existing Frankston rail line, Bay Road will be transformed to better service pedestrians and cyclists travelling east west, and new and improved crossing points will be provided for people travelling north south. Bay Road will also support new retail and commercial opportunities and feature streetscape treatments that will contribute to the creation of a vibrant place to be and an enviable address for new development.

Over time, legible and safe local connections will link to the former Highett Gasworks site and more broadly to the destinations of the Highett Activity Centre to the north and the Cheltenham-Southland Major Activity Centre to the south. These routes and more transport choices will further encourage walking and cycling within the more accessible emerging and established neighbourhoods.

Sir William Fry Reserve's landscape and recreation value will take on a new role servicing more residents and visitors within the Cheltenham Precinct. With an amplified importance, the reserve will become an important connector for pedestrians and cyclists, linking into new open spaces and communities to the north and providing additional opportunities for integrated water management.

The precinct will experience an increase in employment through to 2056. The local working-aged population is expected to rise, and the local ageing population is anticipated to grow at a greater rate than other age groups.

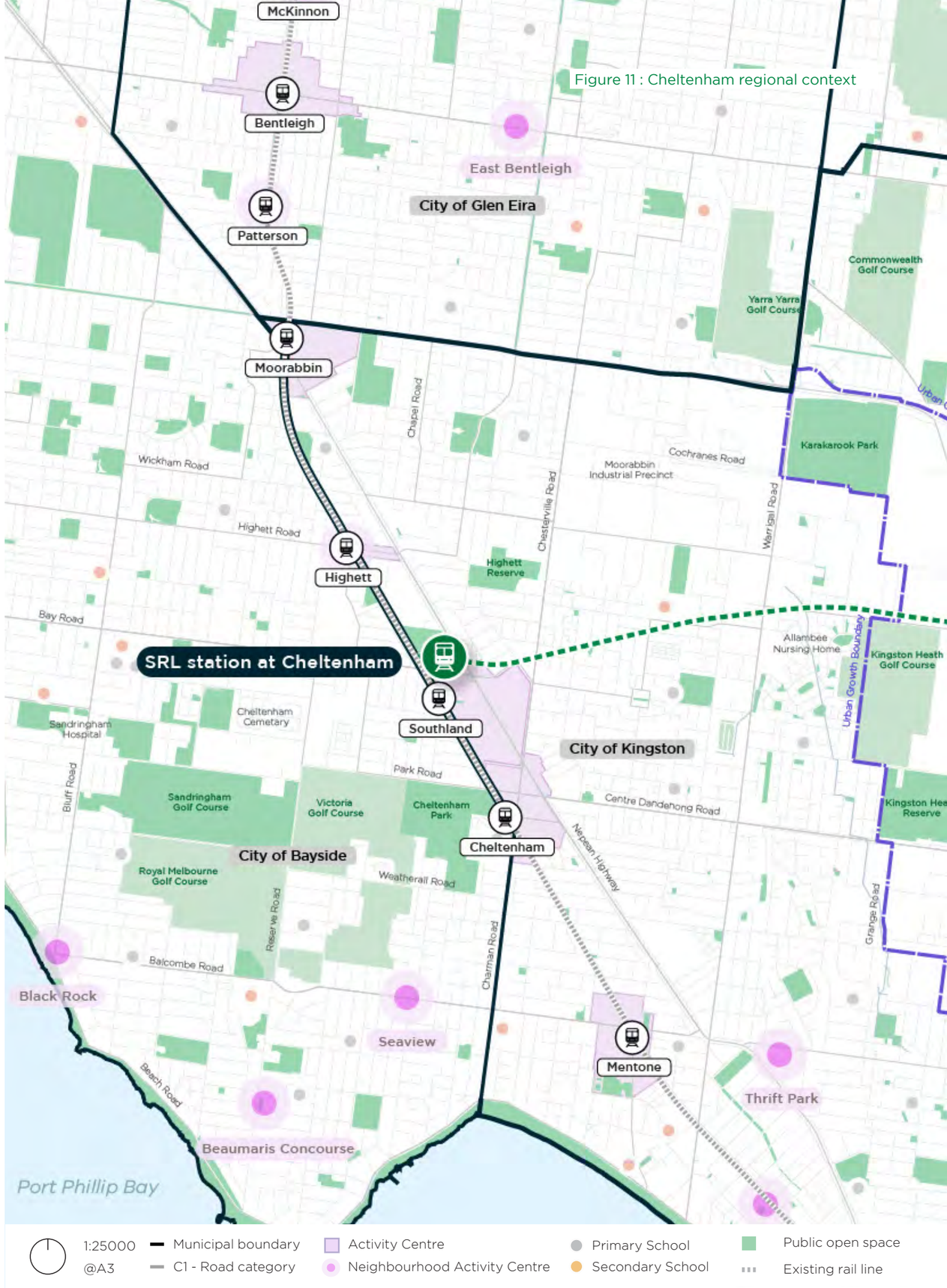


Figure 11 : Cheltenham regional context

Figure 12: Cheltenham place-specific requirements diagram

Legend

- SRL station entrance
- Bus interchange
- Existing bus route
- Existing Metro train station
- Existing bus interchange
- Key location / publicly accessible space
- Enhanced streetscape
- New / improved crossing
- New / improved pedestrian route
- Potential future pedestrian desire line
- Potential cycle hub location
- Existing cycling route
- New / improved cycling route
- Potential future cycling route (subject to change)
- Existing open space
- Project Land
- Approximate station and crossover facility outline (underground)
- 1x Place-specific requirement as described on following page(s)

This diagram is provided to communicate potential urban design moves to support the place-specific requirements outlined in the following pages. It does not represent a design solution nor does it limit a design response.

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Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Cheltenham diagram are represented with a symbol such as: **1x**

Outcome CTM1

Station environs that feel welcoming, with comfortable, high amenity spaces that enhance public life and engagement with place.

The station environs form a vibrant, people-focused centre that is welcoming for all members of the community. Public spaces are safe, comfortable and lively with people, encouraging activity day and night.

Sir William Fry Reserve forms the green heart for the community, providing opportunities for walking and cycling, recreation, relaxation, activity and respite in the centre of the precinct. The area's former use as the Highett Gasworks is explored and celebrated, enriching people's understanding of and engagement with place.

1a Provide a leafy green public realm complementing the character of Sir William Fry Reserve that:

i. Contributes to the creation of places that are comfortable to spend time in

ii. Increases biodiversity

iii. Adopts an integrated water management approach which includes the existing lake, making allowance for appropriate landscape treatments and integration with open space design.

1b Provide a space around the station entrance that:

i. Is designed for people to pause in and move through

ii. Is well-integrated with the central pedestrian spine, clearly connecting it to the pedestrian movement network through the station environs and beyond to the broader surroundings

iii. Provides a clear connection to the elevated pedestrian and cycle connection linking the SRL station, existing Southland railway station and Bay Road crossing.

1c Provide opportunities to make visual connections with Sir William Fry Reserve from within the station environs to support intuitive wayfinding and capitalise on the landscape values of the precinct.

1d Provide a Design with opportunities for a choice of north south pedestrian routes through the station environs from Bay Road that:

i. Connects new pedestrian routes to existing paths and future desire lines within Sir William Fry Reserve, enhancing connectivity to existing and emerging neighbourhoods to the north

ii. Provides attractive and welcoming pedestrian connections between Sir William Fry Reserve, the SRL station and Bay Road at the completion of the Project and during the redevelopment phase.

1e Provide a central pedestrian spine that:

i. Is a generous and high amenity public realm area for people to gather, linger and move through

ii. Has activated frontages

iii. Is a logical and desirable accessway for SRL station users

iv. Visually and physically connects the parkland to the north and the Bay Road crossing to the south

v. Extends the treed landscape character of the parkland through the spine.

1f Provide a Design with a variety of spaces for day-time and night-time use and flexible programming to support activation of the public realm.

1g Provide a Design that supports the integration of site interpretation initiatives exploring and celebrating the area's previous use as the former Highett Gasworks, as part of a heritage interpretation strategy for the Project that enriches people's experience of the station environs.

Outcome CTM2

An attractive and active interface between Sir William Fry Reserve and the station environs.

The station environs are well-integrated with Sir William Fry Reserve, creating an attractive and activated interface that feels welcoming and is accessible at all times.

2a Provide a well-designed frontage to Sir William Fry Reserve that takes advantage of the northerly aspect overlooking parkland and:

i. Creates an activated and attractive open space interface

ii. Is welcoming, inclusive and is able to be enjoyed by the public at all times

iii. Prioritises pedestrian movement along and across the open space interface

iv. Minimises the impact of vehicular and servicing access

v. Is well-integrated with the open space

vi. Includes built form that presents positively to surrounding public spaces.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Cheltenham diagram are represented with a symbol such as: **1x**

Outcome CTM3

Public realm that supports a legible and convenient, integrated multi-modal transport hub.

The movement of people between different transport modes is efficient and intuitive, within a well-designed user-focused public realm that supports easy circulation and wayfinding.

3a Provide a new bus interchange that balances requirements for good bus access and active interfaces with pedestrian and cycling movements along and across Bay Road.

3b Provide an elevated cycle and pedestrian connection across Bay Road that:

i. Provides a safe, seamless and direct connection between the existing Southland railway station and the SRL station

ii. Assists in creating a continuous north south connection through the broader precinct

iii. Provides good amenity for users of the elevated connection

iv. Contributes to an attractive user experience for cyclists and pedestrians passing beneath the elevated connection

v. Contributes to the activation and passive surveillance of Bay Road

vi. Includes public realm which supports positive building frontage(s) to future development on the south side of Bay Road. Ensure the Design includes an attractive landscape treatment and ample space for pedestrian and cycle movement, as well as safe pedestrian access to future buildings.

3c Provide a Design that does not preclude opportunities for potential future upgrades and improved connections to the existing Southland railway station.

Outcome CTM4

Station environs with streets and public spaces that are easy to move around and structured to connect to existing and future neighbourhoods.

The movement network comprises a hierarchy of streets, lanes and mid-block connections to meet the needs of all users, with a focus on walking and cycling connections to existing and emerging surrounds, including adjacent facilities, places and neighbourhoods.

Safer crossing points for pedestrians and cyclists are provided across existing barriers, improving connections between the station environs and the broader precinct.

4a Provide a movement network that:

i. Supports convenient, legible and safe movement across Bay Road, Nepean Highway and the existing Frankston rail line at the completion of the Project

ii. Ensures the Design enables future connections between the station environs and surrounding streets and development areas in the broader precinct.

4b Provide a Design that connects the north and south of Bay Road with safe and desirable points for pedestrians to cross that:

i. Includes improvements for cyclists at the Bay Road crossing

ii. Accommodates future interchange patronage projections, and north south pedestrian and cycle movements through the station environs

iii. Facilitates logical and convenient connections with routes to destinations to the south of Bay Road and to the north of the station environs.

4c Provide generous width, and design an appropriate built form interface that allows for continuous walking and cycling connections that will provide a positive user experience.

4d Provide a Design that includes a pedestrian and cycle crossing which connects into the street network on the eastern side of Nepean Highway.

4e Provide an east west connection that extends the neighbourhood movement network through the station environs with a focus on pedestrians and cyclists.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Cheltenham diagram are represented with a symbol such as: 1x

Outcome CTM5

Bay Road is a well-designed, vibrant and attractive street that creates safe and comfortable active transport connections.

Bay Road provides improved access to public transport and enhances public and active transport routes and crossings, for safe and easy walking and cycling to, from and through the area. Active edges and a well-designed streetscape with shade and greening, also make it a comfortable place for people to pause, encouraging social and economic activity.

5a Enhance Bay Road between the existing Frankston rail line and Nepean Highway to provide:

i. A quality cycle connection along Bay Road and connecting to the new cycle link along the existing Frankston rail line

ii. Improvements for cyclists and pedestrians beneath the existing rail bridge.

5b Provide public realm to the north side of Bay Road between the existing Frankston rail line and Nepean Highway that is:

i. Shaded and comfortable for cycling and walking

ii. Generous to accommodate projected growth in pedestrian use

iii. Designed to support ease of access to public transport for pedestrians and cyclists

iv. Comfortable and attractive for people to move through and pause in

v. Well-designed and resolves relationships between the new station forecourt and other public realm levels, and the sloping levels of Bay Road to ensure accessibility, safety and legibility.

5c Minimise the extent of fences, barriers and walls, designing and optimally locating and integrating these to manage their visual impact.

Outcome CTM6

Station environs that set the foundation for future development.

The SRL station supports and enables future renewal of the area, leveraging its proximity to Southland Shopping Centre, Sir William Fry Reserve, public transport and the emerging high-density residential developments to the north. This is supported by a hierarchy of streets, lanes and mid-block connections which establish a legible and functional framework for future development, and appropriate treatment of interfaces to enhance the public realm user experience including amenity and perceptions of safety.

6a Provide for and contribute to the creation of active edge to the north side of Bay Road, establishing expectations and protecting plans for future renewal of the precinct. Where an active edge cannot be provided at the completion of the Project, a high standard of presentation and appropriate treatment of the interface with Bay Road is provided and allowance made for future active edge.

6b Provide a high standard of presentation, and appropriate treatment of interface with Sir William Fry Reserve at the completion of the Project and during the redevelopment phase.

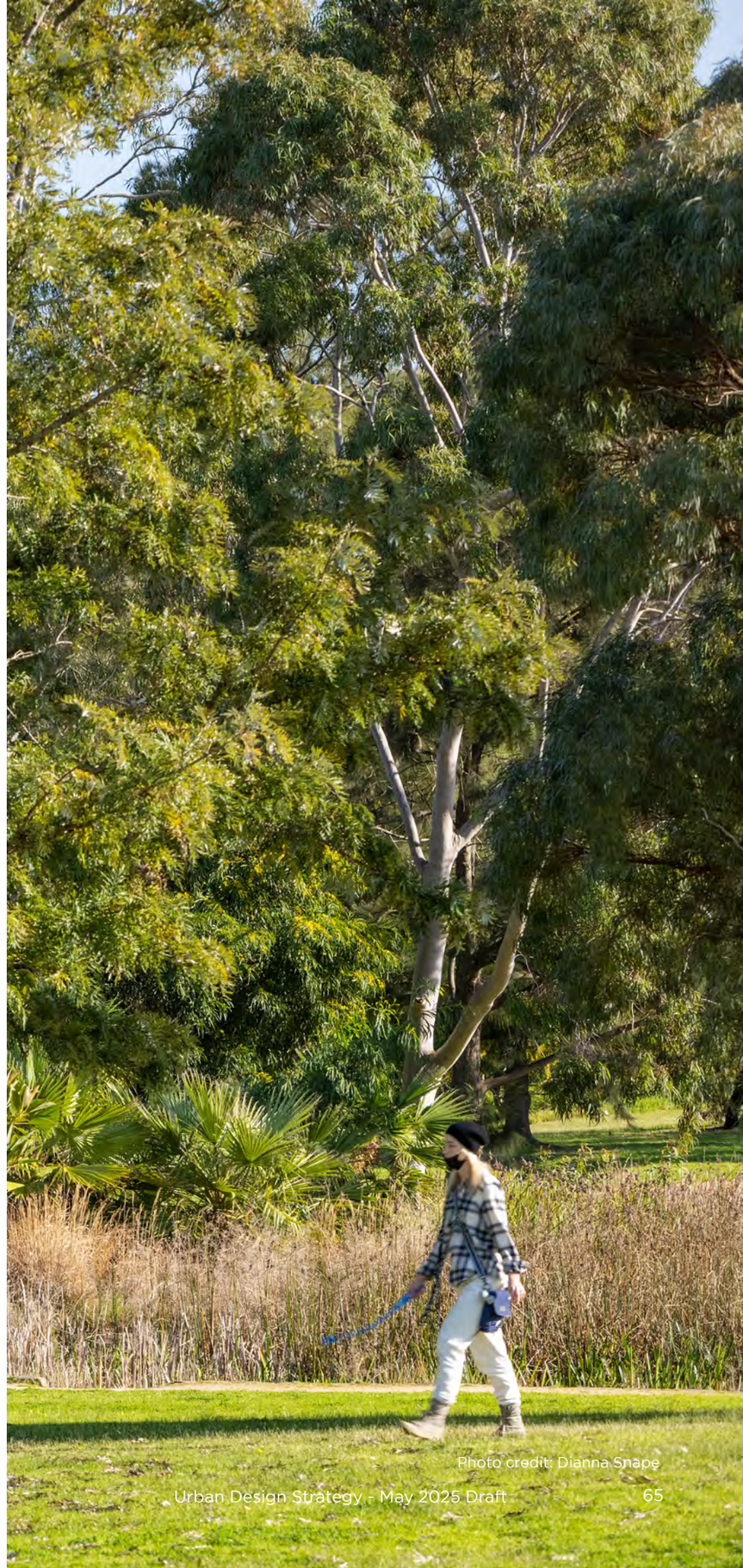

Photo credit: Dianna Snape

6.2 Clayton

Understanding context

The Bunurong Land Council Aboriginal Corporation is the Registered Aboriginal Party for the station environs at Clayton.*

The SRL station at Clayton is located within the Monash National Employment and Innovation Cluster Monash (NEIC). The Monash NEIC is of strategic national significance in health, education and employment activities.

There is a strong health focus in the precinct with Monash Medical Centre and Monash Children's Hospital located on Clayton Road, north of the existing Clayton railway station. Other health specialists are located around the Monash Medical Centre. To the south of the existing Clayton railway station is a vibrant and multicultural retail core.

Located within a designated Activity Centre, Clayton Road forms the main retail 'high street' and north south movement spine. The retail uses along Clayton Road are located south, and immediately north, of the rail line and are generally characterised by narrow shop frontages offering a variety of tenancy types. The shops provide a vibrant and varied interface to the street including alfresco dining and street trading which contribute to public life and activity on the street. Larger retail premises and surface car parking areas are located behind the shops facing Clayton Road. Clayton's Community Centre is a valued local community asset located on Centre Road, but is dislocated from the core of the activity centre.

Clayton Road is a wide and busy road that has a high volume of vehicles and buses. This creates a barrier to east west movement, provides a poor walking experience and contributes to low perceptions of safety. Despite the high level of pedestrian activity on Clayton Road, especially to the south, there are limited mid-block pedestrian connections and few opportunities for safe crossing.

The local area is currently well-serviced by frequent rail and bus services. Clayton's core has been improved by the 2018 Caulfield to Dandenong Level Crossing Removal Project which grade-separated the rail line and established a new elevated railway station. A linear open space below the elevated rail line has provided the community a central focal point for recreation. The project has also enhanced the urban spaces around the existing Clayton railway station and provided active transport links by completing the Djerring Trail along the Cranbourne / Pakenham rail line through Clayton.

The Clayton Precinct has a relatively low tree canopy coverage and a high urban heat island effect when compared to the metropolitan average. There is limited green park space and tree canopy coverage within the activity centre, with Meade Reserve and the Remembrance Gardens providing the most greenery. Residential areas comprise a mix of single and two storey detached dwellings set behind landscaped front gardens with emerging numbers of medium density townhouses and multi-storey units. Street trees are a mix of native and introduced species.

The Clayton Precinct has a mix of residents including younger professionals who are in the early stages of their careers (with a high proportion renting apartments), people approaching retirement age, and younger workers from a range of industries who work outside the area in other parts of Melbourne.

**In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

Photo credit: Dianna Snape

Clayton will be both a leading health cluster and ‘transport super hub’ for Melbourne’s southern metropolitan and Gippsland region. Home to world-standard healthcare and leading-edge commercialised research and development innovations, it will also be a hub for local living services and maintain a high amenity environment.

Future state

Co-located with the existing Clayton bus, metropolitan and regional train interchange; the completion of the SRL station at Clayton will elevate the interchange to transport superhub status. This will see a significant increase in commuter volumes and support the long-term growth of medical services and encourage health-related land uses along links in between Monash Medical Centre and the southern end of Monash University.

To fully capture and cater for this opportunity, the streets and public spaces immediately north of the existing rail line, towards the Monash Medical Centre, will be transformed to create a platform for future redevelopment. High-quality public realm connections and spaces will support a vibrant retail environment and strengthen the neighbourhood character. Mixed-use redevelopment and the emergence of specialised business uses, 24/7 activity and short to long-term accommodation uses will be anticipated in support of this precinct-wide transformation.

Clayton Road’s established ‘high street’ character will be improved and extended north to the Monash Medical Centre, with high-quality public realm including greening and activated street frontages. While retaining its local function, Mary Street will play an important role in the extension of the activity centre core through the provision of walking and cycling connections between public transport access points and the Monash Medical Centre, promoting active transport choices for students, researchers and workers to create a vibrant environment.

There will be high levels of pedestrian activity in the immediate vicinity of the SRL and existing Clayton railway station and the bus interchange, with commuters dispersing to local attractors and interchanging transport modes. An improved and safe experience for cyclists will be supported through legible routes and clear connections with the Djerring Trail. The public realm, including upgrades completed as part of the 2018 Caulfield to Dandenong Level Crossing Removal Project, will be integrated and expanded to support the growth in pedestrian circulation and to provide seamless and safe walking connections. New public space will be created by SRL East to provide places for people to meet and rest within the centre, and will build on Clayton’s identity as a diverse and vibrant place.

The Clayton Precinct will experience a significant increase in total employment through to 2056 with the local working aged population expected to grow. The precinct will need to cater for the significant increases in aged people living in the area, as well as for working families and individuals.

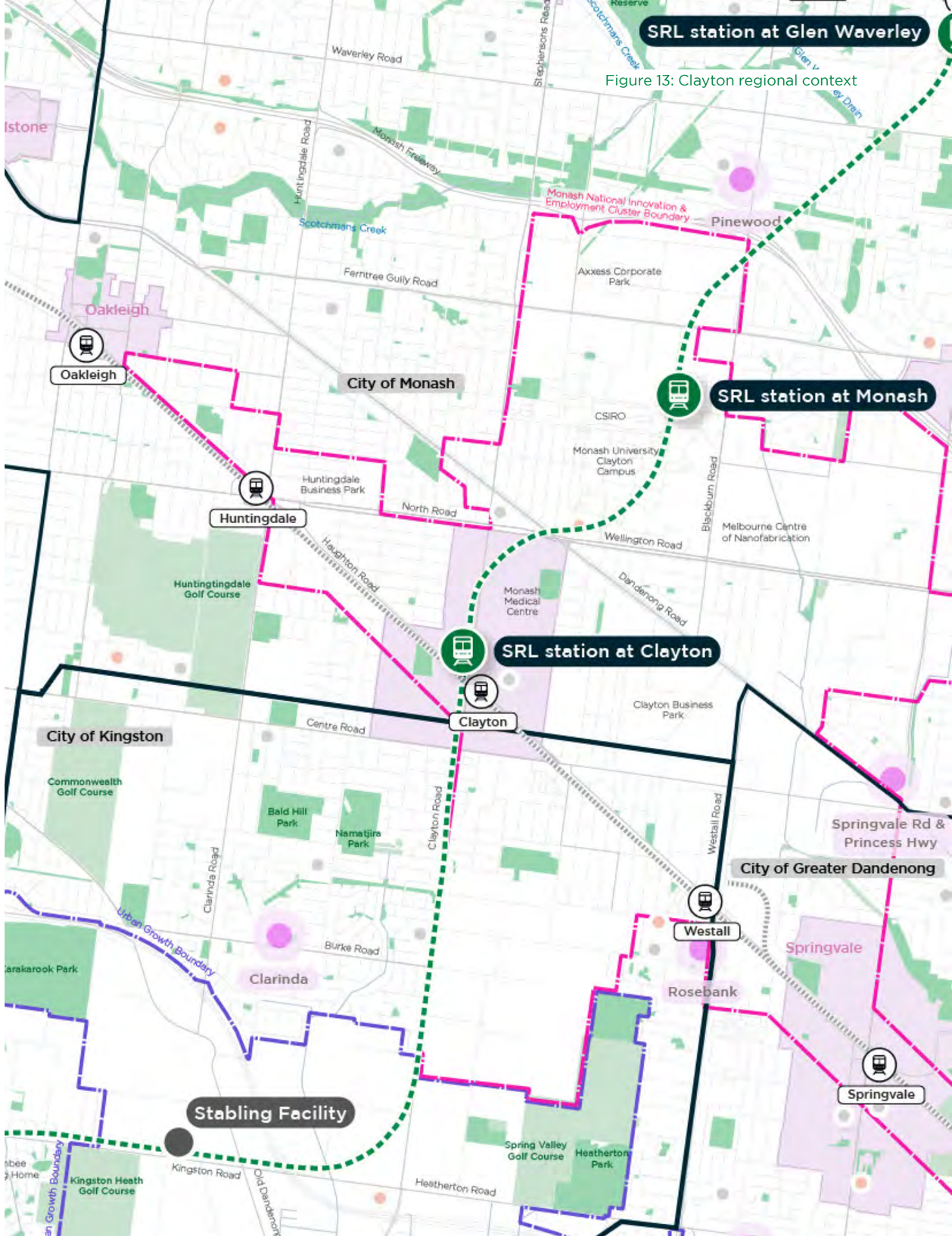

Figure 13: Clayton regional context

Figure 14: Clayton place-specific requirements diagram

Legend

- SRL station entrance
- Existing bus interchange
- Existing bus route
- Existing Metro train station
- Key location / publicly accessible space
- Enhanced streetscape
- New / improved crossing
- New / improved pedestrian route
- Potential future pedestrian desire line
- Potential cycle hub location
- Existing cycling route
- New / improved cycling route
- Potential future cycling route (subject to change)
- Existing open space
- Project Land
- Approximate station outline (underground)
- 1x Place-specific requirement as described on following page(s)

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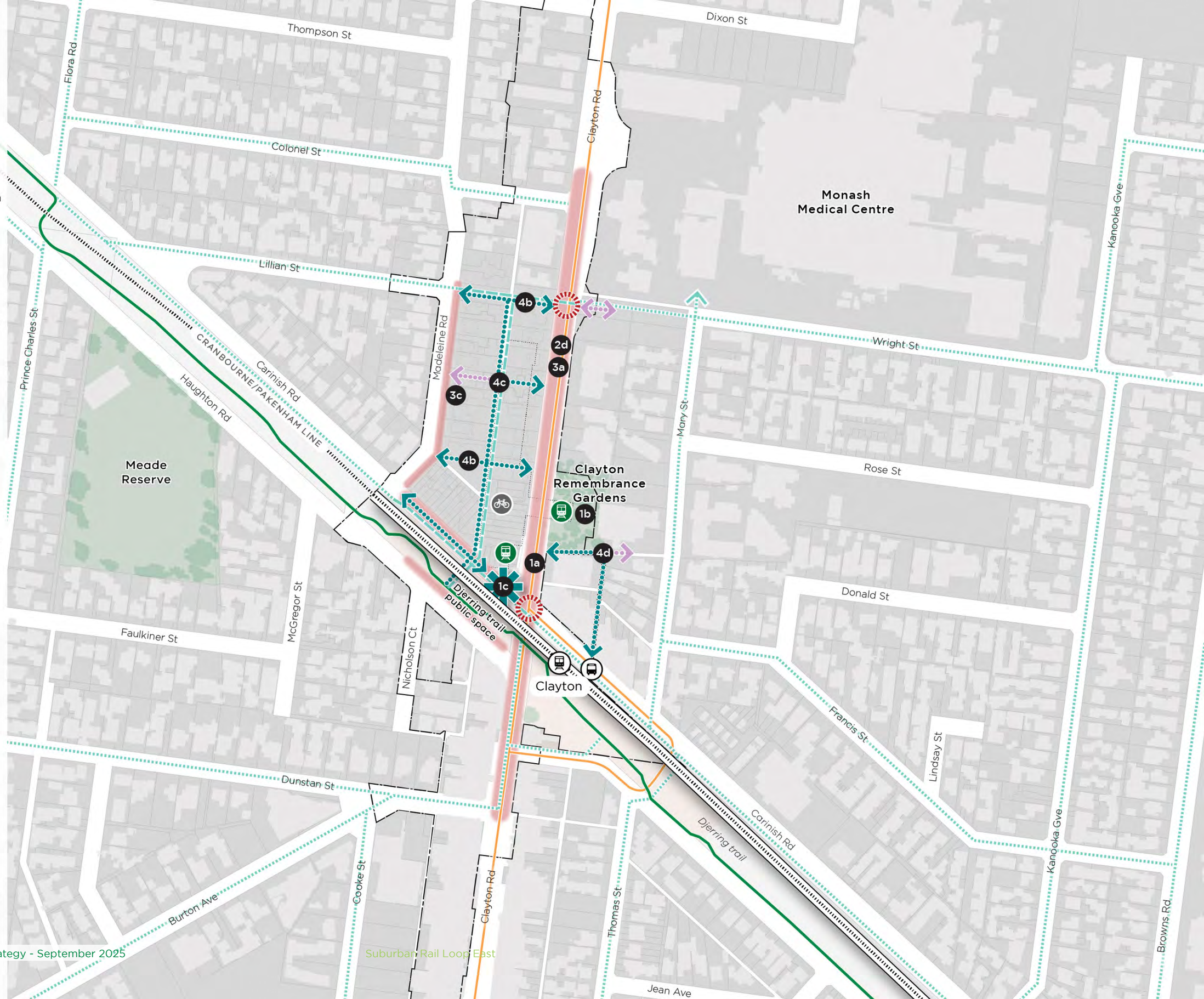

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Clayton diagram are represented with a symbol such as: **1x**

Outcome CLA1

Station environs that are attractive and comfortable to spend time in, delivering an enhanced public life for all members of the community.

The station environs form a vibrant people-focused centre that feels welcoming for all ages and all members of the area's multi-cultural community. Public spaces build on the identifiable character of the community space located below the existing railway viaduct, and complement this recreation space with other space types that are comfortable and lively, encouraging people to spend time in Clayton's centre.

1a Extend Clayton Road's 'high street' character north of the existing rail line to the Monash Medical Centre. Increase space and comfort for pedestrians spending time here and enhance connections with nodes of activity to support the precinct.

1b Enhance the Remembrance Gardens to:

i. Sensitively integrate any new works associated with the Project
ii. Minimise the reduction of green space and loss of established trees
iii. Retain the existing 'garden' quality and provide a space for respite that includes canopy trees and is comfortable to spend time in
iv. Improve amenity across the gardens, integrating with, and complementing adjacent and nearby community facilities
v. Allow for enhanced through-block connections and the potential redevelopment of interfacing sites in the future (by others)
vi. Consider opportunities to tell stories of Clayton's local history and post-war development.

1c Provide a new urban place that:

i. Prioritises pedestrian movement
ii. Builds on the identity of the existing Clayton railway station
iii. Creates an appropriate connection and setting for a new SRL station entrance
iv. Provides a coherent, visually uncluttered and coordinated user experience
v. Includes urban greening and shading to create an inviting place and to offer visual relief from surrounding built form and hard paved areas
vi. Supports increased activity and improved passive surveillance with good visibility to the new SRL station entrance from Clayton Road
vii. Is well-integrated with the community space below the viaduct, maintaining access, and supporting the continued use of the community space as an activated, well-lit and high amenity location
viii. Maintains and enhances north south pedestrian connectivity
ix. Considers opportunities for heritage interpretation that are consistent with the heritage interpretation strategy developed for the Clayton Station Level Crossing Removal Project.

Outcome CLA2

An integrated design response that recognises the Clayton centre as a well-designed transport 'superhub', improving transport and user experience outcomes.

Quick, convenient movement of people between public transport access points is supported by well-designed streets and public spaces that facilitate legibility and ease of circulation. Routes and elements in the public realm are well-designed and makes a positive contribution to place amenity and experience. Improvements and additions to the public realm build on now established works around the existing Clayton railway station to create an integrated and enjoyable transport interchange experience.

2a Provide new public realm works associated with the Project that are well-integrated with the existing Clayton railway station, to create a coherent public realm marking the heart of the Activity Centre.

2b Provide a public realm design which is reflective of Clayton's community and cultures and supports the activation of the existing Clayton railway station and SRL station entrances.

2c Ensure that escalators and lifts providing connections between the below-ground SRL and the above-ground existing Clayton railway station and transfer spaces are:

i. Well-designed as part of an integrated, three dimensional urban design response
ii. Well-integrated into the public realm, minimising impacts on sight lines, supporting good passive surveillance and contributing to place activation and amenity.

2d Enhance Clayton Road to accommodate the projected increase in bus services. Deliver a slower speed environment to support the creation of an attractive, shady high street with greening.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Clayton diagram are represented with a symbol such as: **1x**

Outcome CLA3

A well-designed public realm that feels safe and inviting at all hours, supports people's health and wellbeing and builds on the location as a key service and employment destination.

A well-designed public realm contributes to the creation of a vibrant, people-focused centre, that feels welcoming, comfortable and safe for all members of the community during the day and at night. The SRL station environs are designed to feel welcoming and safe, acknowledging that a broad range of users including healthcare industry workers and university students will access the area at different times during the day and at night. Clayton Road is enhanced, with active edges and generous space provided for pedestrians, shade and greening, improving the amenity and comfort of this link to the Monash Medical Centre and Monash University.

3a Enhance Clayton Road to establish it as an attractive connection from Dunstan Road to the Monash Medical Centre that:

i. Provides generous footpaths to accommodate the projected increase in pedestrians accessing destinations

ii. Provides spaces for people to pause and rest

iii. Creates an attractive streetscape which maximises opportunities for greening to enhance shade and comfort

iv. Includes lighting that is well considered to support an attractive, safe and engaging night-time experience.

3b Provide for and contribute to the creation of active edges along Clayton Road, and Carinish Road. Where this cannot be provided at the completion of the Project, a high standard of presentation and appropriate treatment of interfaces is provided, and allowance made for future active edges.

3c Provide a high standard of presentation and appropriate streetscape treatment on the east side of Madeleine Road, that includes generous space for pedestrians with shade and greening.

Outcome CLA4

Station environs that are well-connected with surrounding neighbourhoods, support desire lines and provide a permeable movement network with a range of movement options supporting a range of activities.

New pedestrian and cycle connections to Clayton Road improve east west permeability throughout the station environs and surrounding neighbourhoods. Clayton Road is improved to better accommodate pedestrians and buses, for improved north south connectivity and good connections into the Djerring Trail. Alternative north south routes contribute to improving access for cyclists throughout the area.

4a Provide multiple quality cycle connections through the station environs improving links to Monash Medical Centre, Monash University and other destinations within the broader precinct. Do not preclude the provision of cycling corridors to the east and west (by others) by protecting logical routes for future connections.

4b Provide fine grain spaces to improve place outcomes and east west links to enhance pedestrian and cycling connectivity to Clayton Road. Link:

i. Lillian Street to Clayton Road to create a comfortable green space and provide an improved pedestrian and cycle crossing across Clayton Road

ii. Madeleine Road to Clayton Road to create an activated pedestrian space for people to move through and pause in that does not preclude a potential future crossing (by others) to provide a direct connection to the Remembrance Gardens.

4c Enhance the existing north south connection located between Madeleine Road and Clayton Road to:

i. Provide a well-lit, comfortable, unobstructed, uncluttered and attractive pedestrian route that contributes to the Activity Centre's sense of place

ii. Provide a cycling connection linking Carinish Road to the extension of Lillian Street

iii. Support access, servicing, existing and future maintenance requirements while minimising impacts on the public realm.

4d Provide improvements to existing laneways south of the Remembrance Gardens enhancing opportunities for street engagement, amenity and perceptions of safety to pedestrian connections from the gardens to Clayton Road and Carinish Road.

4e Retain and enhance strong east west walking and cycling connectivity along the Djerring Trail, maintaining its identity as a connecting thread through the parkland (beneath the viaduct) created as part of the Caulfield to Dandenong Level Crossing Removal Project.

Photo credit: Dianna Snape

6.3 Monash

Understanding context

The Bunurong Land Council Aboriginal Corporation is the Registered Aboriginal Party for the station environs at Monash.*

The SRL station at Monash is located within an existing industrial area to the north of the wider Monash NEIC. The Monash NEIC is of strategic national significance in health, education and employment activities.

The broader precinct contains the flagship campus of Monash University, the largest university in Australia, as well as globally recognised research facilities including the Australian Synchrotron and CSIRO headquarters.

The Monash University campus occupies the largest land area within the precinct and is also home to the Victorian Heart Hospital. The campus includes teaching spaces, research laboratories, food and retail, student accommodation and sports and recreation areas set within extensive gardens and high-quality public realm. Outside Monash University, there is limited public open space and opportunity for social interaction.

The Monash University campus has a distinctive and extensive native landscape setting. The campus edge is vegetated with well-established native plants which provide limited or filtered views into the campus. In contrast, the northern industrial area has relatively low tree canopy coverage and a higher urban heat island effect than the metropolitan average. The broader precinct sits on a major drainage line of Mile Creek.

Howleys Road and Normanby Road provide direct vehicular access to Monash University, and with Ferntree Gully and Blackburn Road create a well-connected, road-based transport network facilitating access across the eastern metropolitan region. However, for pedestrians and cyclists, these car-dominated roads are low in amenity, comfort and safety.

Business and industry in the area comprises of one and two storey buildings and warehouses set back varying distances behind a grassed verge with mature native trees found along property boundaries and major streets, providing a significant contribution towards the streetscape character. The larger land parcels of the existing warehouses, light manufacturing and commercial offices to the north of the Normanby Road have resulted in large street blocks that provide limited permeability for people walking and cycling and further contributes to a poor active transport experience.

Residential uses are mostly limited to on-campus student accommodation. These multi-storey dwellings are set back a distance from the road, behind mature canopy trees and shrubs. Other residential uses outside the employment-focused areas include low-density residential clusters with varying setbacks and landscaped frontages.

Many residents surrounding the Monash University campus are students living in rented accommodation. Surrounding suburbs comprise a mix of residents including younger professionals from a range of industries in the early stages of their careers (with a high proportion renting apartments), and people approaching retirement and looking to relax and enjoy life.

**In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

Photo credit: Dianna Snape

Monash Precinct will be known globally for innovation, building on Monash University's strengths in science, technology, engineering and mathematics (STEM) to attract and retain leading global firms. Significant employment growth will be supported by an attractive public realm, comprehensive walking, cycling and public transport networks, and a diverse lifestyle and hospitality offering.

Future state

Leveraging its location at the heart of the Monash NEIC and close proximity to Monash University, SRL East will create a vibrant and high amenity place that will encourage informal interactions and collaborations. Enhanced local public transport connectivity, and new cycling infrastructure, public spaces and walkable streets will improve connections between the SRL station, the Monash University campus and other destinations within the broader precinct.

The station environs will celebrate the distinctive Australian native landscape character established by Monash University, and extend the green walking links beyond the campus. New public spaces and safe welcoming streets will encourage recreation, and increased tree canopy and urban greening will create shaded, comfortable and attractive environments and contribute to urban ecology.

A permeable and high amenity street network will create a high-quality pedestrian and cycling experience. Howleys Road will be transformed to be a desirable, comfortable and convenient north south link for walking, cycling and accessing public transport.

The SRL station at Monash will anchor growth and position education, health and innovation at the heart of the new centre. The associated public realm will strengthen the identity of the area, create an attractive setting to support ground level activation, and deliver a new civic heart, arrival space and focal point for the community. With greater walking, cycling and use of public transport, the SRL station at Monash will be a hub of activity that fosters interactions between students and workers and creates a vibrant environment.

The Monash Precinct will experience tremendous job growth through to 2056 and beyond, remaining one of the largest employment precincts outside Melbourne's CBD. The total number of people employed will continue to outstrip the total number of residents through to 2056. The total number of university students living in the area will grow at a much faster rate than the local residential population.

Figure 15: Monash regional context

Figure 16: Monash place-specific requirements diagram

Legend

- SRL station entrance
- Potential SRL southern entrance location (option)
- Bus interchange
- Existing bus route
- Key location / publicly accessible space
- Enhanced streetscape
- New / improved crossing
- New / improved pedestrian route
- Potential future pedestrian desire line
- Potential cycle hub location
- Existing cycling route
- New / improved cycling route
- Potential future cycling route (subject to change)
- Opportunity for green connection
- Existing open space
- Project Land
- Approximate station and crossover facility outline (underground)
- 1x Place-specific requirement as described on following page(s)

This diagram is provided to communicate potential urban design moves to support the place-specific requirements outlined in the following pages. It does not represent a design solution nor does it limit a design response.

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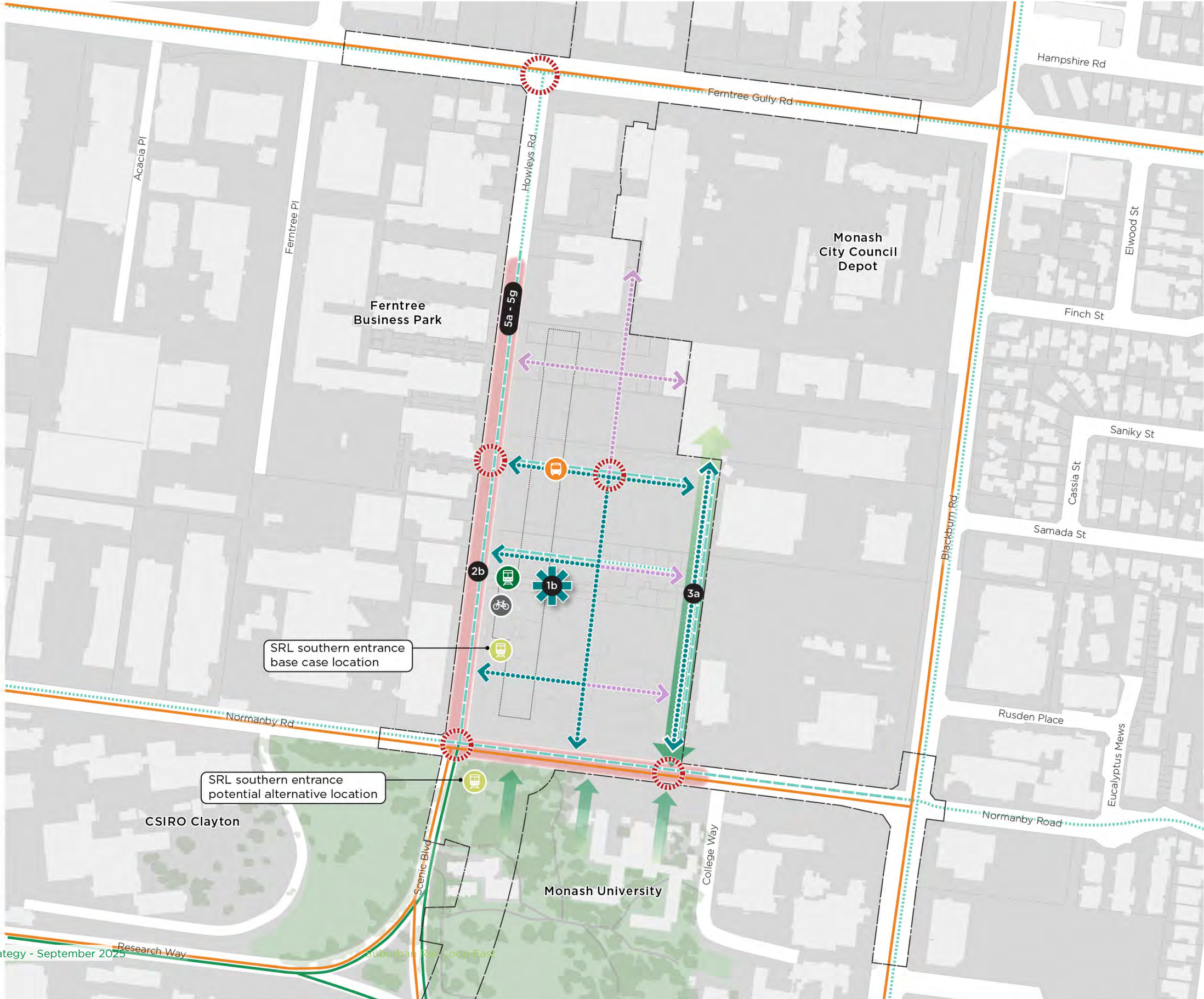

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Monash diagram are represented with a symbol such as: **1x**

Outcome MSH1

A clear, street oriented town centre for Monash with a strong identity, and a high-quality public realm that is vibrant and attractive to new business, workers, students and local residents.

The station environs form a vibrant, people-focused centre, that feels welcoming for all members of the community. Public spaces are comfortable and lively with activity, encouraging people to spend time in them, enabling collaboration and supporting innovation as an important precinct driver.

1a Provide a Design that establishes Howleys Road as the major axis within a new, street-oriented town centre, that is well-integrated with Scenic Boulevard to facilitate integration of Monash University, the SRL station environs and the broader precinct.

1b Provide a central public space near the SRL station entrance that is an inviting focal point for the precinct as it diversifies and grows, acts as a collaboration space and meeting spot for all members of the community that:

i. Provides spaces and infrastructure to showcase precinct activities in the public realm, and to encourage socialising, exhibition, interaction and incidental collaboration between industry and academia

ii. Includes flexible space/s that are adaptable to changing community needs, allow for a range of place activations, and place-making

iii. Is well-lit and supports 24/7 use

iv. Creates a single unifying ground plane that is flexible to accommodate larger events and is designed to avoid severance of the 'place' function of the space by cycling and principal pedestrian networks

v. Has active edges that are legible and frame the space. Where this cannot be provided at the completion of the Project, ensure a high standard of presentation can be achieved during the redevelopment phase, and make allowance for future active edges to be created with minimal constraints

vi. Includes urban greening and shading to provide respite from surrounding buildings and hard paved areas

vii. Ensures line of sight to the SRL station from the public space is generally uncluttered to support its role as an attractor

viii. Provides integrated public art (in accordance with the Creative Strategy) that creates a legacy, acts as a place (or visual) marker, and reinforces the unique character of the central public space

ix. Is well-designed and resolves relationships between the public space levels and the sloping levels of Howleys Road to ensure accessibility, safety and legibility

x. Allows for Smart City infrastructure to be embedded to enhance the function of the public realm.

1c Provide space around the SRL station entrance that forms part of the central public space, is integrated with the design of Howleys Road, and creates a positive arrival experience into the station environs.

1d Provide attractive and generous pedestrian and cycle connections from the central public space near the SRL station entrance, to Howleys Road and Normanby Road to encourage active transport choices. Ensure the Design allows for potential connections to precinct destinations including to the Victorian Heart Hospital located within the Monash University campus.

1e Provide a consistent and well-designed public realm that ensures new spaces associated with the Project are complementary to Monash University's established landscape character and material palette to create a coherent public realm with a clear identity in the heart of the precinct.

1f Facilitate a future network of finer grain streets, laneways and spaces configured to define a clear town centre supporting a range of new land uses in the future.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Monash diagram are represented with a symbol such as: **1x**

Outcome MSH2

A multi-modal transport hub with a well-designed public realm to support the evolution of employment, innovation and industry in the broader precinct.

Quick, convenient movement of people between public transport access points is supported by well-designed streets and public spaces that facilitate intuitive wayfinding to public transport access points and supports ease of circulation. Provision is made for a potential public transport corridor and a multi-modal interchange at the SRL station.

2a Provide a Design that considers a potential on-road public transport corridor along:

i. Howleys Road

ii. Normanby Road between Howleys Road and Blackburn Road

iii. Blackburn Road between Normanby Road and Wellington Road.

2b Provide a Design that allows for direct and safe pedestrian access between the SRL station and Howleys Road, that does not preclude the potential on-road public transport corridor along Howleys Road.

2c Provide a new bus interchange that balances requirements for good bus access close to station entrances and active interfaces with pedestrian and cycling movements along Howleys Road and new east west road(s).

Outcome MSH3

Monash University's green links are extended through the station environs and beyond, building on the established Australian landscape character of the campus and maximising positive environmental outcomes.

Tree canopy, green links and open spaces make visual and landscape connections with Monash University, extending established campus landscapes to mitigate the urban heat island effect and achieve a high standard of environmental performance and amenity throughout the station environs.

3a Provide a generous linear open space extending north from Normanby Road that:

i. Is attractive, comfortable and pleasant to spend time in, while also providing a walking and cycling connection

ii. Includes generous space for pedestrians, with canopy shade planting and places for pausing

iii. Provides an attractive green outlook and frontage to allotments to the west

iv. Achieves an appropriate interface with neighbouring sites to the east.

3b Provide tree canopy, green links and open space that:

i. Extend the established landscape character of Monash University, including ecological and urban water elements

ii. Increase biodiversity and opportunities for integration of green infrastructure to maximise positive environmental outcomes for the SRL station environs and the broader precinct

iii. Provide opportunities to make visual and physical connections with Monash University's landscaped estate and tree canopy

iv. Create an integrated and high-quality public realm setting.

3c Provide a high standard of presentation, and appropriate treatment of interfaces with new green links and other open space at the completion of the Project and during the redevelopment phase.

Photo credit: Dianna Snape

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Monash diagram are represented with a symbol such as: **1x**

Outcome MSH4

Station environs with a legible, fine grain urban structure that is walkable and cyclable and is well-integrated with its existing and emerging context.

The scale of existing blocks is broken down with the introduction of new streets and links to create a permeable structure with a choice of pedestrian, cycle and vehicle routes. Improvements are made to north south connections with Monash University. A high priority is given to walking and cycling, with the movement networks designed to be extended into surrounding neighbourhoods, in line with future precinct development as part of the Monash NEIC.

4a Facilitate smaller blocks and a future grid street network that is walkable and cyclable with clear sightlines so that wayfinding is intuitive and reliance on directional signage is minimised.

4b Provide multiple quality cycle and pedestrian crossings points across Normanby Road to Monash University.

4c Do not preclude the ability for a future east west connection (by others) into the existing streets on the eastern side of Blackburn Road. Align streets to enable direct and logical future connections.

4d Provide for active edges to the north side of Normanby Road and allow for generous, high amenity space for pedestrian circulation.

4e Provide well-defined, high amenity routes for pedestrians, extending Monash University's established and planned pedestrian network and integrating this with the broader precinct.

4f Integrate cycling and pedestrian connections with:

i. A generous new north south green linear open space extending north from Normanby Road

ii. Monash University's green links

iii. Surrounding streets connecting to precinct destinations and residential areas to the east and west.

Outcome MSH5

Howleys Road is a vibrant, high amenity and distinctive high street which is attractive for pedestrians, cyclists and public transport users and plays a key role in a transformational street network for the station environs.

Howleys Road is transformed to provide generous space for pedestrians, a safe cycling route and potential on-road public transport. A well-designed, high amenity street lined with canopy trees, Howleys Road has active edges and provides a safe and inviting way to access public transport.

5a Provide generous footpaths to accommodate the projected growth in pedestrian circulation and adequate space for future transport stops, pause points and spaces for outdoor activities encouraging people to spend time.

5b Provide a quality cycle connection within the Howleys Road streetscape.

5c Prioritise pedestrians, cyclists and public transport at crossing points.

5d Ensure the design of Howleys Road provides seamless pedestrian and cycle connections with Scenic Boulevard.

5e Provide a street that is shaded and comfortable for walking and cycling, and with good amenity for people to pause or dwell.

5f Provide for and contribute to the creation of active edges to Howleys Road. Where this cannot be provided at the completion of the Project, a high standard of presentation and appropriate treatment of interfaces is provided, and allowance made for future active edges.

5g Provide a design for Howleys Road that is attractive for day and night pedestrian and cycling use and accommodates any future cycle share facilities.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Monash diagram are represented with a symbol such as: **1x**

Outcome MSH6

Public realm that supports a 24-hour neighbourhood experience to provide a safe place for living, learning and working.

Streets and public spaces are well-designed and feel welcoming for all members of the community during the day and night. Well-integrated lighting, active edges, and adequate space and infrastructure, support outdoor dining, community events and a vibrant creative program.

6a Provide a Design that ensures 'eyes on the street' and feels safe for interchange patrons which will include a significant proportion of Monash University students, academics, researchers and other staff. Support future change and growth in patronage numbers and in night-time users as the precinct develops and the community diversifies and grows.

6b Provide lighting that is well considered to support an attractive, safe and engaging night-time experience.

6c Provide adequate space and infrastructure within the public realm to support food and beverage and nightlife amenities.

6d Provide appropriate services and vehicle access to public spaces to support flexible and pop-up uses.

6.4
Glen Waverley

Understanding context

The Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation is the Registered Aboriginal Party for the station environs at Glen Waverley.*

The SRL station at Glen Waverley is located within the Glen Waverley Major Activity Centre which is a thriving retail, hospitality and community hub, with a good transport offering due to the existing Glen Waverley railway station, road access, and a major bus interchange. Anchored by a regionally-significant shopping centre, and with culturally rich retail and hospitality uses, the area has experienced unprecedented residential growth and commercial interest resulting in an emergence of multi-storey developments within the core of the precinct.

As the location of the last railway station on the existing Glen Waverley rail line, the precinct performs an important role in connecting the wider eastern suburbs to the CBD and beyond. As a result, there is reliable transport access for commuters and visitors. However, the rail line also divides the centre into two distinctive environments, linked by Kingsway and its continuation, Snedden Drive.

North of the rail line and Coleman Parade, the large and recently refurbished The Glen shopping centre and residential towers are visually prominent. Springvale Road, the shopping centre and rail line form barriers to movement for walking and cycling, and the sloping topography presents an additional challenge for pedestrians and cyclists. There is limited street activation and pedestrian connectivity to the activity centre from Springvale Road and High Street Road. While The Glen provides a high amenity interface at the Snedden Drive and O'Sullivan Road entrances, the other interfaces are less welcoming to pedestrians. Generating high pedestrian and cycle activity, Glen Waverley Secondary College is also located to the west of Snedden Drive.

South of the rail line and Coleman Parade, Kingsway provides a community and activity hub, attracting local residents and visitors. Along Kingsway smaller fine-grained shopfronts provide a range of multicultural food and retail offerings including cafes and grocery stores as well as some on-street outdoor dining. To the south of Kingsway are community facilities and the Monash Council offices. The greater level of street activation and a strong day, evening and night-time offering contribute to a vibrant street life. However, the area remains dominated by vehicular traffic and carparking which impacts amenity, safety and comfort.

Large expanses of surface carparking and inconsistent street tree planting, contribute to an overall lack of greenery within the activity centre. Outside the core of the precinct, lower density areas of detached housing and streets lined with native trees are punctuated with units and townhouses. Dwellings are a mixture of single and two storey buildings with varying setbacks and landscaped gardens.

This precinct is predominantly home to older and middle-aged couples with older children at home, with high degrees of home ownership. There are also newer demographics moving to Glen Waverley, including younger professionals who are commencing their careers, as well as younger people who are renting their homes and commuting elsewhere for work.

**In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

Photo credit: Dianna Snape

Glen Waverley will be a centre for workers, students and residents, accessible from across the eastern metropolitan region and anchored by a vibrant multicultural core. Central Glen Waverley will grow through an intensified mix of businesses, retail, services and entertainment uses, within a pedestrian-and cycling-friendly local environment.

Future state

Drawing upon elements that have made Glen Waverley such a vibrant place, the SRL station at Glen Waverley will build on the qualities of Kingsway, extending the existing centre westward and revitalising what is largely inactive public realm currently dominated by carparking.

The SRL station environs will contribute to creating an active, engaging and walkable centre that supports day and night-time activities, with improved connections between the existing transport interchange and the surrounding walking and cycling infrastructure. Enhanced and new streets and laneways will reflect desire lines linking to the SRL station entrance, the existing Glen Waverley railway station and bus interchange. The new movement network and block structure will connect logically into the broader precinct and contribute to the commercial and retail activation of Kingsway.

Co-located with the existing Glen Waverley railway station and bus interchange, the SRL station will generate greater volumes of foot traffic on the already busy thoroughfare of Coleman Parade. The design of Coleman Parade will improve safety and amenity for pedestrians and cyclists, improve the commuter interchange experience and become a high-quality pedestrian-oriented connector and arrival space for the precinct.

Framed by Myrtle Street and Bogong Avenue, which will be enhanced with improved cycling infrastructure, the SRL station environs will be defined by vibrant and bustling streets and spaces and a leafy treed environment. New public open space around the SRL station will provide places of respite through much-needed green spaces that will be easy to access for pedestrians and cyclists, creating an accessible and welcoming environment for the existing community, as well as the growing numbers of residents, workers and visitors.

Already a Major Activity Centre experiencing steady growth, Glen Waverley's population and its employment will double by 2056 compared with today. All household types will increase, with a particular increase in its aged population.

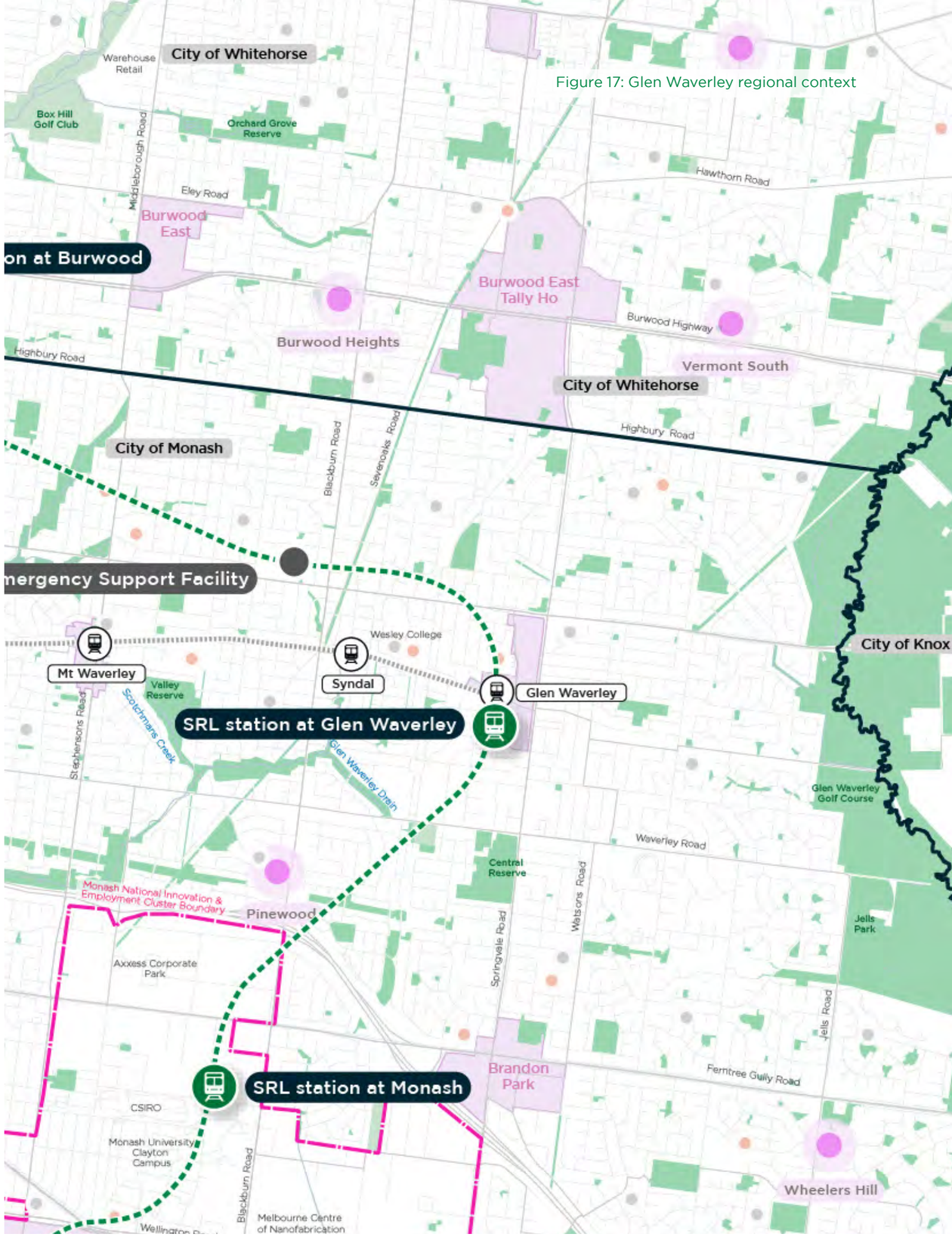

Figure 17: Glen Waverley regional context

Figure 18: Glen Waverley place-specific requirements diagram

Legend

- SRL station entrance
- Existing Metro train station
- Existing bus interchange
- Existing bus route
- Key location / publicly accessible space
- Enhanced streetscape
- Realigned street
- New / improved crossing
- New / improved pedestrian route
- Potential future pedestrian desire line
- Potential cycle hub location
- Existing cycling route
- New / improved cycling route
- Potential future cycling route (subject to change)
- Existing open space
- Project Land
- Approximate station outline (underground)
- 1x Place-specific requirement as described on following page(s)

This diagram is provided to communicate potential urban design moves to support the place-specific requirements outlined in the following pages. It does not represent a design solution nor does it limit a design response.

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Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Glen Waverley diagram are represented with a symbol such as: **1x**

Outcome GWY1

Station environs with well-designed and welcoming spaces that safely and intuitively connect to the wider Activity Centre.

The station environment is comfortable for walking and cycling, providing safe and intuitive connections between key uses and local destinations including an upgraded Kingsway (upgrades to Kingsway by others).

1a Provide a low-speed walking and cycling environment that responds to a rebalance of modal priorities within the station environs and wider precinct.

1b Provide a movement network that:

i. Is configured to support a range of new land uses in the future, and extends the Activity Centre core westwards into the SRL station environs

ii. Includes the realignment of Myrtle Street to create a new street connection, creating a positive interface with adjacent residential neighbourhoods and providing high amenity, comfort and generous space for people, cyclists, shade and greening

iii. Is reflective of the permeable and fine grain laneway character of the centre

iv. Introduces new pedestrian links that increase the walkability of the station environs and improves connections to nearby residential neighbourhoods and Kingsway

v. Provides pedestrian links directly to the SRL station, the existing Glen Waverley railway station and other destinations.

1c Provide a cohesive, unified and coordinated public realm that supports intuitive wayfinding between the SRL station entrance and the existing Glen Waverley railway station, the bus interchange, Railway Parade North and Kingsway, and other destinations.

1d Retain and improve the pedestrian connection from Montclair Avenue to the Bogong Avenue multi-storey car park, ensuring suitability for day and night use and providing amenity and shade.

1e Provide a design for the lane to the west of Kingsway between Montclair Avenue and Coleman Parade that:

i. Enhances pedestrian and visual connections to and from SRL and existing Glen Waverley railway station entrances

ii. Maintains service access for Kingsway fronted sites.

1f Provide quality cycle connections and generous space and amenity for pedestrians on Coleman Parade and Myrtle Street/Bogong Avenue.

1g Provide a design for Montclair Avenue that includes generous space for pedestrians and is well integrated and aligned with any potential upgrades to Kingsway, supporting outdoor dining at the interface.

1h Do not preclude plans by others for potential upgrades to Kingsway and Snedden Drive as the Activity Centre's north south civic spine, with expanded street level activation, including additional space for outdoor dining, pedestrians and cycle lanes.

Outcome GWY2

Public realm that supports a legible and convenient, integrated multi-modal transport hub.

Quick, convenient movement of people between public transport access points is supported by well-designed streets and public spaces that facilitate intuitive wayfinding and ease of circulation. A new public space at the SRL station and an improved entrance to the existing Glen Waverley railway station are well-connected through improvements to Coleman Parade.

2a Provide an attractive and well-designed space around the SRL station entrance that is integrated with Coleman Parade that:

i. Creates a positive arrival experience into the station environs

ii. Contributes to addressing the open space needs of the community

iii. Minimises barriers to pedestrian movement between the SRL Station, bus interchange and existing Glen Waverley railway station forecourt.

2b Provide enhancements to the existing Glen Waverley railway station forecourt that:

i. Provide a coherent, well-lit and welcoming user experience

ii. Maximise space for pedestrian movement and enhance wayfinding between the existing Glen Waverley railway station, SRL and bus interchange

iii. Minimise reliance on ramps and stairs within the public realm to resolve transitions in floor levels

iv. Enhance viewlines to Coleman Parade and minimise visual clutter

v. Integrate with the improvements to Coleman Parade

vi. Do not preclude the potential for future upgrades and extension of the existing bus interchange (by others), ensuring the Design supports seamless public realm integration and connections in the future.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.

For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.

Place-specific requirements shown on the Glen Waverley diagram are represented with a symbol such as: 1x

Outcome GWY3

An ambition for encouraging diversity of development and activity, supporting the growing community and building upon its thriving multicultural character.

A variety of activities including temporary and permanent, creative and placemaking initiatives are accommodated within a vibrant and active public realm. Streets, laneways and public spaces are designed to allow for, and support, future development of the station environs over time.

A new pedestrian-prioritised public realm at Coleman Parade provides a centre for the community, a safe connection between SRL and the existing Glen Waverley railway station, and contributes to the creation of a visually distinctive station environment.

3a Provide a Design that creates:

i. A variety of spaces for day-time and night-time use that support flexible programming to meet changing community needs over time

ii. Space, infrastructure, facilities and adequate vehicular access to support permanent and temporary activation and place-making.

3b Provide a design for Coleman Parade that:

i. Creates vibrant public space with good amenity, that is welcoming and attractive to a broad range of users

ii. Reconfigures the existing streetscape to place a high priority on pedestrians and cyclists while maintaining access to the IKON tower

iii. Accommodates the safe and intuitive movement of pedestrians between SRL and existing Glen Waverley railway station entrances

iv. Helps to create the visual identity of the station environs as a place for people

v. Supports safe, slow speed environment at interfaces with pedestrian crossings.

Outcome GWY4

Enhanced public places and urban greening for a high amenity pedestrian experience to encourage people to pause and stay longer.

Well-vegetated public spaces provide cool and inviting meeting places for residents, workers and visitors to the station environs and wider Activity Centre. The amenity and comfort of the station environs is further improved with comprehensive street tree planting.

4a Create a network of pedestrian links and spaces within the station environs that:

i. Provide connections of generous widths between Montclair Avenue and the SRL station entrance, that are well-integrated with improvements to Coleman Parade

ii. Include large canopy trees and other vegetation to provide respite from surrounding buildings, complementing the activities on Kingsway and creating places for the community to gather, rest and pause

iii. Feel safe, are high amenity and have active edges. Where active edges cannot be provided at the completion of the Project, ensure a high standard of presentation and make allowance for future active edges to be created with minimal constraints.

4b Optimise tree and streetscape planting and performance to enhance greening in the heart of the Activity Centre.

4c Maximise the integration of service and ancillary uses with adjacent built form on Coleman Parade and Montclair Avenue, maximising pedestrian amenity and perceptions of safety.

Outcome GWY5

An integrated movement network that supports a range of active transport connections to surrounding neighbourhoods and networks.

Pedestrian crossing points, reconfigured kerbs, improved street amenity and reduced vehicular traffic speeds support pedestrian and cyclists to move easily in and around the station environs.

5a Provide improvements to pedestrian connectivity across Myrtle Street and Bogong Avenue. Ensure the public realm provides adequate space for a quality cycle connection that will support safe interactions between pedestrians and cyclists.

5b Provide a cycle connection on Coleman Parade and a high-quality public realm design that will support seamless integration with the broader cycling network.

5c Do not preclude future upgrades by others to Railway Parade North as a potential future bus boulevard and pedestrian connection from Springvale Road to the bus interchange. Ensure the Design supports intuitive and generous, seamless connections and cohesive public realm treatments.

Photo credit: Dianna Snape

6.5 Burwood

Understanding context

The Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation is the Registered Aboriginal Party for the station environs at Burwood.*

The SRL station at Burwood is located on the eastern edge of the Gardiners Creek corridor which contributes to the distinctive green character of the area. Gardiners Creek features important remnant ecological values along its broader reaches, and is listed in the Yarra Strategic Plan (2020) as the only existing inner-city tributary of the Yarra River. With popular regional cycling and walking paths running through the Gardiners Creek parklands, the waterway extends to connect Blackburn Lake Sanctuary to the north, and the Yarra River to the south.

Burwood Highway is located to the north of the SRL station, providing arterial road and tram access into Melbourne's CBD and accommodating a number of bus routes. This busy, car-dominated environment presents a barrier to north south movement through the precinct for pedestrians and cyclists. The hilly nature of the Burwood Precinct creates a scenic drive for commuters and vehicle users, but presents an additional challenge for walking and cycling.

North of Burwood Highway, there is a strong educational presence with the Melbourne campus of Deakin University, the Presbyterian Ladies College and Mount Scopus Memorial College. Built form adjoining Burwood Highway is typified by larger-scale buildings and a mix of different uses, which is notably different to that found on the small residential streets on either side of the highway and around the university. A large portion of the area around the SRL station is currently used for utility and storage purposes.

Local residential areas typically feature tree-lined streets with medium to large blocks and detached housing, with many streets reflecting the character of the bushland corridor created by Gardiners Creek. Sinnott Street Reserve provides local open space to the east side of the creek. To the west of Gardiners Creek, there are more consolidated developments, including townhouses and approved apartment developments which introduce greater density near and overlooking of the Gardeners Creek corridor. A number of industrial uses are located along the eastern edge of the corridor which affect local access and amenity.

Approximately two kilometres to the east of the SRL station is the Burwood Heights Activity Centre, which includes the former brickworks site. The centre is undergoing major redevelopment which will result in higher density residential housing and a new shopping and entertainment precinct.

Gardiners Creek and its linear parklands provide a range of experiences and areas of biodiversity and habitat. However, south of Burwood Highway, Gardiners Creek transitions from a naturalised corridor into a constructed drain. An existing bridge near the south west of the SRL station site provides a creek crossing for walkers to connect the neighborhoods to the west.

The Whitehorse Heritage Trail provides information about the area's history. Sinnott Street Reserve, the Local History Park and the adjacent section of the Gardiners Creek Reserve contain sculptures, a re-creation of a settler's shelter, and remnant structures from the former Skyline Drive-In which was Australia's first drive-in cinema.

The precinct includes higher numbers of affluent retired couples and middle-aged professional couples, many of whom have school-aged children. Burwood is also home to increasing proportions of young culturally diverse students living in rented accommodation.

** In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

Photo credit: Dianna Snape

Burwood will have significant mixed-use activity areas and be a major education precinct for Victoria, anchored by Deakin University's strengths as a leader in technology and commerce. An activated public realm along the Burwood Highway corridor will support more jobs and residents, and enhanced access to Gardiners Creek will be supported by comprehensive walking and cycling links.

Future state

The SRL station at Burwood will transform largely industrial landholdings south of Burwood Highway into a new mixed-use centre that is a thriving place to live, work and study.

The Deakin University, Presbyterian Ladies' College and Mount Scopus campuses north of Burwood Highway will play an important role in activating the precinct and supporting future employment growth and a diverse new community, with large commuter volumes utilising the SRL station. Safe and legible connections for students and workers crossing Burwood Highway will be achieved through integrated public transport access points and improved crossings for walking and cycling. Burwood Highway will become a distinctive and inviting address with a high-quality public realm and streetscape improvements.

A new street network and public spaces to the south of Burwood Highway will enhance walking and cycling and create desirable connections through the SRL station environs. Gardiners Creek will continue to play an important role in the identity of the precinct. Sections of the creek will be naturalised, environmental and landscape qualities will be enhanced, and the Indigenous and non-Indigenous cultural values celebrated. The built form and public realm of new stations will respond positively to Gardiners Creek and facilitate an attractive and active creek interface.

The SRL station environs will provide physical and visual links to surrounding parklands that run north south along the Gardiners Creek corridor, and east west along the McComas Grove Linear Reserve alignment. With high-quality connections to the bridge crossings and trails along the creek corridor, access to regionally-enjoyed open space, regional recreation destinations and cycling connections will be enhanced. Opportunities for people to connect with nature and be active outdoors will be improved.

Informed by the character and broader biodiversity values of Gardiners Creek, the SRL station environs will enhance urban ecology and embrace water sensitive design, extending the landscape character of the naturalised creek corridor into the precinct.

Enrolments at Deakin University's Burwood campus are expected to grow significantly through to 2056. This, as well as jobs growth in new employment opportunities and the improved connectivity provided by SRL, will transform the precinct. The overall residential population and employment numbers are projected to double over this period.

Figure 19: Burwood regional context

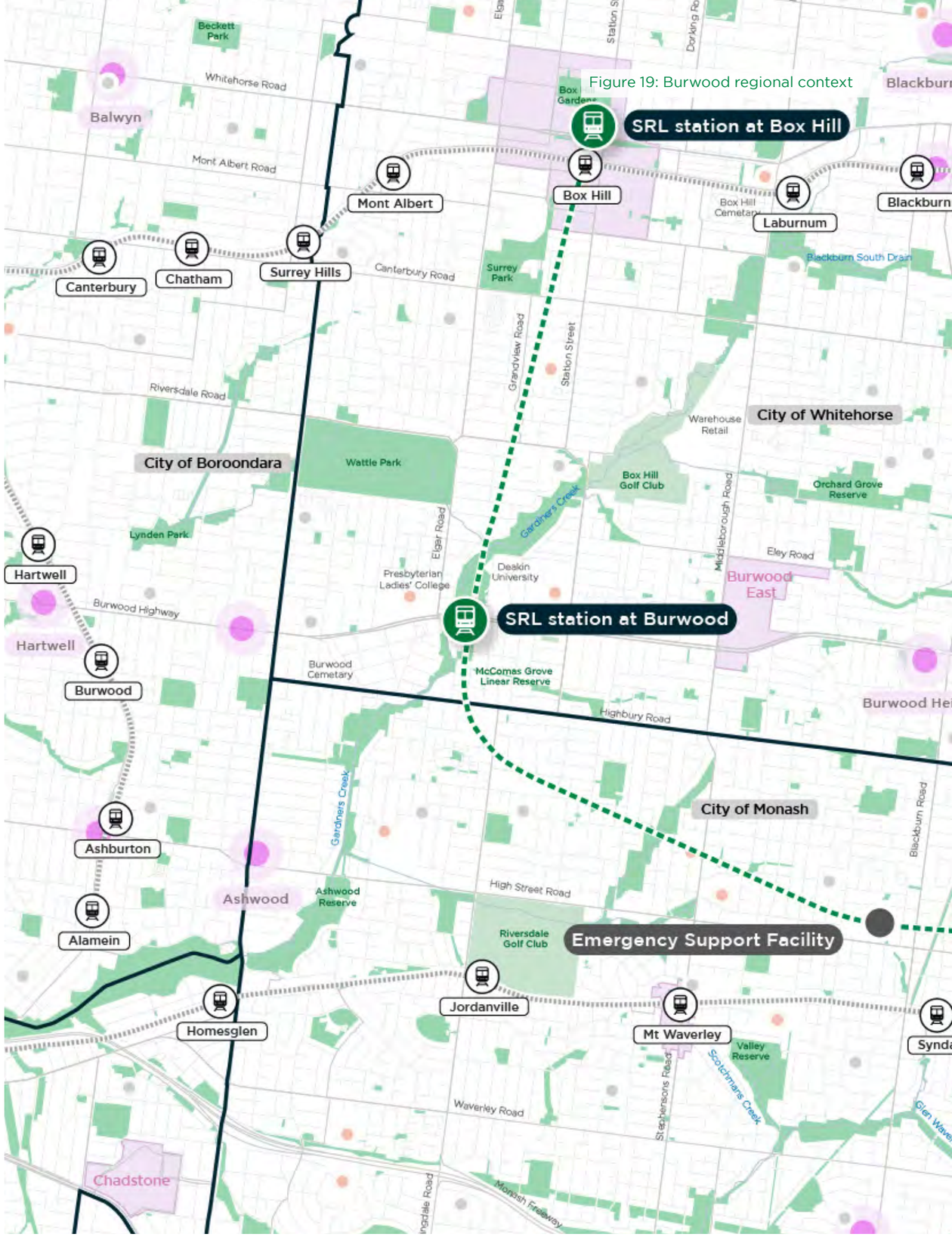

Figure 20: Burwood place-specific requirements diagram

Legend

- SRL station entrance
- Bus interchange
- Existing bus route
- Potential tram interchange
- Existing tram route
- Key location / publicly accessible space
- Enhanced streetscape
- New / improved crossing
- New / improved pedestrian route
- Potential future pedestrian desire line
- Potential cycle hub location
- Existing cycling route
- New / improved cycling route
- Potential future cycling route (subject to change)
- Existing open space
- Opportunity for green connection
- Burwood Substation
- Project Land
- Approximate station outline (underground)
- 1x Place-specific requirement as described on following page(s)

This diagram is provided to communicate potential urban design moves to support the place-specific requirements outlined in the following pages. It does not represent a design solution nor does it limit a design response.

0 30M 60M 90M 120M
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Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Burwood diagram are represented with a symbol such as: **1x**

Outcome BUW1

A well-designed and engaging public realm and positive interfaces with streets and spaces that are comfortable and inviting.

A well-designed public realm contributes to supporting of a vibrant, people-focused centre, that feels welcoming, comfortable and safe for all members of the community during the day and at night. An active and attractive frontage is provided to Burwood Highway with improved amenity for pedestrians. A highly visible and generous connection is provided to the new SRL station entrance.

1a Provide new public open space that:

i. Creates an address for SRL and a well-designed station forecourt

ii. Is well-integrated with the Burwood Highway and Sinnott Street extension streetscapes

iii. Provides an attractive space for people to move through, meet and pause

iv. Resolve ground levels to manage the relationship between Gardiners Creek and the station entrance to ensure orientation, connectivity, accessibility, safety, and legibility and public realm function

v. Balances a sense of openness and connection to the creek with creating a defined and comfortable space for people to be in.

1b Provide a Design that ensures 'eyes on the street' and feels safe for interchange patrons which will include a significant proportion of students and staff from Deakin University and nearby schools. Support future change and growth in patronage numbers and night-time users as the precinct develops and the community diversifies and grows.

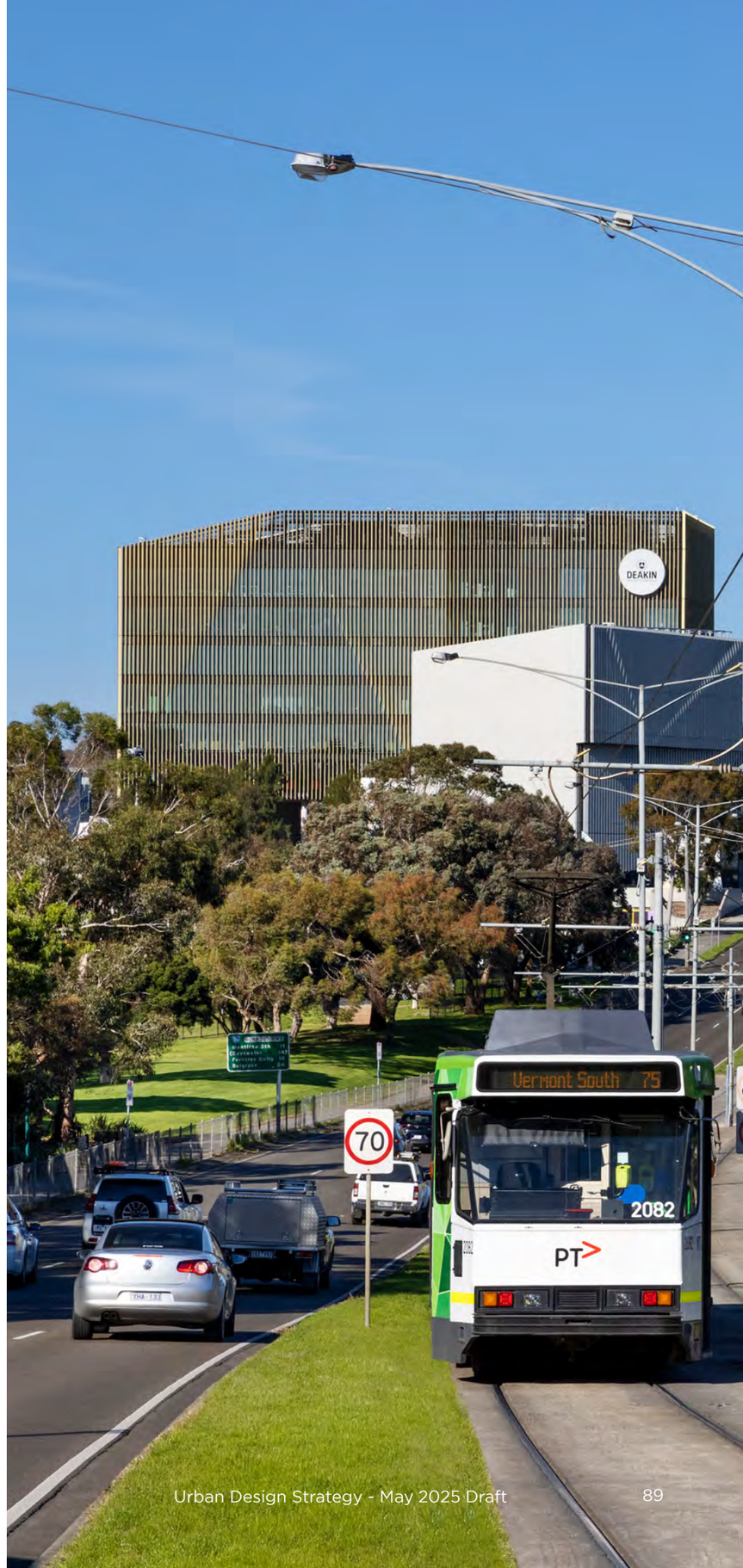
1c Provide active edges to Burwood Highway, Gardiners Creek and other open space and maximise opportunities for active edges to new and existing streets. Where this cannot be provided at the completion of the Project, a high standard of presentation and appropriate treatment is provided, and allowance made for future active edges.

1d Provide a Design for the Burwood Highway frontage that:

i. Offers amenity and shade to support a more comfortable and attractive journey for people accessing public transport and for other users

ii. Reflects Deakin University's ambitions to redevelop and enhance the campus arrival experience, establishing expectations and protecting plans for the future renewal of the precinct.

1e Enhance the Sinnott Street streetscape to create a welcoming entry into the precinct with good amenity and comfort for pedestrians and cyclists.



Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Burwood diagram are represented with a symbol such as: **1x**

Outcome BUW2

An integrated transport network that supports a range of active connections to support public health, linking community infrastructure and key destinations.

Quick, convenient movement of people between public transport access points is supported by well-designed streets and public spaces that facilitate intuitive wayfinding and ease of circulation. Safer, more legible, and attractive cycling and walking connections are provided within the station environs, with links to important locations throughout the broader precinct.

2a Provide a Design that supports Burwood Highway between Elgar Road and Cumming Street as an enhanced and accessible public transport corridor with improved walking and cycling infrastructure, and active edges.

2b Provide multiple crossing points of Burwood Highway that are adequately sized to service large numbers of transport users, allowing for safe and convenient north south pedestrian and cycling movement through the precinct.

2c Ensure public transport stops are well-integrated with the Burwood Highway streetscape to provide safe, convenient and intuitive access from new pedestrian and cycle crossings, and the new public open space as part of the SRL station forecourt.

2d Provide a new bus interchange that balances requirements for good bus access and active interfaces with pedestrian and cycling movements and safety:

i. Along and across Burwood Highway

ii. Accessing Gardiners Creek Reserve

iii. Accessing the SRL station.

2e Provide pedestrian and cycling networks that clearly link into paths along Gardiners Creek, building on recent improvements to the active transport network.

2f Provide walking and cycling routes that connect open spaces with the station public realm and the broader precinct including consideration and coordination with Deakin University's future planning.

2g Provide an elevated pedestrian connection across Burwood Highway that:

i. Provides a high-quality pedestrian experience for all users, that is the optimal route across Burwood Highway

ii. Improves the comfort and safety of pedestrians crossing over Burwood Highway

iii. Contributes to improved north south pedestrian connections with the broader precinct and facilitates connection towards the east (Deakin University) and west (Gardiners Creek Trail)

iv. Optimises opportunities to integrate with future and planned pedestrian networks on the Deakin campus, and future pedestrian connections by others, at both ground and elevated planes

v. Considers opportunities for the integration of vertical travel of the overpass with other built form

vi. Considers risks associated with conflicts between pedestrian, cycle, car and bus movements at Holland Avenue

vii. Provides continuity of movement between the station entry and the overpass

viii. Is legible and clearly expresses the public nature of the link

ix. Is an elegant structure that is sympathetic with the setting and views to Gardiners Creek, and creates a positive visual experience on Burwood Highway during the day and at night

x. Contributes to the activation and casual surveillance of Burwood Highway.

2h Improve the sections of the Gardiners Creek Trail that connect to the north side of Burwood Highway within the Project Land boundary, to meet appropriate design standards.


Photo credit: Dianna Snape

Place-specific requirements

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Place-specific requirements shown on the Burwood diagram are represented with a symbol such as: **1x**

Outcome BUW3

Station environs with a strong connection and positive interface to Gardiners Creek, supporting positive environmental and amenity outcomes.

The station environment is carefully integrated with site topography and incorporates an integrated environmental approach into the design of streets and spaces. The naturalisation of the creek strengthens terrestrial and aquatic habitat corridors to support biodiversity, enhance recreation value and reflect Aboriginal cultural values and themes. The landscape character of the creek corridor is extended into the station environs and views of the creek corridor are maintained. Pedestrian and cycle access to the creek and links to public open space and other destinations within the broader precinct are improved.

3a Provide an interface with Gardiners Creek that:

i. Feels welcoming, inviting and is able to be enjoyed by the public at all times

ii. Is fine grain and delivers numerous opportunities for visual and pedestrian access from the east

iii. Maintains generous and well-presented public access along the entire length of the creek.

3b Enhance the Gardiners Creek corridor and associated parklands including:

i. Naturalisation of the concrete channel waterway and other landscaping improvements focused on the eastern side of Gardiners Creek to improve aesthetic quality, and strengthen environmental quality and performance

ii. Outcomes that consider opportunities for the integration of Aboriginal cultural values and themes developed with the active participation of the Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation

iii. Maximising the retention and integration of existing large canopy native and indigenous and high-quality trees into the Gardiners Creek corridor landscape

iv. Minimising the footprint of surface disturbance to areas of revegetation

v. Prioritising the creation of tree canopy cover along the Gardiners Creek corridor and adjacent parklands

vi. Providing planting to enhance visual amenity, biodiversity and habitat corridor for fauna along the Gardiners Creek corridor and adjacent parklands.

3c Create positive visual connections to the Gardiners Creek corridor from Burwood Highway and from the station entrance area, enhancing the user experience.

3d Provide a leafy green public realm connected to the adjacent Gardiners Creek corridor that extends the tree canopy, landscape and biodiversity values into the station environs, to enhance visual connections, amenity and urban biodiversity and cooling.

3e Provide pedestrian and cycling access to the Gardiners Creek corridor that is connected to the existing and new street network.

3f Enhance function and facilities within the Gardiners Creek landscape to improve the recreation value of the creek corridor and adjacent parklands, and to support its role as an open space link for the community.

3g Provide recreation space that connects to and addresses the Gardiners Creek corridor.

3h Provide open space at or near Sinnott Street that:

i. Is high quality and provides recreation opportunities to support its role as a local community park

ii. Maintains access to the local walking catchment

iii. Enhances landscape and walking connections with nearby parklands and maintains connections to the existing Sinnott Street footbridge.

Place-specific requirements

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For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Burwood diagram are represented with a symbol such as: **1x**

Outcome BUW4

Streets and movement networks that are responsive to, and well-integrated with, the surrounding neighbourhood.

The station environs connect seamlessly to the street structure, facilities and places in surrounding neighbourhoods.

4a Provide a road structure that logically connects into the existing street network at Coppard Street, Sinnott Street and McComas Grove.

4b Extend Sinnott Street north to Burwood Highway to:

i. Create an activated north south street and a new axis for the SRL station environs and broader area

ii. Ensure the design for Sinnott Street balances vehicles access with pedestrian and cycling connectivity.

4c Provide improved pedestrian and cycle crossing at the Highbury Road and Sinnott Street intersection to support walking and cycling.

4d Provide pedestrian and cycling networks that link to Gardiners Creek connections and consider alignment with the street network to its west.

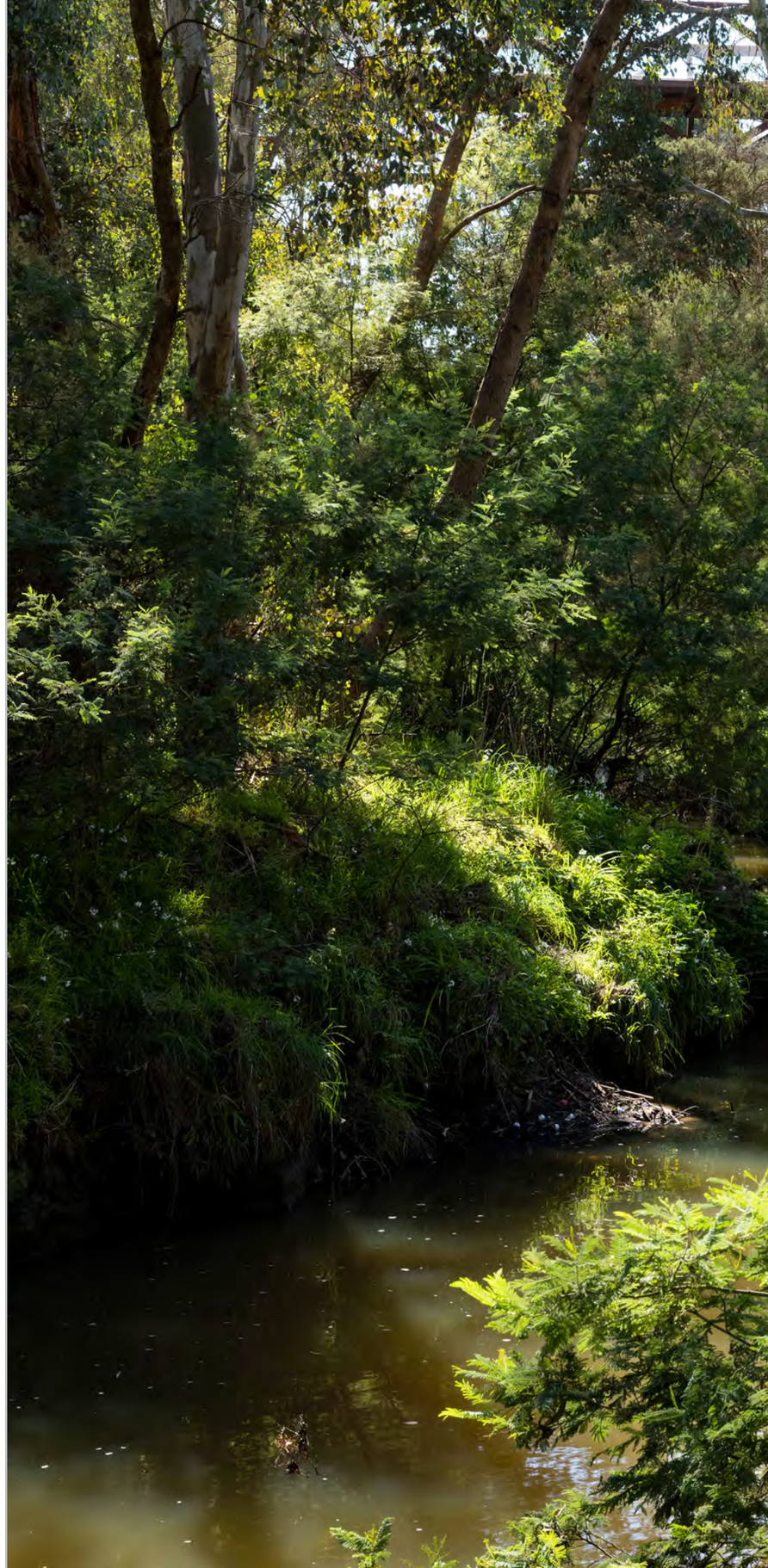
Outcome BUW5

Acknowledgment and celebration of Aboriginal cultural heritage values and local history.

Elements celebrating Aboriginal cultural values and knowledge are integrated within the public realm and enhanced Gardiners Creek landscape. The former Burwood Skyline Drive-in cinema is acknowledged as a notable feature of local history.

5a Integrate interpretation of Indigenous and non-Indigenous heritage within the enhanced Gardiners Creek landscape.

5b Provide a Design that supports the integration of site interpretation initiatives exploring and celebrating the area's previous use as the former Burwood Skyline Drive-In cinema, as part of a heritage interpretation strategy for the Project, building on and enhancing the existing heritage trail and enriching people's experience of the station environs.



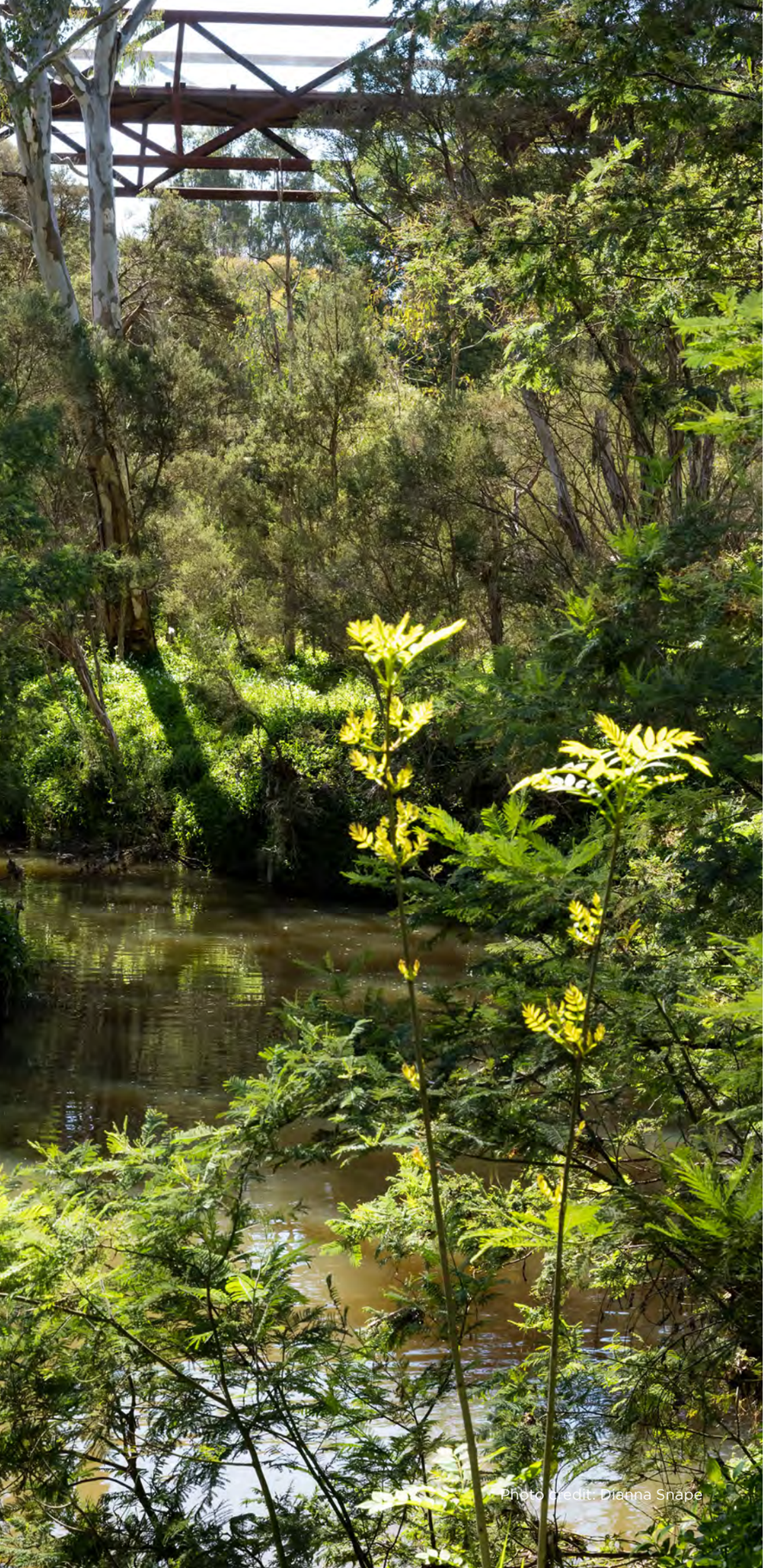


Photo credit: Dianna Snape

Place-specific requirements

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Place-specific requirements shown on the Burwood diagram are represented with a symbol such as: **1x**

Outcome BUW6

A well-designed substation that maximises positive place outcomes for the surrounding area.

The design of the Burwood substation located on the north west corner of Sinnott Street and Highbury Road intersection minimises negative impacts on the character of the area. A strong architectural concept ensures the substation is attractive to people passing by in vehicles while also allowing people walking or cycling next to it feel comfortable and safe.

6a Provide a strong architectural concept that authentically reflects the purpose of the substation.

6b Minimise negative impacts on the character and amenity of the area and on sensitive residential interfaces that overlook the site by providing well-designed built edges, screens and walls:

i. To create a built form interface to Sinnott Street and Highbury Road that is well-considered in scale and articulation

ii. To complement the established streetscapes of the site's residential context

iii. To screen negative views of unsightly elements and service areas

iv. To create an architectural interface that contributes positively to the public realm, and feels comfortable and friendly to people walking next to it

v. That are not reliant on the establishment of plants and landscaping for success.

6c Use materials that respect and complement the existing residential neighbourhood character.

6d Provide a high-quality architectural response to the prominent corner site.

6e Provide landscaping within the project boundary to create an interface with Sinnott Street and Highbury Road that achieves a balance of planted areas and architectural built form that reflects the surrounding neighbourhood landscape character.

6f Ensure the substation design allows for a continuous green streetscape adjacent to the substation site to reflect the treed character of Burwood.

6g Locate maintenance access driveways carefully, to maintain and provide for continuous street tree planting and safe, attractive pedestrian and cycle routes.

6.6
Box Hill

Understanding context

The Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation is the Registered Aboriginal Party for the station environs at Box Hill.*

Box Hill is a Metropolitan Activity Centre, providing a hub of employment, education, health, dining, retail and entertainment uses in Melbourne's east. Box Hill is also a major transport interchange supporting a significant regional catchment of commuters using the 109 tram route, the existing Box Hill railway station and the Box Hill bus interchange servicing 17 bus routes.

Box Hill is anchored by the major retail shopping area at its core. Main Street and Market Street (Box Hill Mall) provide pedestrian-focused public spaces lined by retail shop frontages and eateries. These spaces link into the Box Hill Central shopping centre and its mix of anchor retail outlets, a fresh food market and smaller retail providers. The existing Box Hill railway station is located underneath Box Hill Central, with the entrance inside the shopping centre. A bus interchange is located above the complex. The centre generates significant pedestrian activity in the limited space between the tram terminus, the bus interchange and the existing Box Hill railway station.

Box Hill is experiencing a strong demand for high density living with numerous residential and mixed-use developments of significant size in recent years. This has resulted in a distinctive built form characterised by tall towers around the centre of the commercial area.

Separated from this activity by Whitehorse Road, to the north of the core area is the Box Hill Institute (Nelson Campus), Box Hill Hospital, Epworth Eastern Hospital and smaller complementary health services. These facilities are significant employers that service a wide catchment of Melbourne's eastern suburbs.

Box Hill Gardens is also located to the north. Established in the 1920s, this large multi-purpose park provides valuable amenity to patients, hospital staff and the wider community. The park provides for a range of passive and active recreational uses including a running track (Wrighites Run), exercise stations, sports courts, playgrounds and manicured gardens.

Within Box Hill's core, tree canopy and other greenery is largely limited to the central median dividing Whitehorse Road. However, the amenity and accessibility of the central median is compromised by its location within busy Whitehorse Road and the limited number of existing pedestrian crossing points.

While urban greening and tree canopy cover is relatively low in the core activity centre, outside the central area, lower density neighbourhoods are highly valued by the community for their leafy green character. These neighbourhoods typically comprise detached dwellings and tree-lined streets featuring a mix of mature native and introduced species.

The precinct includes a culturally diverse mix of residents including homeowners approaching the twilight of their careers and middle-aged professionals renting or owning their first home. Box Hill is also home to younger students and blue-collar workers who live in the area but commute for their work.

**In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

Photo credit: Dianna Snape

Box Hill will continue to grow as a Metropolitan Activity Centre and strategic multi-modal transport hub for Melbourne's east. Growth in health and public sector jobs will be supported by continued mixed-use development and high-quality landscaped central areas that are attractive for pedestrians. The precinct will remain a multicultural hub, providing amenity and community infrastructure for its diverse population.

Future state

Recognising and responding to Box Hill's role as the largest Activity Centre within Melbourne's eastern suburbs, the SRL station will build upon the existing public transport network. A walkable environment will be prioritised within the station environs, allowing more people to easily access and enjoy the area.

Whitehorse Road will evolve into a major boulevard and a generous linear park, transforming the centre of Box Hill with a signature public space. This transformation of road space into accessible open space will create a centrally located, leafy green environment for the enjoyment of the growing community, providing place-making and recreation opportunities, and offering a place of respite from the activity of the surrounding commercial area.

Public realm improvements integrating Box Hill Central, Main Street and Market Street, will extend over Whitehorse Road, drawing street activity northwards and allowing traders to capitalise on high foot traffic between SRL and the existing Box Hill railway station, buses and trams. Extending to Box Hill Gardens, a new pedestrian promenade will improve north south connectivity, supporting growth of the health and education area anchored by Box Hill Hospital and Box Hill Institute. On Main Street and Market Street, fine grained building frontages will reflect the retail street tradition of the centre, contributing to a vibrant and activated public realm experience while facilitating intuitive wayfinding to the existing Box Hill railway station within Box Hill Central.

Ample comfortable spaces and varied public realm experiences will be provided for growing residential and employee populations, reflecting Box Hill's status as a Metropolitan Activity Centre, and showcasing its culturally diverse community.

Box Hill will experience a significant increase in total employment through to 2056. Over time the population is expected to increase significantly and also become older on average. Improved options for age-appropriate and accessible transport, housing and services will be required.

Figure 21: Box Hill regional context

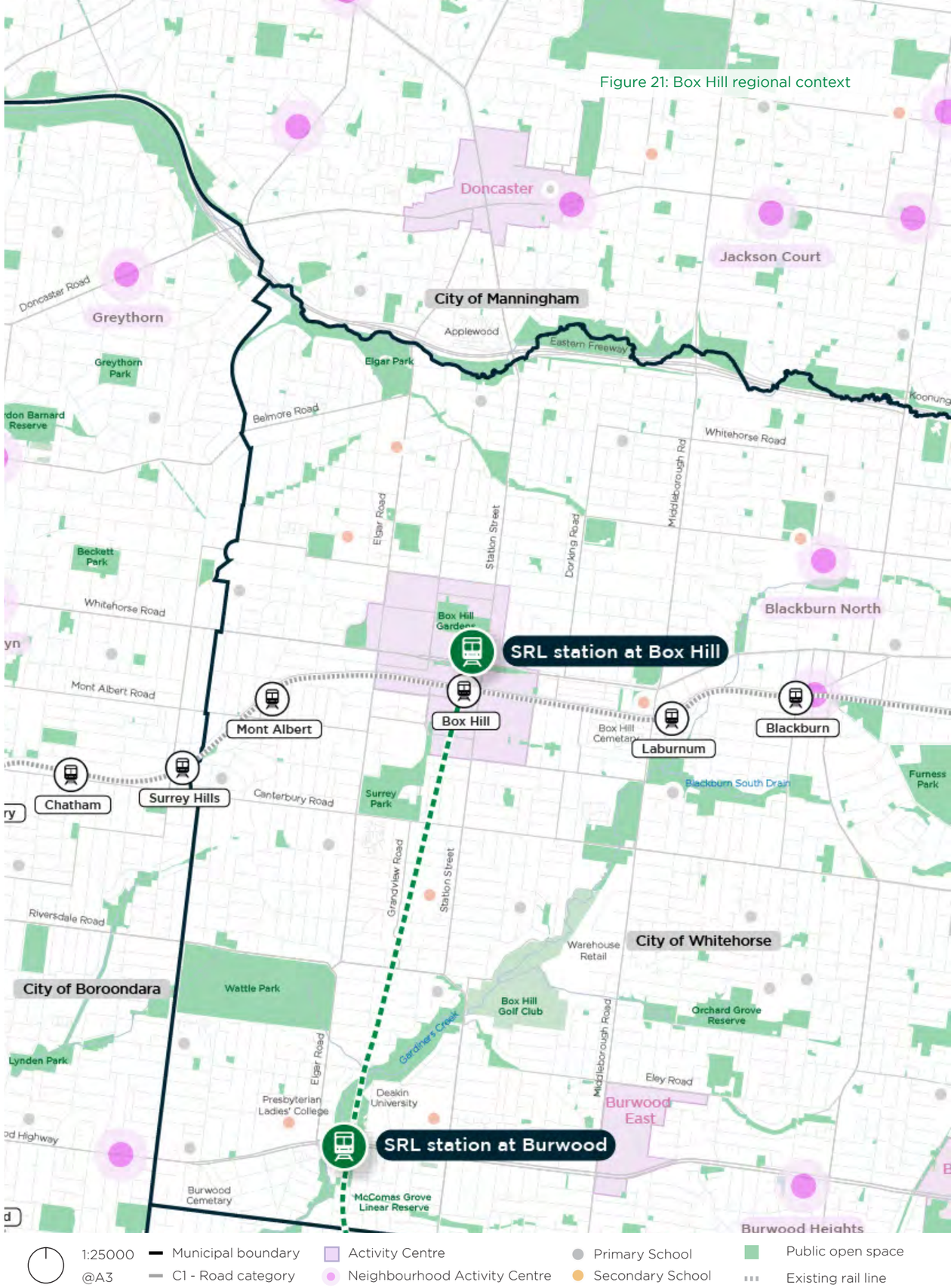

Figure 22: Box Hill place-specific requirements diagram

Legend

- SRL station entrance
- Existing Metro train station
- Existing bus interchange
- Existing bus route
- Potential tram interchange
- Existing tram route
- Key location / publicly accessible space
- Enhanced streetscape
- New / improved crossing
- New / improved pedestrian route
- Potential future pedestrian desire line
- Potential cycle hub location
- Existing cycling route
- New / improved cycling route
- Potential future cycling route (subject to change)
- Existing open space
- Existing location of heritage markers/ monuments
- Project Land
- Approximate station and crossover facility outline (underground)
- 1x Place-specific requirement as described on following page(s)

This diagram is provided to communicate potential urban design moves to support the place-specific requirements outlined in the following pages. It does not represent a design solution nor does it limit a design response.

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Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Box Hill diagram are represented with a symbol such as: **1x**

Outcome BOX1

Whitehorse Road recast as a high amenity boulevard and enhanced linear public space for people in the heart of Box Hill.

Whitehorse Road has been transformed into a memorable space within the Box Hill Activity Centre. It is a vibrant, green, people-focused place that is popular as an everyday destination and a setting for community events. Its character and design reflects on its long history as a formalised public landscape accommodating civic, recreational, commemorative and community functions of importance to Box Hill. The Design maximises public space for people, reduces and reconfigures space dedicated to vehicular traffic, and integrates the existing tram line and a new pedestrian and cycle connection.

1a Create a revitalised Whitehorse Road to provide a significant new public green space that offers respite and creates a community place and destination in its own right that:

i. Has a civic character and a design that relates to and interprets aspects of earlier forms and landscape character of the Whitehorse Road medians, as well as the current culture of Box Hill

ii. Acts as a complementary and/or enhanced events and activation space linking to Market Street and Main Street

iii. Provides a cohesive overall design with interconnected spaces that accommodate a variety of experiences complementing adjacent uses

iv. Considers integrated public art and/or creative works in accordance with the SRL Creative Strategy and as part of an overarching and engaging sensory journey experience that supports Box Hill's contemporary identity as a multicultural hub while also reflecting on its history and heritage

v. Avoids encumbrance of the space that detracts from use as public open space.

1b Reconfigure Whitehorse Road between Nelson Road and Linsley Street, creating a boulevard that prioritises pedestrians, cyclists and public transport, balancing opportunities for public open space and the retention of existing trees, and includes:

i. Consolidated vehicular traffic to the north and optimised public green space outcomes to the south

ii. Adequate public space around signalised pedestrian crossings (existing and proposed) on Whitehorse Road ensuring crossings are well-integrated into the public realm

iii. Generous space for people and a logical network of pedestrian connections supporting desire lines and enhancing east west and north south circulation for pedestrians and cyclists

iv. Appropriate service access to businesses and other properties.

v. Consideration to ensure the potential future extension by others of the existing tram along Whitehorse Road is not precluded.

1c Reconfigure street edges to:

i. Provide generous space to allow for the projected increase in pedestrian movement and to provide shade and greening

ii. Allow for outdoor dining use and other on-street activities on the south side of Whitehorse Road and with the cycle connection located to minimise the number of conflict points with pedestrian movements

iii. Improve amenity for pedestrians on the north side of Whitehorse Road.

Outcome BOX2

A public realm that supports a comfortable, legible and convenient public transport interchange and mode change experience.

Quick, convenient movement of people between public transport access points is supported by well-designed streets and public spaces that facilitate intuitive wayfinding and ease of circulation. An urban space provides a well-designed setting for the tram interchange and a generous space to support a high volume of pedestrian movement.

2a Locate SRL station entrances for convenient access from both sides of Whitehorse Road and to reduce pedestrian congestion of the currently constrained public realm.

2b Provide a design for Whitehorse Road Boulevard that supports ease of pedestrian movement between public transport access points, extending Market Street and providing space for community events.

2c Do not preclude the potential for future upgrades and extension of the existing bus interchange (by others), ensuring the Design supports seamless public realm integration and connections in the future.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
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Outcome BOX3

Station environs that support Box Hill as an established hub of metropolitan significance, provide a well-designed setting for a vibrant public life and enhance engagement with place.

Station environs are well-designed and visually distinctive, defining the heart of Box Hill and reflecting its importance as a popular destination and Metropolitan Activity Centre. Activated streets and spaces provide great amenity required to support people shopping, working and socialising.

Streets and public spaces have generous room for people and are inviting and comfortable to move through and spend time in. A variety of activities including temporary and permanent, creative and placemaking initiatives are accommodated, showcasing Box Hill's vibrant community and inviting people to engage with each other.

3a Provide a cohesive public realm design that:

i. Uses consistent materials to create a distinctive visual identity for the station environs

ii. Supports well-integrated connections and complementary public realm treatments between the station environs and broader precinct.

3b Provide a Design that supports the integration of site interpretation initiatives exploring and celebrating the area's heritage, particularly its history as the commercial and civic centre of Box Hill, as part of a heritage interpretation strategy developed for the Project that enriches people's experience of the station environs.

3c Provide streets and spaces that create welcoming day-time and night-time places throughout the station environs.

3d Provide a public realm with adequate space and infrastructure to support food and beverage and nightlife amenities.

3e Facilitate flexible programming within public spaces that responds to the diverse and changing community by providing:

i. Appropriate services and lighting to support outdoor performances and community events

ii. Controlled vehicle access to public spaces to support flexible and pop-up uses while maintaining access for maintenance and deliveries.

3f Ensure the Design makes provision for service and delivery vehicles while maintaining amenity and access for pedestrians.

3g Provide for and contribute to the creation of active edges to Whitehorse Road, Market Street and Main Street through the upgrade and enhancement of public spaces. Where active edges cannot be provided at the completion of the Project, provide a high standard of presentation and appropriate treatment of interfaces and allowance for future active edges.

3h Provide frontages to streets and public spaces that are consistent with and/or complement the size and diversity of the existing fine grained retail uses, contributing to a comfortable pedestrian experience.

3i Provide upgrades to Market Street and affected areas of Main Street, to achieve high-quality urban spaces and a vibrant public realm experience that:

i. Accommodates increased pedestrian movement and improves pedestrian accessibility and connections

ii. Offsets the location of any infrastructure in the public realm by widening Market Street to maintain capacity for pedestrian circulation and public activity

iii. Enhances amenity and optimises canopy tree shade and other planting for increased comfort

iv. Minimises visual and physical clutter

v. Provides opportunities for people to gather, linger and socialise within the heart of Box Hill.

3j Provide a design for Market Street that integrates and seamlessly connects with Main Street to the south, and the new public space along Whitehorse Road to the north.

3k Provide a public realm design that does not preclude plans by others for the future upgrading or replacing of the Station Street underpass to optimise short and long-term public realm outcomes.

3l Provide enhancements to Box Hill Gardens (within the Project Land boundary) and do not preclude future upgrades (outside the Project Land boundary) in collaboration with stakeholders and in accordance with the Box Hill Gardens Masterplan 2010 that:

i. Contribute to a cohesive design for the gardens as a whole

ii. Support the important role of the gardens as a place of activity and respite

iii. Reflect and incorporates aspects of the established design and character of the gardens

iv. Reinstate and/or provides appropriate replacement recreation facilities

v. Provide clear connections to paths linking to destinations within the precinct.

Photo credit: Dianna Snape

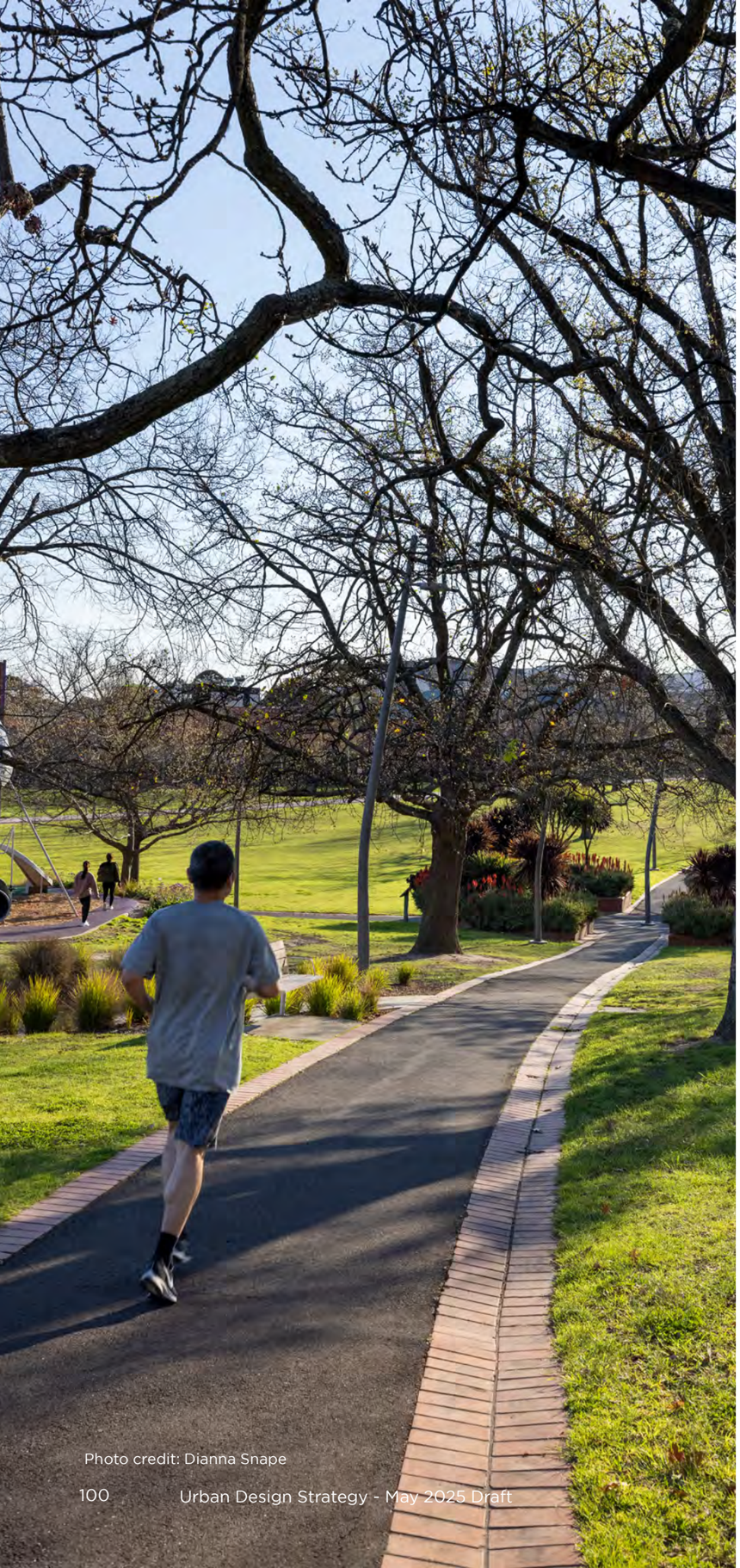


Photo credit: Dianna Snape

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.

For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.

Place-specific requirements shown on the Box Hill diagram are represented with a symbol such as: 1x

Outcome BOX4

Enhanced urban greening and tree canopy within the heart of Box Hill, prioritising the creation of shady, cool connections to key destinations.

On Whitehorse Road, existing established trees are supplemented with new planting reducing the urban heat island effect, and improving amenity and comfort for all users. In other locations throughout the station environs, new canopy street trees and other planting build on existing streetscape vegetation to provide a leafy green heart for Box Hill.

4a Integrate retained trees into the Whitehorse Road boulevard design. Supplement retained trees with new canopy and other planting, to maximise comfort and amenity for pedestrians and cyclists, and to provide separation from vehicle traffic.

4b Provide greening to the north side of Whitehorse Road to complete the streetscape and improve amenity and comfort for pedestrians.

4c Optimise street tree canopy cover and do not limit opportunities for additional trees to be provided within Elland Avenue.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Box Hill diagram are represented with a symbol such as: **1x**

Outcome BOX5

Improved and new connections through the station environs and beyond, linking neighbourhoods and destinations.

The prioritisation of walking, public transport and place is supported with a general reduction in traffic through the provision of alternative routes and mode share changes. New pedestrian and cycle connections are integrated into the design for Whitehorse Road, improving east west permeability throughout the station environs and the broader Activity Centre, and connecting with surrounding neighbourhoods. A new north south pedestrian promenade provides a generous and clear connection from Main Street and Market Street, over Whitehorse Road to Box Hill Gardens.

5a Provide a new north south pedestrian promenade that connects Whitehorse Road to Box Hill Gardens, maximising public realm outcomes and allowing for the creation of active development edges. The pedestrian promenade and associated public spaces:

i. Provide landscaping to enhance urban greening, and canopy trees for pedestrian shade and comfort along the full north south extent while maintaining view lines to Box Hill Gardens

ii. Strengthen wayfinding and landscape and visual connections to Box Hill Gardens

iii. Minimise barriers and transitions that negatively impact the function or experience of the space, limit the activation of built form interfaces, and that sever pedestrian desire lines

iv. Maximise continuous pedestrian access along the full extent of the promenade and into active building frontages and adjacent streetscapes.

5b Ensure the Design of the north south promenade is well-integrated with the Box Hill Gardens providing space and conditions to support healthy and optimal plant health and growth.

5c Ensure the Design integrates future improvements to Irving Avenue in accordance with the Box Hill Gardens Masterplan 2010 recommendations including:

i. Improving visual and physical access to Box Hill Gardens

ii. An east west pedestrian connection that links Box Hill Gardens to the medical and education facilities to the west.

5d Improve the existing signalised crossing at Whitehorse Road / Station Street to support capacity for growth in pedestrian and cyclist movements.

5e Provide a Design that can accommodate the seamless integration of a future at-grade pedestrian and cycle crossing of Station Street linking Main and Bank Street and creating a more inviting connection to surrounding neighbourhoods at all times of the day.

5f Provide improvements to pedestrian amenity, accessibility and connections to the western side of Station Street.

5g Do not preclude the potential for an elevated pedestrian and cycling connection by others across the Belgrave / Lilydale Metro rail line connecting Thurston Street and Nelson Road.

5h Provide a safe and convenient connection to the 'Box Hill to Ringwood C1 Strategic Cycling Corridor'.

Photo credit: Dianna Snape

6.7
Stabling Facility

The Bunurong Land Council Aboriginal Corporation is the Registered Aboriginal Party for the Stabling Facility and surrounding area.*

The site for the Stabling Facility is located on Kingston Road, Heatherton, between SRL stations at Cheltenham and Clayton. The prevailing existing characteristics of the area around the Stabling Facility site are established by the industrial, landfill, open space and agricultural uses of the area including market gardens and hobby farms and commercial uses such as nurseries.

The site for the Stabling Facility site is bounded by Kingston Road to the south and Dingley Bypass to the east. Old Dandenong Road will be closed between Henry Street and Kingston Road.

The 'Chain of Parks' concept, also known as the Sandbelt Parklands, envisages the creation of a network of recreation facilities and connected open spaces across Heatherton and Dingley. Through the conversion of historic land fill sites into public open space and linking these with existing golf courses and parklands, the 'Chain of Parks' aims to create a series of connected open spaces from Karkarook Park to Braeside Park.

The Henry Street Linear Reserve includes the Henry Street Playground and forms the northern boundary of the site featuring established and regenerating native and indigenous trees. The reserve also provides an important cycling and walking connection as part of Kingston's 'Chain of Parks' regional aspiration. Karkarook Park is a significant open space area located less than a kilometre to the north of the Stabling Facility via the trail along the Henry Street Linear Reserve.

The Kingston Walk Linear Reserve forms the western boundary of the site, creating a vegetated interface between the site and the low density single story residential housing located to the west of the reserve. Featuring large native and indigenous canopy trees and a north south walking connection between Kingston Road and the Henry Street Linear Reserve, the linear space provides an important role in linking the open spaces to the north and south.

The Stabling Facility will be designed appropriately and present positively to the local area. Kingston Linear and Henry Street Linear Reserve will be preserved and upgraded, contributing towards local biodiversity and extending pedestrian and cycling connectivity around the site to allow people and landscapes to link with broader open space, recreation and movement networks.

**In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

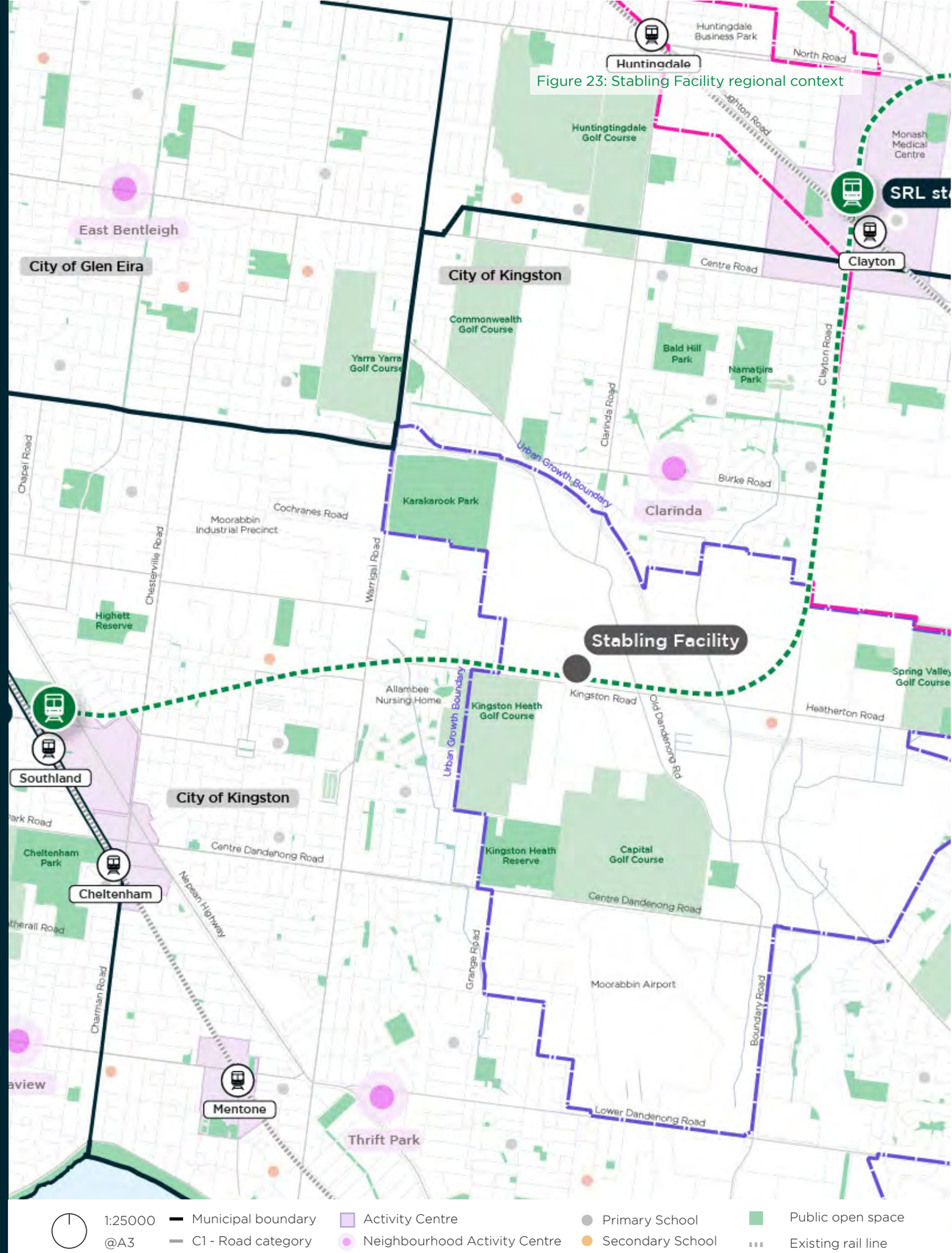


Figure 23: Stabling Facility regional context

Figure 24: Stabling Facility place-specific requirements diagram

Legend

- New / improved pedestrian route
- Potential future pedestrian desire line
- Enhanced streetscape
- New crossing*
- Existing cycling route
- New / improved cycling route
- Potential future cycling route (subject to change)
- Existing bus route
- Existing bus route to be rerouted
- Landscape buffer
- Existing open space
- Project Land
- 1x Place-specific requirement as described on following page(s)

* New crossing location is indicative only and subject to detailed design and consultation with the relevant stakeholders.

This diagram is provided to communicate potential urban design moves to support the place-specific requirements outlined in the following pages. It does not represent a design solution nor does it limit a design response.

0 50M 100M 150M 200M

1:5000 @ A3

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Stabling Facility diagram are represented with a symbol such as: **1x**

Outcome SF1

A Stabling Facility that is well-integrated with the surrounding area and responsive to the emerging 'green' character of the 'Chain of Parks'.

Site infrastructure, plant and equipment associated with the Stabling Facility is carefully sited, and its footprint and visual bulk is minimised. Landform, topography and vegetation is used to address the visual impact and appearance of the Stabling Facility, enhance views and sensitively integrate the facility into the local context.

1a Utilise landform and topography in combination with vegetation to create landscape buffers that optimise screening of buildings and structures, mitigating potential negative impacts of the Stabling Facility.

1b Provide a landscape buffer within the southern site boundary along Kingston Road that:

i. Enhances roadside character and improves the amenity and comfort for users of adjacent paths

ii. Manages negative visual impacts by filtering views towards the Stabling Facility and associated infrastructure from Kingston Road.

1c Maximise opportunities for a landscape buffer within the eastern site boundary along the Dingley Bypass to enhance the landscape character and mitigate views of the Stabling Facility and associated infrastructure.

1d Provide a landscape buffer within the western site boundary, to the immediate east of the Kingston Walk Linear Reserve, to:

i. Mitigate visual impacts on the existing residential area to the west

ii. Optimise and extend the landscape values of the Kingston Walk Linear Reserve.

1e Provide a landscape buffer within the northern site boundary along the Henry Street Linear Reserve to selectively screen rail infrastructure and filter views from existing and future open space. Landscape planting is to complement the existing open space planting.

1f Minimise the extent of fences, barriers and walls located on the site perimeter, designing and optimally locating these within the landscape buffers to secure the site and to:

i. Maximise integration of the Stabling Facility and sensitively respond to the local context and the emerging surrounding parkland landscape character

ii. Maximise opportunities for potential publicly accessible recreational uses

iii. Ensure landscaping adjoins to an adjacent open space and is able to be accessed for maintenance by the ultimate owner.

Outcome SF2

Improved connectivity that responds to future area planning.

Existing paths and links are improved and extended to establish a connected walking, cycling and horse-riding network around the site, integrating with the broader movement network and prioritising safe public access to the future 'Chain of Parks' public open spaces.

2a Provide a north south walking and cycling connection along the Kingston Walk Linear Reserve, aligned to minimise impact on existing trees, formalising current usage and not precluding connections to future public open space to the north, in line with the 'Chain of Parks' concept.

2b Enhance the east west Henry Street Linear Reserve trail for walking, cycling and horse riding, including wayfinding to Kingston Walk Linear Reserve and Karkarook Park, in collaboration with relevant authorities.

2c Provide a quality shared connection along the southern site boundary on Kingston Road that is shaded and comfortable, and includes appropriate pedestrian landings and waiting areas for bus stops.

2d Provide well-designed vehicle entries and vehicular crossing points that provide safe pedestrian and cycle crossing points, do not negatively impact the safety, accessibility and legibility of walking and cycling routes and do not disrupt the continuity of the Green Wedge character setting.

2e Do not preclude the potential for a pedestrian connection (by others) along the western side of the Dingley Bypass, ensuring the Design supports good user experience of the adjacent public realm.

2f Do not preclude the potential future extension of the Henry Street walking and cycling connections to the Dingley Bypass and north to Elder Street South, ensuring the Design supports these future connections and good user experience of the adjacent public realm.

2g Provide a pedestrian and cycling crossing across Kingston Road, between Nicholas Grove and Pietro Road, to improve safety for pedestrians and public transport users.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Stabling Facility diagram are represented with a symbol such as: 1x

Outcome SF3

Demonstrated commitment to maximising environmental and community sustainability outcomes.

Water sensitive urban design (WSUD) techniques are used to strengthen the role of waterways that exist throughout the broader area, achieving a range of community and environmental co-benefits. Tree canopy is maximised to increase the site's potential ecological value, delivering environmental and community health and wellbeing benefits including carbon sequestration; providing habitat; linking biodiversity sites; reducing air, soil and water pollution; and reducing the urban heat island effect.

3a Retain all trees, maximise opportunities for the retention of other vegetation, and supplement planting located within Kingston Walk Linear Reserve and Henry Street Linear Reserve including planting to reinforce landscape buffers within the boundaries of the Stabling Facility.

3b Enhance the recreation, biodiversity and habitat value of the Kingston Walk Linear Reserve.

3c Enhance the interface with the Henry Street Linear Reserve, ensuring that works outside the site are considered in collaboration with relevant authorities to:

i. Enhance biodiversity

ii. Contribute to the mitigation of views toward rail infrastructure, supporting an attractive experience for users of the Henry Street trail and open space.

3d Enhance environmental outcomes and visual amenity by including canopy tree planting across the site where practicable.

3e Provide new, and/or enhance existing landscape corridors and links with appropriate plant species to enhance biodiversity and habitat for fauna, supporting native fauna to move through the landscape. Vegetation species and types, and any other habitat enhancement opportunities are to be developed in accordance with ecological advice.

3f Locate and design drainage and WSUD infrastructure (for example retarding basins, wetlands and permanent water bodies) to:

i. Maximise environmental benefits and opportunities for potential recreational uses

ii. Ensure that drainage lines, flood ways and constructed wetland features are naturalistically incorporated into the landscape.

3g Provide well-designed green spaces on any surplus land:

i. Complementing the 'Chain of Parks'

ii. Maximising opportunities for the integration of any accessible landscaped space within the Stabling Facility site with adjoining reserves and parkland

iii. Providing for community recreation as appropriate and determined in collaboration with key stakeholders.

3h Consider opportunities for the community to view and engage with Stabling activities.

Outcome SF4

Well-designed buildings and structures that make a positive contribution to the local area and mitigate negative impacts.

The siting, design and materials of buildings and structures, reflect the site's function while presenting positively to the local context and are well-designed to mitigate negative impacts for the community, and support the well-being of workers.

4a Provide well-designed buildings, structures and infrastructure elements that:

i. Maximise their integration with the landscape treatment of the site and with the surrounding emerging parkland context

ii. Are designed in response to how they will be viewed from different surrounding contexts, acknowledging that some elements will be of a height that cannot be screened from view by landscape buffer planting and mounding

iii. Are sited to improve passive surveillance of publicly accessible spaces where appropriate

iv. Include green roof structures where appropriate and feasible.

4b Provide portal structures that:

i. Make a positive contribution to the identity of the local area

ii. Mitigate negative visual impacts to the extent practicable on the surrounding context and particularly the residential area to the west

iii. Contribute to a positive experience for users of adjacent public realm and open space and for drivers using adjacent roads.

4c Provide integrated landscape and architectural treatments to enhance views towards the site from the intersection of Dingley Bypass and Kingston Road for road users.

4d Provide noise mitigation measures (where required) that are designed to be sensitive to context and optimise integration of grading and landscape treatments.

6.8 Emergency Support Facility

The Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation is the Registered Aboriginal Party for the Emergency Support Facility and surrounding area.*

The Emergency Support Facility site will be located on High Street Road, Mount Waverley, between the SRL stations at Glen Waverley and Burwood. The site is currently occupied by a hardware store and an associated surface carpark and yard.

The site shares its eastern boundary with a linear drainage reserve located at the corner of High Street Road and Elm Grove. The Elm Grove reserve is grassed and populated with a mix of medium to large native and introduced tree species. Large eucalypts line the outside of the reserve and filter views towards the site from residential dwellings on Elm Grove.

Residential dwellings are located immediately to the west and to the north of the site and are generally detached one and two storey buildings, set back behind well-vegetated front gardens comprising a mix of native shrub and tree species. Well-established street trees on grassed verges contribute to a fairly dense canopy and an overall green streetscape.

The Emergency Support Facility will present an appropriate frontage to High Street Road, and provide an appropriate interface with adjacent residential lots and the Elm Grove reserve. The secure Emergency Support Facility will include an emergency congregation space and provide access for occasional maintenance, operations and emergency vehicles.

** In accordance with the July 2021 determination of the Victorian Aboriginal Heritage Council.*

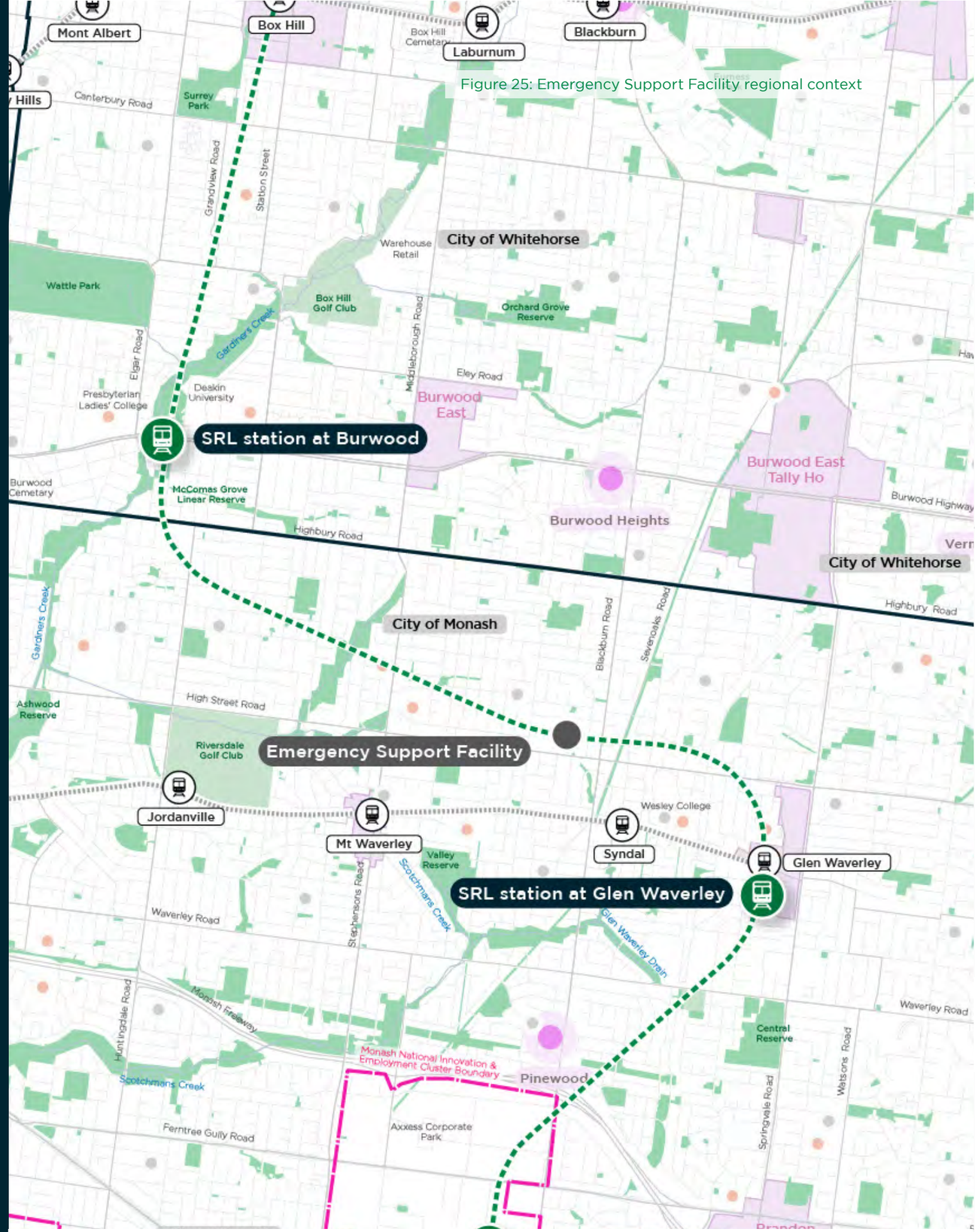
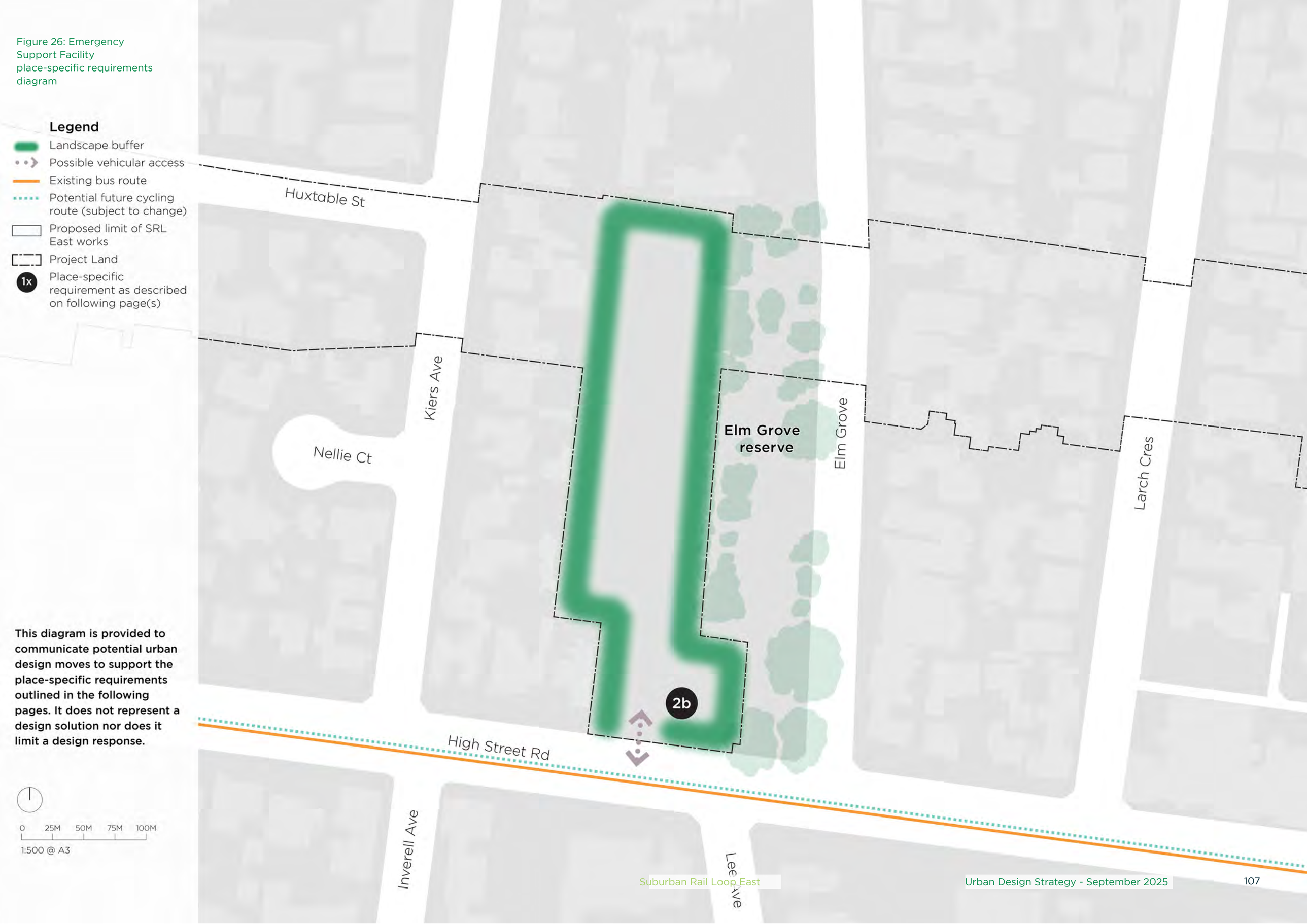


Figure 25: Emergency Support Facility regional context

Figure 26: Emergency Support Facility place-specific requirements diagram



This diagram is provided to communicate potential urban design moves to support the place-specific requirements outlined in the following pages. It does not represent a design solution nor does it limit a design response.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Emergency Support Facility diagram are represented with a symbol such as: **1x**

Outcome ESF1

A Design that maximises positive community outcomes and forms a civic backdrop and interface to the Elm Grove reserve.

Access to the Elm Grove reserve is maintained and its enjoyment by the community enhanced, with buildings and other structures designed to be a backdrop to views through trees.

1a Ensure the Emergency Support Facility is sensitively sited to minimise negative impacts on the Elm Grove reserve and surroundings.

1b Provide an architecturally-considered Design that creates a respectful backdrop to the existing treed reserve and is:

i. Not unduly visually complicated

ii. Not reliant on the establishment of plants and landscaping for success.

1c Complement existing planting within Elm Grove reserve with new planting on the Emergency Support Facility site to:

i. Provide filtered views of the Emergency Support Facility

ii. Provide strategically-located screening to limited locations if required

iii. Provide an attractive visual transition between built elements and the adjacent reserve.

1d Enhance visual and environmental outcomes by maximising canopy tree planting and permeable surfaces within the site where practicable.

1e Ensure the Design does not limit physical and visual access to the Elm Grove reserve by the community.

1f Locate new areas of open space and/or landscaping adjacent to the Elm Grove reserve to improve and expand the areas available for community use.

1g Maximise opportunities for walls and hard stand areas infrequently required for access and parking to be suitable and accessible for use by the community for purposes such as balls games and other recreation.

Outcome ESF2

A facility that is integrated and respectful of the residential surroundings.

Negative visual impacts on the surrounding residential areas are carefully managed. In particular, the view from Elm Grove residences and the adjacent reserve to the east, and the view from existing residences to the north and west. On High Street Road, building setbacks and frontage treatments respect the neighbourhood context.

2a Mitigate negative impacts on the Elm Grove reserve and on adjacent and nearby residents by:

i. Minimising the height of buildings and other structures above ground

ii. Maximising setbacks of buildings, other structures and hard stand areas from shared boundaries

iii. Maximising the incorporation of vegetated screen planting within setbacks from shared boundaries.

2b Provide a Design that addresses High Street Road appropriately through:

i. A building setback that reflects those of the surrounding neighbourhood context

ii. Landscaping within the Project boundary that achieves a balance of planted areas and architectural built form that reflects the surrounding neighbourhood character

iii. A built form interface that contributes positively to public realm and feels comfortable and friendly to people walking next to it.

2c Use materials that are respectful of the residential context and do not dominate surrounding houses and gardens.

Place-specific requirements

The Design must demonstrate achievement of key urban design outcomes through compliance with the place-specific requirements listed below.
For more information refer to the User guide: Urban design outcomes and Place-specific requirements on page 59.
Place-specific requirements shown on the Emergency Support Facility diagram are represented with a symbol such as: 1x

Outcome ESF3

Access and security requirements that are balanced with perceptions of safety.

Buildings, structures and landscape elements are carefully sited and designed to secure the Emergency Support Facility, allow for egress in the unlikely event of an emergency, and provide for occasional access required for emergency support and maintenance activities. An integrated design approach balances these needs with supporting safety and perceptions of safety around the site.

3a Ensure that security walls and fences are:

i. Located sensitively to create comfortable interfaces with adjacent uses

ii. Designed to visually break down their height and length and provide appropriate transition to the pedestrian scale at interfaces with High Street Road and the Elm Grove reserve.

3b Minimise the need for security fencing by using buildings to secure site boundaries.

3c Provide emergency and maintenance access to the site while also maintaining safe and attractive pedestrian and cycle connections on Elm Grove and High Street Road.

3d Integrate the emergency egress path and congregation area into the public realm design.

3e Provide a Design that:

i. Eliminates potential concealment places and areas of low passive surveillance that could encourage undesirable behaviour

ii. Strategically screens any negative views and creates an interface between the private and public realm that protects and enhances personal safety and feelings of personal safety.

7.0 References

The Urban Design Strategy has been informed by a range of national, state, regional and local legislation, policies and other guidance documents and sources including census data and modeling undertaken as part of the SRL Business and Investment Case. These include:

National

- Australian Transport Assessment and Planning Guidelines, Australian Government, 2018
- Creating Places for People, an Urban Design Protocol for Australian Cities, Australian Government, 2011

State

- A Guide to Healthy Parks Healthy People 2017, Parks Victoria
- Aboriginal Heritage Act, 2006 No. 16 of 2006, Version 25 incorporating amendments as at 1 July 2021, Victorian Government
- Absolutely Everyone, State Disability Plan 2017-2020, Victorian Government
- Accessible Public Transport in Victoria, Action Plan 2020-2024, Victorian Government
- Creative State Victoria's First Creative Industries Strategy 2016–2020, Victorian Government
- Good Design + Transport, Issue 05, guideline 2012, Office of the Victorian Government Architect
- Integrated Water Management Framework for Victoria 2017, DELWP
- International Indigenous Design Charter. Protocols for sharing Indigenous knowledge in professional design practice 2018, Deakin University
- Movement & Place in Victoria 2019, Department of Transport
- Movement and Place Framework, Transport for Victoria and VicRoads
- OVGA's Case for Good Design, Office of Victorian Government Architects
- Open Space Strategy for Metropolitan Melbourne 2021, Victorian Government
- Planning and Environment Act 1987, Victoria
- Plan Melbourne 2017–2050 Metropolitan Planning Strategy, Victorian Government
- Plan Melbourne 2017 - 2050 - Addendum 2019, Victorian Government
- Public Transport Guidelines for Land Use Development, Department of Transport, 2008
- SRL Business and Investment Case August 2021, Suburban Rail Loop Authority
- Transport Integration Act 2010, Department of Transport, Victorian Government
- Trees for Cooler and Greener Streetscapes, Guidelines for Streetscape Planning and Design 2019, Department of Environment, Land, Water and Planning
- Urban Design Charter 2009, Victorian Government
- Urban Design Guidelines for Victoria 2017, Department of Environment, Land, Water and Planning
- Victorian Cycling Strategy 2018–28, Transport for Victoria
- Victorian Planning Provisions
- Victoria's Infrastructure Strategy 2021 – 2051, Victorian Government, 2021
- Victoria's 30 Year Infrastructure Strategy, Victorian Government, 2017
- Yarra Strategic Plan, Victorian Government, 2020

Regional - Inner Metro south east

- Monash National Employment and Innovation Cluster Draft Framework Plan 2019, Victorian Planning Authority
- Monash Clayton Campus Masterplan 2017 - 2030, Monash University

Local

Policies, plans, strategies and guidelines from:

- Bayside City Council
- Kingston City Council
- Monash City Council
- Whitehorse City Council

8.0
List of figures

All images Suburban Rail Loop Authority unless otherwise stated.

Figures

Qualitative Benchmark (QB) figures

9.0
Glossary and abbreviations

20-minute neighbourhood

The concept of a 20-minute neighbourhood is about giving Melburnians the ability to 'live locally' – meeting most of their everyday needs within a 20-minute walk, cycle or local public transport trip of their home.

Aboriginal cultural heritage

Aboriginal cultural heritage means Aboriginal places, Aboriginal objects and Aboriginal ancestral remains. (Aboriginal Heritage Act 2006)

Aboriginal knowledge

Aboriginal knowledge refers to Aboriginal intangible heritage and means any knowledge of or expression of Aboriginal tradition, other than Aboriginal cultural heritage, and includes oral traditions, performing arts, stories, rituals, festivals, social practices, craft, visual arts, and environmental and ecological knowledge, but does not include anything that is widely known to the public.*(Aboriginal Heritage Act 2006)*

Active edges / frontages

Building edges/frontages which contain uses that promote activity and interaction with the street.

Active transport

Transport requiring physical activity, typically walking and cycling.

Activity Centres

Areas that provide a focus for services, employment, housing, transport and social interaction. They range in size and intensity of use from smaller neighbourhood centres to major suburban centres and larger metropolitan centres.

Amenity

The pleasant or satisfactory aspects of a location which contribute to its overall character and the enjoyment of residents or visitors. May include access to services and well-designed public spaces.

Ancillary structures

Constructed elements that provide support to the SRL rail functions and may include service buildings or rail-related buildings that do not have a public component, ventilation structures, tunnel portals and dive structures, walls and fences, access stairs, skylights and services.

Australian native flora/fauna

Species that occur naturally within Australia, but originate outside of Victoria.

Benchmarks

Benchmark photographs and text drawn from other projects complement the Project-wide requirements and illustrate the minimum standard of design quality expected for Project elements to meet the requirements in terms of conceptual and detailed design integration, innovation and resolution.

Building mass

Relates to the three dimensional form of a building, including its scale, height, proportions and composition.

Built form

The combination of features of a building, including its style, façade treatments, height and site coverage.

Climate change

A long-term change of the earth's temperature and weather patterns, generally attributed directly or indirectly to human activities such as fossil fuel combustion and vegetation clearing and burning.

Construction phase

Period between the commencement and completion of the SRL East (the Project).

Creative works

Creative works refer to a diverse and constantly evolving array of temporary and permanent manifestations of creative expression from disciplines such as visual arts, publishing, architecture, multimedia, music, game development, graphic design, fashion, filmmaking, performing arts, comedy and craft.

Creek corridor

The area immediately adjacent to the waterway, including the waterway (bed and banks), riparian zones and adjacent open space.

Cycle hub

Is a facility integrated into built form and includes a large number of cycle parks with complementary provisions including but not limited to water fountains and bike repair stations.

C1 Strategic Cycling Corridor

Primary routes that provide a core network of Strategic Cycling Corridors that connect places of state significance within metropolitan Melbourne.

Embodied energy

Is the energy consumed by all of the processes associated with the production of a building, from the mining and processing of natural resources to manufacturing, transport and product delivery.

Environment Effects Statement (EES)

The Environment Effects Statement (EES) is a detailed assessment of the environmental impacts during construction delivery and operational phases of SRL, including mitigation measures and environmental performance requirements. The EES process is the most extensive level of formal planning and environmental assessment available in Victoria. The Suburban Rail Loop Ministerial Guidelines for Assessment of Environmental Effects (September 2020) set out the guidelines for assessment of environmental effects of the Project. After completion of the EES, public exhibition and an inquiry hearing, the Minister for Planning prepares an assessment on the EES based on EES documents, public submissions, the response to submissions and any inquiry report. The EES is not an approval process itself, rather it enables statutory decision-makers to make decisions about whether a project with potentially significant environmental effects should proceed.

Emergency Support Facility

A location where ventilation of the rail tunnel occurs and emergency access, passenger egress and congregation, and car parking is provided.

Future development sites

Sites where future development is proposed on land surplus to SRL East operations. These sites are not subject to Project approvals under the Planning and Environment Act 1987 and would undergo separate assessment and approvals. Future development sites may be adjacent or over SRL stations and station buildings.

First and last mile

The beginning and end of a user's trip made primarily by public transport. An example being the walk to and from a tram stop.

Fine grain

An urban environment with human scale spaces, mixed uses, relatively narrow street frontages and through block links, to foster diverse activities and walkability.

Green infrastructure

Green infrastructure is the network of natural and built landscape assets, including green spaces and water systems within and between settlements. Individual components of this environmental network, such as gardens, parks, recreation areas, highway verges and waterways, are sometimes referred to as green infrastructure assets. (Australian Standard 5334-2013 : Climate change adaptation for settlements and infrastructure - A risk based approach). Green infrastructure is also referred to as 'blue-green infrastructure' or 'living infrastructure'.

Health and education precincts

Locations where health and/or education services are clustered together to improve access to integrated service provision, encourage synergies between complementary activities, support development of the health and education workforce, and deliver economic benefits such as innovation and job creation.

Heritage value

Heritage value may refer to physical fabric that has formal recognition but may also encompass intangible values.

High Street

A function of an activity centre, where vitality and activity are created by orienting uses towards the street, and ensuring that the primary address of all retail stores is the street. This would normally be a connector street rather than an arterial road.

Integrated Design

Integrated design is the outcome of a multi-disciplinary approach with the input, collaboration and coordination of specialists in many different areas including planning, architecture, engineering, heritage, user-centric design, sustainability, land use planning and landscape architecture, amongst others.

Integrated water management (IWM)

An approach to planning that brings together all facets of the water cycle including sewage management, water supply, stormwater management and water treatment, ensuring environmental, economic and social benefits. (Plan Melbourne)

Indigenous flora/fauna

Naturally occurring plants and animals within the locale.

Introduced flora/fauna

Species that originate outside of Australia.

Key urban design outcomes

Key urban design outcomes support the realisation of urban design principles and objectives in local places.

Legibility / legible (place)

Places that people can easily understand and find their way around.

Major Activity Centres

Suburban centres that provide access to a wide range of goods and services. They have different attributes and provide different functions, with some serving larger subregional catchments. Plan Melbourne identifies 121 major activity centres.

Mid-block connection

A pedestrian connection made through a street block, preferable open to the sky.

Mixed use

A mixture of different land uses such as retail, commercial and residential in the same location or building.

Multi-modal transport hub

A place where passengers access, or interchange between, different modes of transport including private vehicles, public transport, walking and cycling, and where good connections are provided between different modes.

National employment and innovation clusters (NEICs)

Designated concentrations of employment distinguished by a strong core of nationally significant knowledge sector businesses and institutions that make a major contribution to the national economy and Melbourne's positioning in the global economy.

Native flora

Plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses as per the definition included in the Victorian Planning Provisions.

Landscape buffer

Low planting in combination with tall plants and trees located to mitigate negative impacts, filter and enhance views. Often used in combination with topography or mounding to maximise effectiveness.

Open space

Land that provides outdoor recreation, leisure and/or environmental benefits and/or visual amenity.

People-centred

Comfortable places for people, less dominated by vehicle traffic.

Permeable places

Permeable places (such as neighbourhoods, city blocks, buildings and spaces) allow people to move through them freely, usually in reference to pedestrian and bicycle access.

Permeable surfaces

Permeable surfaces are soils, paving or other ground surfaces that allow rainwater and oxygen to penetrate into the soil below.

Performance-based requirements

Requirements setting out functions to be supported and/or other project outcomes without prescribing how to achieve those outcomes. They may be qualitative (measurable), qualitative, or both.

Place-specific requirements

Place-specific requirements are contextually responsive requirements that communicate how the Design is informed and evaluated in local places.

Principal Pedestrian Network (PPN)

A designated mapped network of routes which support walking trips into and around key destinations such as activity centres, schools and transport nodes.

Precinct

Refer to SRL precinct in this glossary.

Private open space

An outdoor area of a building or land for the exclusive use of the occupants.

Project Design (the Design)

The design for Suburban Rail Loop East.

Project Land

The Project Land is the land described on maps to which an incorporated document applies to facilitate the delivery of the Project through a Planning Scheme Amendment.

Project-wide requirements

Project-wide requirements are performance-based and communicate the outcomes required to achieve the urban design principles and objectives.

Proposed limit of SRL East works

The area within which the final SRL East scope of works would be contained.

Provide

Deliver outcome as described at the completion of the Project unless otherwise stated.

Public spaces / public realm

Incorporates all areas freely accessible to the public, including open spaces, parks, plazas, streets and laneways.

Public transport interchange

Places where people can access or change between multiple public transport routes and modes. For example, between train and bus or a multi-route bus station at a major activity centre.

Redevelopment phase

The period between the completion of the Project and the progressive future development of the precinct.

Registered Aboriginal Party (RAP)

Registered Aboriginal Party means a body that is registered under Part 10 of the Aboriginal Heritage Act 2006.

Resilient / resilience

The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change.

Safer design

Specific public space design responses aimed at promoting personal safety and reducing people's fear of and vulnerability to crime. Design actions focus on improving safety in places by increasing informal surveillance and community usage of public spaces, reducing opportunities for crime and antisocial behaviour, and creating connected and integrated streets and public places.

Setback

The minimum distance from any allotment boundary to a building.

Shocks

Large-scale high impact events and catastrophes such as human-caused and natural disasters. Example shocks could include: cyber-attack; digital network failure; terrorist attack; war and conflict, collapse of financial systems; natural disasters, widespread pandemics and/or diseases.

Shore lining

People who are blind or vision impaired use what is known as 'shore lining' to navigate. Features such as building lines or walls, edges of formed footpaths and fences are all used for orientation along a footpath.

Siting

Location relative to other built form and natural elements and adjacent uses.

Sleeving

Comprises the positioning of active building uses between inactive buildings (such as those housing infrastructure or services) and the public realm to achieve good public realm presentation, amenity and perceptions of safety.

SRL

Suburban Rail Loop, an orbital rail loop connecting Melbourne's middle suburbs stretching from Cheltenham to Werribee, together with a series of integrated initiatives to create value and improve the precincts around the new stations.

SRL precinct

The broader precincts enabled by the Project, typically around a 1600m station catchment.

Suburban Rail Loop Authority (SRLA)

Administrative Office of Department of Transport, responsible for the planning and delivery of SRL on behalf of the Victorian Government.

Suburban Rail Loop (SRL) East (the Project)

The first section of SRL to be delivered between Cheltenham and Box Hill.

Stabling Facility

The Stabling Facility includes stabling and maintenance for all trains on SRL East, an operational control centre and associated facilities such as a train wash and electrical substation.

Stationary activity

Activities by pedestrians that involve extended stays within a space, such as sitting and eating, rather than walking through.

Station environs

The area around the SRL stations including forecourts at station entrances, public spaces and interchanges as contained within the proposed limit of SRL East works.

Traditional Owner

A person is a Traditional Owner of an area if—

(a) the person is an Aboriginal person with particular knowledge about traditions, observances, customs or beliefs associated with the area; and

(b) the person—

(i) has responsibility under Aboriginal tradition for significant Aboriginal places located in, or significant Aboriginal objects originating from, the area; or

(ii) is a member of a family or clan group that is recognised as having responsibility under Aboriginal tradition for significant Aboriginal places located in, or significant Aboriginal objects originating from, the area. (Aboriginal Heritage Act 2006)

Structure plan / Structure planning

A plan for implementing a framework or vision for a precinct. It may include proposed land zonings and building controls, plans for infrastructure provision, proposed development contributions, strategies for addressing issues such as drainage, and nominated sites for more detailed master planning.

Substation

A location where the transformation and/or switching of electricity takes place.

Transit Oriented Development (TOD)

Compact, walkable, mixed-use communities centred on high-quality public transport systems. Transit-oriented development assists in addressing the growing problems of climate change and global energy security by creating dense, walkable communities that greatly reduce the need for driving and energy consumption.

Transport super hub

A multi-modal transport hub which also provides interchange with regional rail services.

Tunnel portal

Rail tunnel portals at either side of the Stabling Facility which comprise dive structures and a tunnel portal at the interface with the rail tunnels.

Underpass

An underpass is a passage below a structure connecting two outside areas. They are commonly created by cut and cover construction methods. An underpass is a solution used commonly to avoid at-grade crossings of pedestrians and cyclists with modes of transport such as road and rail.

User-centric design

User-centric design is based upon an explicit understanding of users, tasks, and environments; is driven and refined by user-centred evaluation; and addresses the whole user experience. The process involves users throughout the design and development process, is iterative and includes multi-disciplinary skills and perspectives. Unearthing articulated and unarticulated needs in people enables us to design in response to these needs – it helps create sustainable outcomes and mitigate risk.

Urban design objectives

Urban design objectives describe what is required to align with the urban design principles.

Urban design principles

Urban design principles outline the expected results of good urban design.

Urban Design Strategy

Refers to this document, Draft Urban Design Strategy Suburban Rail Loop East.

Urban forest

All of the trees and other vegetation in a city as well as the soil and water that supports it.

Urban heat island effect

When the built environment absorbs, traps, and in some cases directly emits heat, causing urban areas to be significantly warmer than surrounding non-urban areas.

Urban renewal

Refers to the large-scale restoration and/or redevelopment of under-utilised urban areas.

Walkability

The degree to which an environment supports walking as a transport mode, for instance by providing frequent, safe and attractive paths that connect common trip origins and destinations. See 20-minute neighbourhood.

Water Sensitive Urban Design (WSUD)

Integrating the urban water cycle into urban design to minimise environmental damage and improve recreational and aesthetic outcomes. WSUD includes the use of passive irrigation techniques, and the incorporation of WSUD infrastructure such as swales, bio-filtration systems (rain gardens), permeable paving, and wetlands into the Design.

Wayfinding

The process of navigating to a destination. It is about knowing where you are, where you want to go and how to get there from where you are.