SUBURBAN RAIL LOOP EAST

SRL East Draft Structure Plan – Clayton

Urban Design Report

More Homes For Victorians

VICTORIA State Government

SRL East Draft Structure Plan

Urban Design Report

Clayton

Technical Report R.2

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This document is based on the information available, and the assumptions made, as at the date of the document. For further information, please refer to the assumptions, limitations and uncertainties set out in the methodology section of this document.

This document should be read in full and no excerpts are to be taken as representative of the findings.

Contents

This document is to be read in conjunction with:

SRL East Structure Plan - Urban Design Report - Attachment A: Supporting Research

SRL East Structure Plan - Urban Design Report - Attachment B: Gehl Public Space and Life study

SRL East Structure Plan - Urban Design Report - Attachment C: Assessment of Solar Access to the Public Realm

Executive summary

Suburban Rail Loop (SRL) East is a city and state-shaping project that will transform Victoria's public transport system and support vibrant suburbs across Melbourne. Realised over decades, SRL will deliver sustained job creation and investment in Melbourne's already thriving middle suburbs, leading to increased demand for floorspace.

Draft Structure Plans (Structure Plans) are being prepared for the neighbourhoods surrounding the new underground stations at Box Hill, Burwood, Glen Waverley, Monash, Clayton and Cheltenham.

The Structure Plans will set a Vision and framework to guide growth and change in each neighbourhood, while preserving valued existing character attributes and ensuring high quality environments.

This Urban Design Report will inform the development of the Structure Plan for Clayton.

Recommendations

This report sets out recommendations relating to urban design to consider when developing the Structure Plans, with the objective to achieve the Vision for Clayton and the SRL Urban Design Principles and Objectives. This includes reconciling the provision of growth with the creation of high quality amenity, defining the attributes of each neighbourhood that will deliver diverse opportunities, and identifying the public realm interventions necessary to create a well connected, comfortable and welcoming public realm.

The recommendations are organised around three major urban design components - public realm, urban form and built form.

A set of eight design directions were developed to guide the recommendations:

- Design Direction 1: Ensure streets are inviting places that support community life
- Design Direction 2: Promote active transport access
- Design Direction 3: Foster resilient urban environments
- Design Direction 4: Facilitate outdoor recreation
- Design Direction 5: Provide for growth in a form that delivers high amenity environments
- Design Direction 6: Establish diverse, liveable and productive neighbourhoods
- Design Direction 7: Support an inviting public realm
- Design Direction 8: Ensure high quality and responsive built form.

Each design direction provides a set of strategies to inform how the design directions can be achieved in the Structure Plan Area.

The **public realm strategies** seek to deliver an environment which invites people to walk, particularly to key destinations such as public transport, activity centres, major employment areas and large open spaces, and which provides outdoor amenity to support higher-density living and working. The initiatives include new links where there is a gap in walkability or general permeability, and new open spaces where a gap in provision has been identified. Additionally, the strategies advocate for a street and open space system with an enhanced environmental performance, creating climate resilient streets and spaces.

The **urban form strategies** seek to deliver higher-density and high-quality development for living and working in response to the increased accessibility brought about by the SRL, while also contributing to a high-quality public realm. The Structure Plan Area comprises a collection of places, each of which has distinct attributes and a distinct desired land use function. The strategies promote different forms of development in each place that will capitalise on its attributes and support its desired land use function, reinforcing their diversity and individual identity and sense of place.

The different place types include:

- A central core of well-spaced towers providing for high-density mixed-use activity, complemented by pedestrian-favoured promenades and urban spaces that support street life and events
- Grand boulevards and avenues with moderately-tall and uniform built form to capitalise on their public transport accessibility and to create a well-framed public realm, complemented by broad footpaths and formal rows of mature trees
- Mixed-use areas comprising medium-rise, adaptable buildings that create a continuous, activated street wall behind small, landscaped setbacks
- Residential neighbourhoods developed with low-medium rise apartment buildings in garden settings and leafy streets, and dissected by 'green streets' that connect them to key destinations.

(These places differ from the Structure Plan neighbourhoods, which are informed by a broader range of considerations.)

The **built form strategies** seek to deliver a vibrant public realm, a high standard of on-site amenity and environmentally responsive built form. A 'mid-rise' scale of development is generally recommended because it provides for growth in a form that delivers high amenity environments by maintaining a relatively-open streetscape and a sense of openness between buildings, enabling solar access and sky views. Mid-rise buildings also represent best practice across a range of functional, contextual, social and environmental criteria. The varied forms of mid-rise development recommended will deliver a diverse range of accommodation types, suitable for the anticipated land uses and household types, and a diverse visual experience. Building setbacks are recommended to enable increased tree canopy cover, which will help to mitigate the urban heat island effect, offer access to nature, bolster biodiversity and facilitate natural stormwater management.

The Vision for Clayton outlines the long-term aspiration for the precinct including the Structure Plan Area.

The Vision for Clayton:

Clayton will be a benchmark for inclusive renewal, where diverse communities can live together and the worldleading health hub will deliver exceptional care.

Figure A: View of Clayton elevated rail line

Public realm outcomes

Applying the public realm design directions and strategies in this report will achieve the public realm outcomes shown in Figure B.

Clayton's public realm is recommended to be anchored by a highly pedestrianised and activated core along Clayton Road, leveraging the established 'high street' character and extending north to the Monash Health Precinct, with high-quality public realm, including greening, to support activated street frontages.

A comprehensive description of the design directions and strategies is provided in Section 3. The actions needed to realise these strategies are detailed in Section 6.

Figure B: Public realm outcomes

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Highly pedestrianised and activated core
- Network of green and public spaces
- Pedestrian ecological green loops and linkages
- Tree lined avenues
- Fine-grain network of pedestrian linkages
- Key pedestrian links to Monash Structure Plan Area

Urban form and built form outcomes

Applying the urban form and built form design directions and strategies in this report will achieve the urban form outcomes shown in Figure C. A comprehensive description of the design directions and strategies is provided in Section 4.

The built form strategies needed to support an inviting public realm and shape high quality and responsive development are identified in Section 5.

The actions needed to realise these strategies are detailed in Section 6.

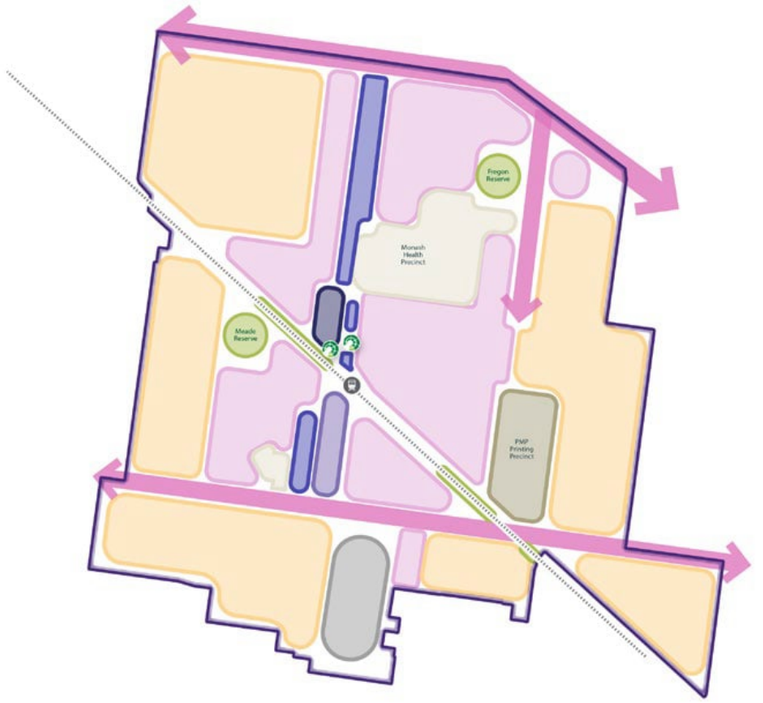

Figure C: Urban form outcomes

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Central Core
- Central Flanks
- Main Streets
- Key Movement Corridors
- Urban Neighbourhood
- Residential Neighbourhood
- Public Open Space
- Enterprise Neighbourhoods
- Civic Areas: Monash Health Precinct and Clayton Community Centre
- Recently Approved Development Plan

1 Introduction

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1.1 Introduction

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

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

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

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

1.2 Purpose of this report

This report will inform the development of the Draft Structure Plan (Structure Plan) to guide land use planning and development in the Clayton SRL neighbourhood.

It describes the existing public realm and urban design character of the Structure Plan Area, and identifies issues and opportunities relating to its development.

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

1.3 Structure planning

Structure Plans have been prepared for defined areas surrounding the new SRL East stations to help deliver the Vision developed for each SRL East neighbourhood.

The Structure Plans cover defined Structure Plan Areas that can support the most growth and change. These areas cover a walkable catchment that extends from the SRL station entrances. Additional places are included within each defined area as required to make planning guidance more robust and effective, and to align with each community's aspirations and current and future needs.

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

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

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

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

1.4 Structure Plan Area

The Structure Plan Area is the area subject to structure planning, that will undergo development to accommodate the projected population and jobs growth for the Clayton Structure Plan Area by 2041

The Structure Plan Area covers a defined area around the SRL station that can support the most growth and change. The area covers a walkable catchment that extends from the SRL station entrance.

The Clayton Structure Plan Area is generally bordered by North Road and Dandenong Road to the north, Buckland Street to the east, Ormond Road to the west and Murdock Street to the south.

It is focused on the existing Clayton Station, on the diagonal east-west alignment of the Cranbourne / Pakenham rail line providing services to and from central Melbourne, and is also bisected by north-south alignment of Clayton Road.

The Clayton Structure Plan Area is shown in Figure 1.4.

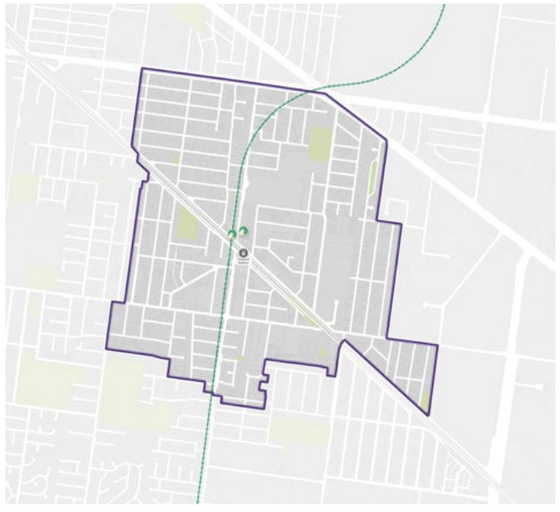


Figure 1.4: Clayton Structure Plan Area

1.5 Methodology

The methodology for the urban design assessment involved the following steps:

- A Study Area for the assessment was identified. For this assessment, the Study Area comprised the SRL Clayton Structure Plan Area, surrounding the station where the most change and development will occur
- Legislation, polices and other documents relevant to the assessment were reviewed. This included:
  - National, state and local government policies, legislation, strategies and guidelines relevant to the affected area
  - SRL East policy and strategies including: SRL East Precinct Visions, SRL East Urban Design Framework, SRL Precinct Development Framework, and SRL East Urban Design Strategy*
  - The community and stakeholder engagement
  - Technical assessments undertaken, including studies on housing, land use, economics, housing, retail, transport, open space, community infrastructure, flooding and water management, aviation, ecology and arboriculture, sustainability and climate response.
- Research was conducted into forms of higher-density development and designs for streets and open spaces in higher-density environments
- Urban design context and background analysis, and the identification of issues and opportunities. This included a desk top review and site visits
- Testing of solar access in the public realm and private properties adjoining development
- Based on the assessment, recommendations were developed for public realm, urban form and built form.
- Consideration of previous consultation undertaken for the feasibility, design development and environmental and planning approval phases of the SRL project, and engagement undertaken through the development of the Structure Plans
- The urban design peer review and advice was sought on the recommendations made in this report.

** While the SRL East Urban Design Strategy was only developed to guide the use and development of the SRL Rail and Infrastructure Project, this document seeks to ensure that the urban design strategies for the broader Structure Plan Area align, respond and build-on the SRL East Urban Design Strategy.*

1.6 Recommendations

The report outlines the basis for the recommended urban design strategies and initiatives. These are organised around:

A **Public Realm Framework**, **design Directions** and **strategies** that seek to deliver an environment which invites people to walk, particularly to key destinations such as public transport, activity centres and major open space areas, and which provides outdoor amenity to support higher-density living and working. This includes recommendations for:

- New streets, lanes and pedestrian links to provide convenient walking routes throughout the Structure Plan Area
- Improvements to existing streets, lanes and pedestrian links based on their role in the movement network, to support their appeal and safety for pedestrians, and social activity
- New and upgraded open spaces to provide for the recreation needs of the future community.

An **Urban Form Framework, design directions and strategies** that seek to deliver create a range of distinct, higher-density neighbourhoods and high-quality development for living and working in response to the increased accessibility brought about by the SRL and the land uses sought in each area, while also contributing to a high quality public realm. This includes recommendations for:

- The types, and forms intensity and land use of new buildings in each part of the Structure Plan Area
- Specific locations within each area where greater or lesser building scale is appropriate. The further design of key interfaces between built form and public realm.

A **Built Form Framework, design Directions and strategies** that seek to ensure high quality development for living and working, and to contribute to high quality public realm amenity. This includes recommendations for:

- The design of buildings where they address the public realm
- The massing of built form at its interface with neighbouring properties
- On-site landscaping.

Outcomes that illustrate how the public realm, urban form and built form strategies can be delivered in each Place Type within the Structure Plan Area.

1.7 Report structure

Section 1. Introduction
Provides a brief overview of SRL and the purpose, method, recommendations, scope and structure of the Structure Plan Urban Design Report.

Section 2. Context
Outlines the context for the urban design recommendations, including the strategic context, SRL urban design principles and objectives, the urban context of the Structure Plan Area and the Vision.

Section 3. Public realm
Sets out a Public Realm Framework to support the achievement of the Vision, including a summary of the underpinning public realm analysis, and proposed future public realm and open space network.

Section 4. Urban form
Sets out an Urban Form Framework to support the achievement of the Vision, including a summary of the underpinning analysis and proposed future urban form pattern.

Section 5. Built form
Sets out a Built Form Framework that identifies the recommended built form outcomes.

Section 6. Outcomes
Brings together and elaborates on the public realm and built form outcomes recommended by the Public Realm, Urban Form and Built Form Frameworks for individual places within the Structure Plan Area.

Section 7. Recommendations summary
Summarises the urban design initiatives recommended to be incorporated in the Structure Plan.

Appendices
Appendix A. *Provides an analysis of the existing public realm and urban design characteristics in the Structure Plan Area.*

Appendix B. *Provides an analysis of development conditions in the Structure Plan Area.*

Appendix C. *Provides an analysis of the street network and public realm quality.*

Supporting Documents

Attachment A: Urban Design Supporting Research
Summarises the research undertaken on:

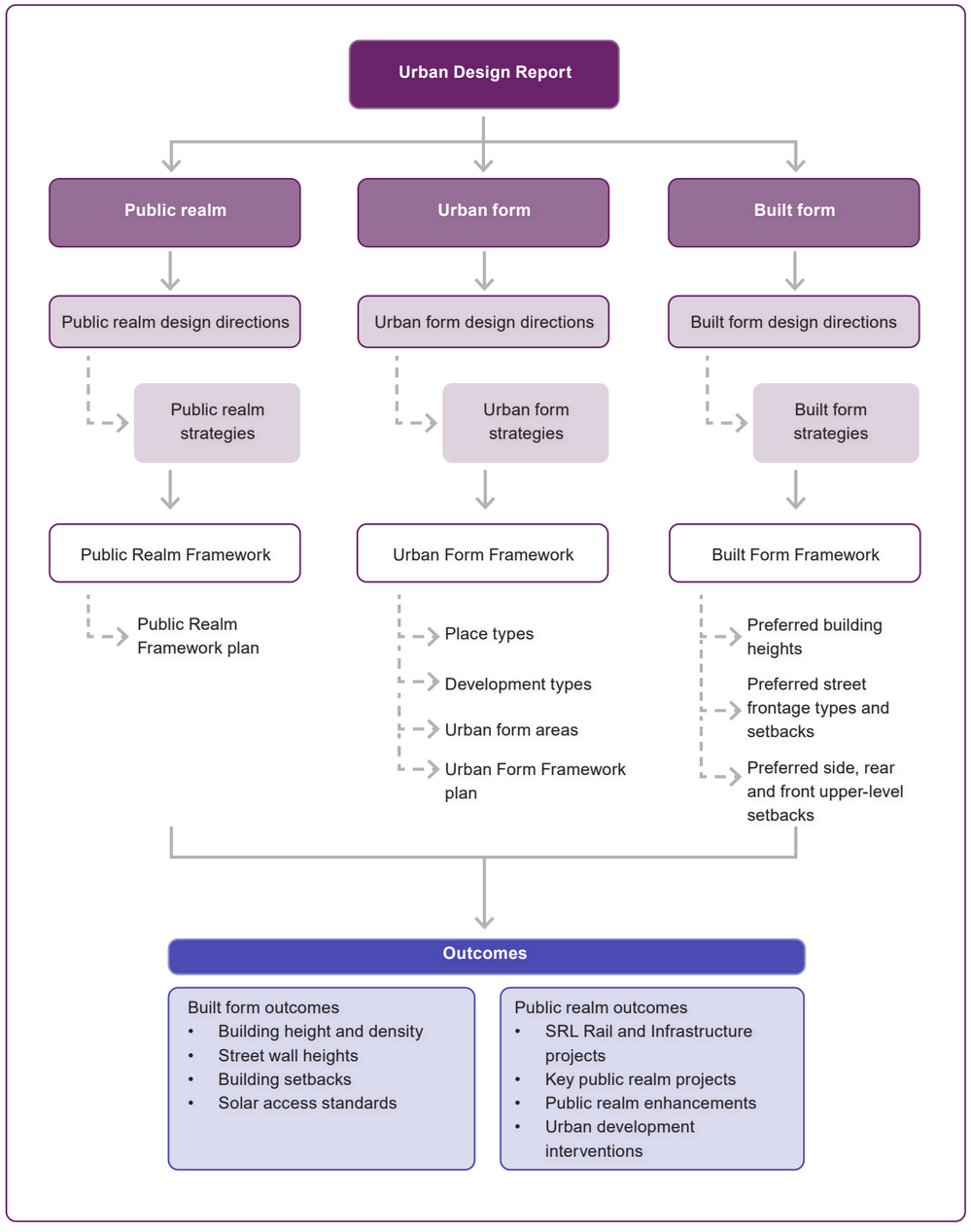
Part 01. *Urban development typologies*

Part 02. *Public realm typologies*

Attachment B: Gehl Public space and Life Study
Supporting urban design research, containing the Public Space and Life Study produced by Gehl.

Attachment C: Assessment of solar access to public realm
Summarises tests undertaken of solar access to public realm.

1.8 How to use this report



1.9 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 the 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 urban design requires good processes and guidance that optimise outcomes and value for money. High-quality design is authentic, contextual and site-specific.

Density Done Well

Density can mean different things, in different places. Each location requires consideration of the scale of density appropriate to its specific local context and future role. Different scales of density bring different benefits and present different challenges. Good urban design can help address these challenges, to 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.

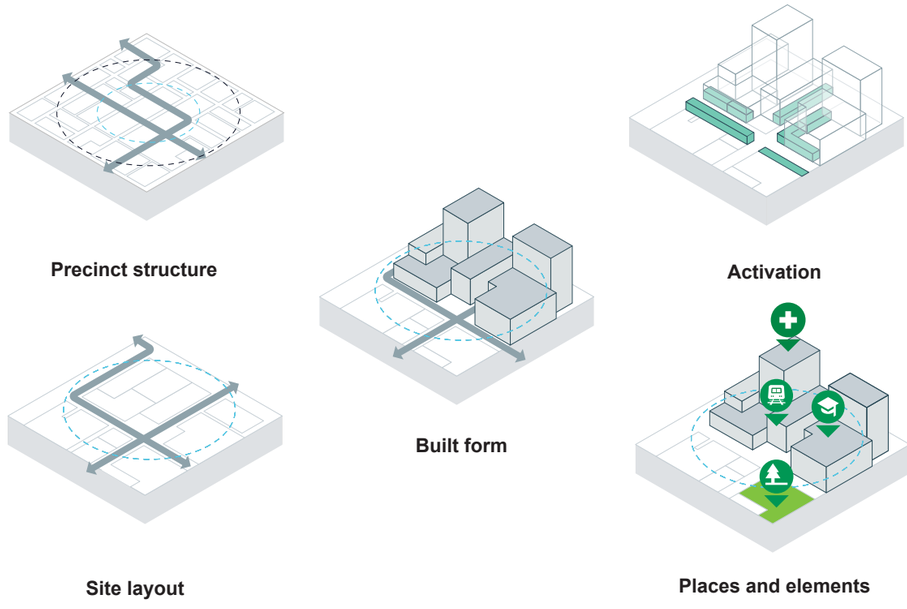


Figure 1.5: How urban design works across different scales of a project

2 Context

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2.1 Policy context

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 updates the 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; and 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*'.

SRL is recognised as providing opportunity to create a direct rail connection between Melbourne's major employment, health and education precincts and activity centres outside the CBD. The role of 20-minute neighbourhoods in making Melbourne a city of inclusive, vibrant and healthy neighbourhoods is recognised.

The focus of Plan Melbourne is delivering more homes near transport, jobs and essential services in vibrant liveable and sustainable neighbourhoods.

Clayton is identified in Plan Melbourne as a Metropolitan Activity Centre (MAC). These are higher-order centres intended to provide a diverse range of jobs, activities and housing for regional catchments that are well served by public transport. As a MAC, Clayton is designated for substantial development, growth and investment.

Victoria's Housing Statement 2024–2034

Victoria's Housing Statement 2024–2034 sets an ambitious goal for addressing Victoria's housing needs.

The overall target is to increase housing delivery from 54,000 homes a year to 80,000 homes a year (equivalent to 800,000 homes over the next decade), with 70 per cent provided in established areas and 30 per cent in growth areas.

The Housing Statement focuses on five key areas to achieve these targets and other housing aspirations:

1. ***Good decisions, made faster***
   The Victorian Government is reforming Victoria's planning system to boost housing supply across the state – clearing the backlog and giving builders, buyers and renovators certainty about how long approvals will take.
2. ***Cheaper housing, closer to work***
   The Victorian Government is making it easier to build more homes, with the best design standards, where Victorians want to live – that means going up and out, not just out.
3. ***More social housing***
   The Victorian Government is building more social and affordable homes across Victoria – launching Australia's biggest urban renewal project on top of the Big Housing Build.
4. ***A long-term housing plan***
   We know our state will keep growing – and we know we'll need a plan to manage that growth in the decades ahead.

Planning Policy Framework

The Victorian Planning Provisions (VPPs) are established under Victoria's Planning and Environment Act 1987 as a state-wide reference document or template that a municipal planning scheme or planning scheme provision must be based on.

The VPPs set out state and regional planning policies relating to settlement, environmental values and risks, natural resource management, built environment and heritage, housing, economic development, transport and infrastructure.

The VPPs specifically reference SRL in:

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 Infrastructure Strategy 2021–2051 provides a practical roadmap for action over the next 30 years across a broad range of public policy areas including housing, energy, transport and social infrastructure.

The strategy seeks to address existing infrastructure pressures, demand on existing infrastructure, and assist with planning the timing and location of required and necessary new infrastructure.

Strong emphasis is placed on improving public and active transport connections in established areas by improving pedestrian, tram, bus and train infrastructure.

Recommendations focus on improving the connection and integration between these nodes of travel.

SRL will address will help achieve the objectives of the strategy, connecting activity centres, providing economic growth and housing opportunities, and improving access to jobs and services.

Victorian Infrastructure Plan 2021

The Victorian Infrastructure Plan 2021 lays out the infrastructure priorities of the Victorian Government.

The priorities include providing transport infrastructure to better connect people in Melbourne and regional areas to health, education and employment centres via public transport.

Urban Design Guidelines for Victoria 2017

The Urban Design Guidelines for Victoria 2017 support the delivery of functional and enjoyable places for people to live, work, and spend leisure time.

SRL aims to create neighbourhoods that foster community interaction and make it easy for people of all ages and abilities to live healthy lifestyles and engage in regular physical activity.

Better Apartment Design Standards for Victoria 2017

The Better Apartment Design Standards 2017 provide guidance for applicants, architects, building designers and planners for designing and assessing apartment developments to ensure their quality and functionality benefits the health and well-being of residents, and improves the environmental performance of apartment buildings.

SRL aims to deliver apartments that provide diverse, well-designed housing options to meet the long-term needs of Clayton's growing community.

2.2 The Vision for Clayton

The Vision for Clayton outlines the long-term aspiration for the precinct including the Structure Plan Area.

The Vision for Clayton states:

A benchmark for inclusive renewal, where diverse communities can live together and the world leading health hub will deliver exceptional care.

Clayton will be a welcoming, eclectic and cosmopolitan district with a vibrant high street at its heart – infused with the character of great international food, independent traders and local creativity. With thoughtful planning and development, Clayton's growing centre will build on the area's existing character and community spirit. Its rich mix of activity will make it an interesting and attractive place to live, work and visit.

Creating sustainable neighbourhoods with more homes that provide greater choice for people of different ages and cultures means Clayton will remain an inclusive and vibrant place to live.

A program of urban enhancement will support Clayton as a welcoming, comfortable place with a strong identity. It will be a greener, cooler place with new homes to support its students, health care workers, young professionals and families.

Clayton will evolve as a major employment and community services centre. Its world-leading health hub will deliver exceptional specialist services and patient care. The precinct area brings together research institutions, major hospitals and commercial enterprises, making it a place of entrepreneurial energy.

Clayton will be a great place for walking or cycling – and as a public transport super hub, there will be less reliance on vehicles to get around. Better connectivity will bring communities, cultures, businesses and services together in Clayton, strengthening its lively culture and creating more opportunities for everyone.

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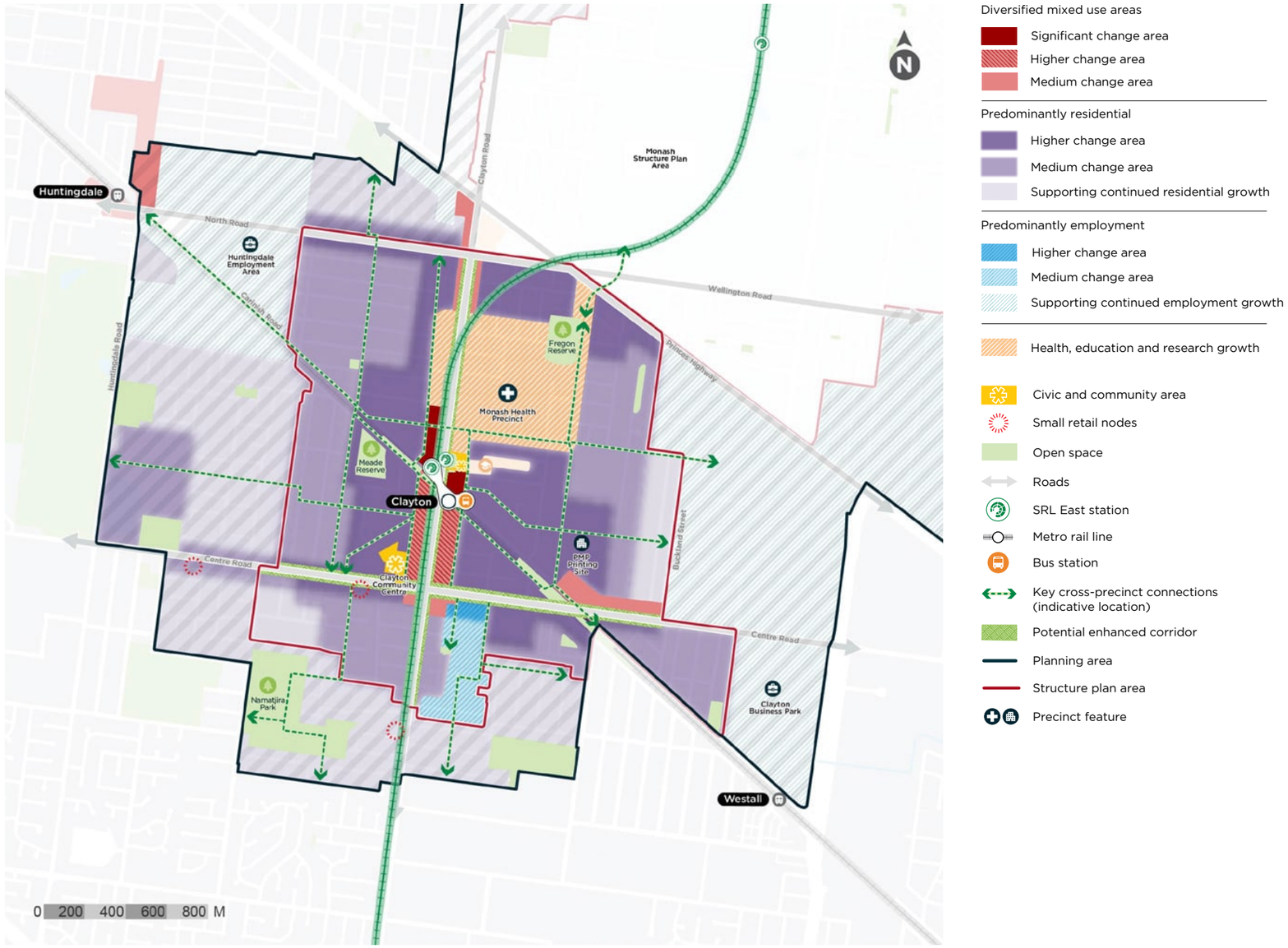


Figure 2.1: Clayton Conceptual Precinct Plan

2.3 SRL urban design principles and objectives

The urban design principles and objectives establish important foundational ideas for SRL as set-out in the SRL Urban Design Framework. They guide the approach to urban design, to ensure SRL Structure Plan Areas 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 adopt a holistic design approach to promote positive environmental, social, cultural, and economic outcomes.

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

Principle 1
Enduring

Places that are functional now and for generations to come

- **Objective 1.1 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 1.2 Future ready**
  Ensure the design catalyses urban renewal, encouraging the evolution of the precincts and changing uses over time.
- **Objective 1.3 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 1.4 Environmentally sustainable**
  Optimise environmental performance and embed sustainability initiatives into the design response of the infrastructure project and surrounding precinct.

Principle 2
Diverse

Places that are inclusive and offer a diverse range of experiences.

- **Objective 2.1 Strategic alignment**
  Facilitate integrated land use and transport solutions that respond to the precinct ambition and strategic transport and land use planning.
- **Objective 2.2 Functional urban structure**
  Create an urban structure that ensures the adequate provision of public spaces that support a complementary mix of activities.
- **Objective 2.3 Integration with context**
  Ensure new works accommodate travel routes and activities that connect to, integrate with and complement those in the wider precinct.
- **Objective 2.4 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.

Connectivity

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

Principle 3
Connected

Places that are connected physically and spatially

- **Objective 3.1 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 3.2 Transport integration**
  Facilitate seamless intermodal transfers prioritising public transport, walking and cycling networks, and design movement networks for safe interactions between transport modes.
- **Objective 3.3 Legible**
  Reflect walking and cycling desire lines, promote intuitive wayfinding, reduce reliance on signage and minimise visual clutter and obstructions to key views.
- **Objective 3.4 Green network**
  Facilitate green networks that link public and private open space and support urban ecology, biodiversity and cooling.

Principle 4
Accessible

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

- **Objective 4.1 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 4.2 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 4.3 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 4.4 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.

Liveability

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

Principle 5
Enhancing

Places that enhance the local environment and community

- **Objective 5.1 Heritage**
  Celebrate, respect and respond to Indigenous and non-indigenous cultural heritage, values and local history.
- **Objective 5.2 Responsive**
  Design to respond, connect and build on the unique and valued social, cultural, physical and economic aspects of the precinct.
- **Objective 5.3 Sensitive**
  Sensitively enhance landscape and urban realm outcomes; and minimise negative physical and visual impacts associated with the new infrastructure.
- **Objective 5.4 Healthy**
  Design infrastructure and green networks, spaces and places that support active lifestyles, and encourage social interaction to improve physical and mental health.
- **Objective 5.5 Quality design**
  Create a high-quality design that makes a positive contribution to the local built and natural environment.

Principle 6
Liveable

Places that are comfortable and welcoming

- **Objective 6.1 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 6.2 Landscape values**
  Create a coherent and engaging landscape response that embraces natural qualities and community and cultural values.
- **Objective 6.3 User experience**
  Enhance the journey and precinct experience for local communities, visitors and transport users.
- **Objective 6.4 Places for people**
  Create inviting, people-friendly streets, open spaces and public places, and maximise the opportunities to create green places.
- **Objective 6.5 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.

2.4 Urban context

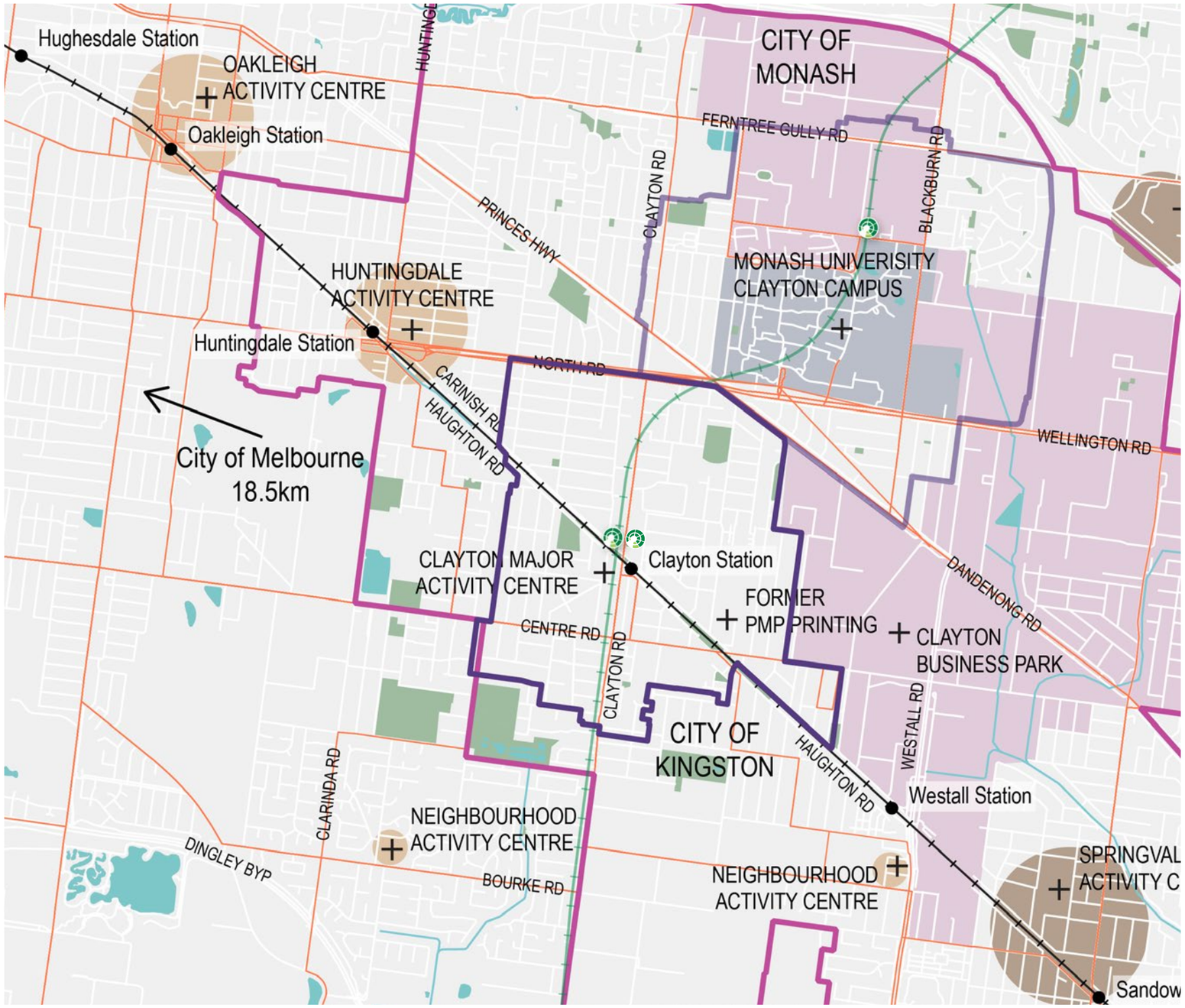
Regional context

The Clayton Structure Plan Area is located approximately 20km south-east of Melbourne's CBD in the local government areas of the City of Monash and the City of Kingston.

The Clayton Structure Plan Area is directly adjacent to the Monash Structure Plan Area to the north and contributes to a substantial proportion of the Monash National Employment and Innovation Cluster (NEIC). Therefore, the two areas are strategically linked.

The Monash NEIC is a globally-significant concentration of health, education and research institutions, with associated business opportunities. It is the largest concentration of jobs in Victoria outside central Melbourne.

The Clayton Structure Plan Area is currently focused on the existing Clayton Station on the Cranbourne / Pakenham rail line providing services to and from central Melbourne, and is also bisected by Clayton Road which connects the Clayton Structure Plan Area to Moorabbin Airport to the south.



Legend

- SRL station
- Structure Plan Area
- Monash NEIC Boundary
- Cranbourne / Pakenham rail line
- SRL East alignment
- Existing Clayton Station
- Existing Bus Route
- Property
- Open Space
- Water Bodies
- Major Activity Centre
- Neighbourhood Activity Centre
- University campus
- Employment Area

Figure 2.2: Regional context of Structure Plan Area

2.5 Summary of existing conditions

Urban structure

The key organising elements in the Structure Plan Area are Clayton Road and the Cranbourne / Pakenham rail line. Clayton Road serves as the central spine of Clayton Activity Centre, located south of Clayton Station. Dandenong Road and North Road / Wellington Road are major highways in the periphery of the Structure Plan Area.

A major employer in the area is the Monash Health Precinct, which attracts many pedestrians, especially those walking north along Clayton Road and Mary Street. Industrial zones are located in the south-east with the PMP Printing Precinct occupying a large area in the east.

Open spaces are dispersed across the Structure Plan Area, with Meade Reserve and Fregon Reserve standing out as larger areas dedicated to sports. The open space beneath the rail viaduct serves as a central recreational connection. Remembrance Gardens, located on Clayton Road, provides the only civic open space in the core area.

The residential landscape is characterised by established low-rise, fine-grain townhouses, often divided into 2 to 3 strata titles and detached dwellings of various architectural styles. The former PMP site is earmarked for future mixed-use development, while Jackson Green provides recently completed residential apartments and townhouses.

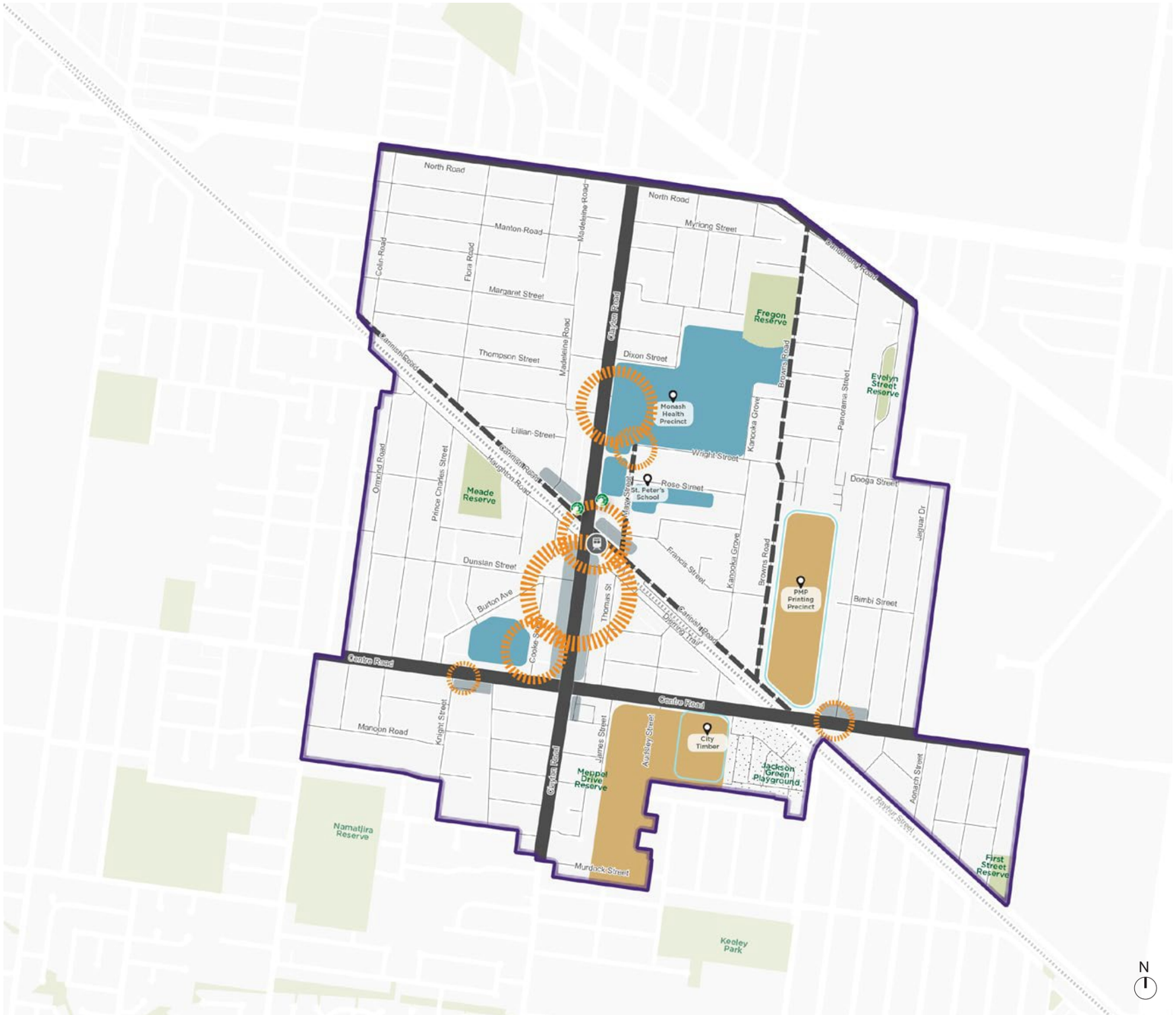


Figure 2.3: Urban structure

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Activity Node - place of high pedestrian activity and attraction
- Highway
- Key Street / Arterial Road
- Open space
- Civic, educational and health
- Medium density housing
- Traditional retail
- Employment
- Large landholding

Movement and access

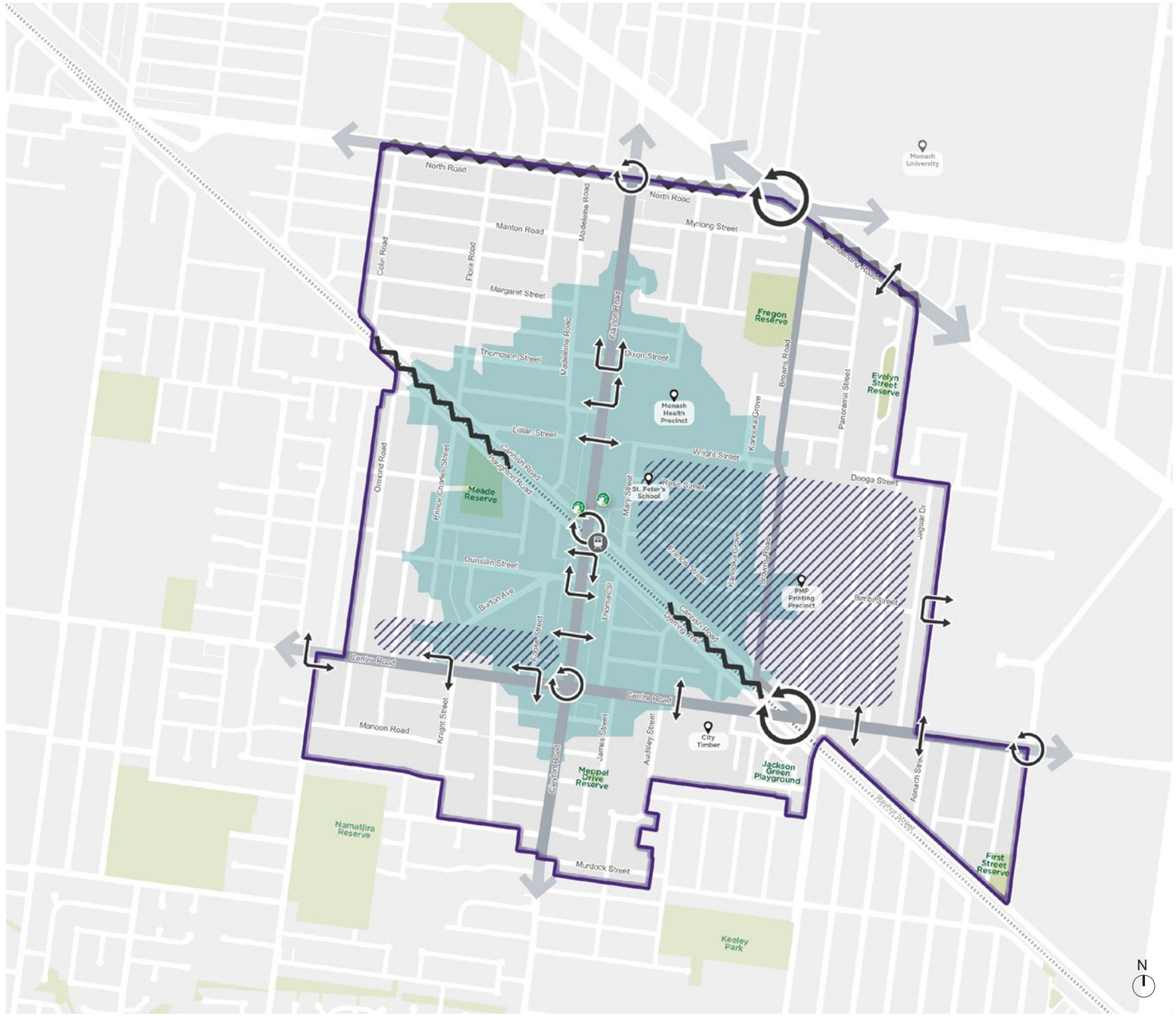
Pedestrian connectivity is constrained where major roads and train corridor intersect with local streets and pedestrian paths throughout the Clayton Structure Plan Area. Long crossing times and a lack of pedestrian amenities at these intersections discourage people from walking.

The Cranbourne / Pakenham rail line dissects the Structure Plan Area diagonally, running at an angle to the rectilinear grid of streets. It creates a significant barrier to movement where it is located at-grade, notably towards the south-east edge of the Structure Plan Area, and to the west of Clayton Road from near Madeleine Road. The elevated existing Clayton Station creates an under-croft space that enables enhanced movement, and providing access locally, boosting north-south connectivity, high-quality public space including paths, sport and recreation facilities. The grid structure of the street network combined with the elevated rail corridor ensures a good walkable catchment for the SRL station at Clayton.

Clayton Road is the main north-south route through the area providing inconsistently spaced crossings for pedestrians moving east-west, although these are more frequent around the Activity Centre, Carinish / Haughton Roads and the Monash Health Precinct. The main east-west route through the area is along Centre Road. Major intersections with North Road and Centre Road typically have four-way crossings.

Dandenong Road and North Road provide efficient movement for a large volume of vehicles on the Structure Plan Area periphery. However, the size of these roads (four to five lanes in each direction) creates a significant barrier for pedestrians and cyclists, particularly those trying to cross north-south to access Monash University.
Large blocks mainly located in the eastern and south-western areas also restrict pedestrian access to key destinations by increasing the distance people need to walk from train station entrances.

Streets within the Structure Plan Area are largely arranged in a grid structure, with a broader grid of wider, higher speed routes, and a finer grain grid for local trips within. Large main roads and highways range from approximately 40 metres to 60 metres in width. These include the Princes Highway and North Road Arterial and connector routes ranging 20 to 25 metres wide, including Centre Road and Clayton Road. Local streets, some lined with trees, are approximately 15 metres wide and are located in residential and industrial areas.



Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Clusters of large blocks
- 800 metres walkable catchment from SRL station entrances
- 800 metres walkable catchment from Existing Clayton Station entrances
- Open space
- Key road connection
- At-grade pedestrian crossing point
- Barrier

Figure 2.4: Movement and access

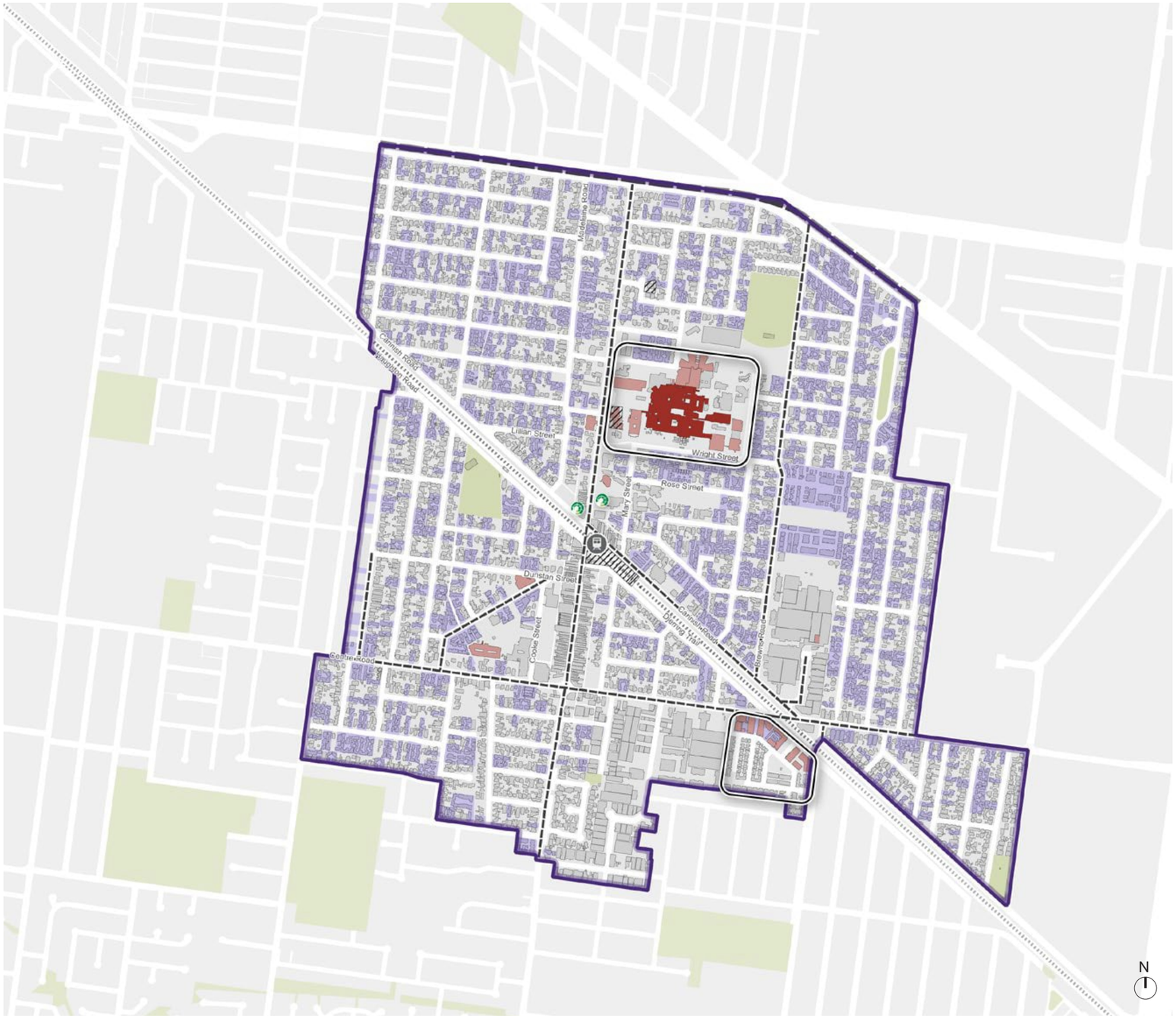
Built form

The Clayton Structure Plan Area is characterised by low-rise, residential buildings, with a small number of pockets of larger buildings.

Residential buildings of suburban character dominate much of the Structure Plan Area. Single-storey detached dwellings are the most common building typology, resulting in moderate site coverage across the area. Two-storey detached homes are increasingly common, particularly where lots have been subdivided and redeveloped as multi unit development / strata properties.

There are larger-scale residential developments, with townhouses and / or apartments developed on medium sized sites, commonly with frontage to main roads. These more recent residential developments have higher site coverage, with townhouse typologies rising as high as 3 storeys and apartment buildings up to 10 storeys high, for instance the Jackson Green and 110-250 Browns Road.

Few heritage places are located in the Structure Plan Area. The Clayton Railway Station at 274 Clayton Road is identified in the Victorian Heritage Register. It retains a single platform building which has been relocated to a new site adjacent to the rail line. There are four Heritage Overlay areas with local heritage significance, including the McCulloch House, a residential dwelling at 7 Hourigan Avenue, Oak and peppercorn trees in the Remembrance Gardens, and the Clayton Railway Station.



Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Strata titled lots
- High-rise buildings
- Mid-rise buildings
- Low-rise buildings
- Heritage
- Open space
- Area with predominantly mid to high rise buildings.
- Road width greater than 40 metres
- Road width 30-40 metres
- Road width 20-30 metres

Figure 2.5: Existing built form

Topography and vegetation

The topography across the Clayton Structure Plan Area is relatively flat, particularly to its south-east region (Centre Road and adjacent land including industrial areas).

A relatively level plane extends from the south-east, in a north-west direction running broadly through the centre of the Structure Plan Area, with the rail line running diagonally through the area.

View corridors include along wider streets and the rail line provide opportunity for longer distance views. Opportunities for longer views run parallel to the rail line, particularly where canopy cover is more sparse.

More subtle variances of topography in the Structure Plan Area create local topographic features including a relative high point where the ground generally falls to the north and the south. This topography creates some challenges from an accessibility point of view between the existing Clayton Station and the Monash Health Precinct including for movement along Mary Street and Clayton Road.

While the Structure Plan Area's overall tree canopy cover is low, there are pockets of greenery throughout the area. Residential streets are often tree-lined, and some front gardens contribute additional landscaping. Public parks like Fregon and Meade Reserves have trees primarily around their perimeters. Transport corridors such as Dandenong Road and North Road boast medians with mature trees. Scattered trees flank the rail line, with a denser concentration along Haughton Road and near the existing Clayton Station due to recent plantings.

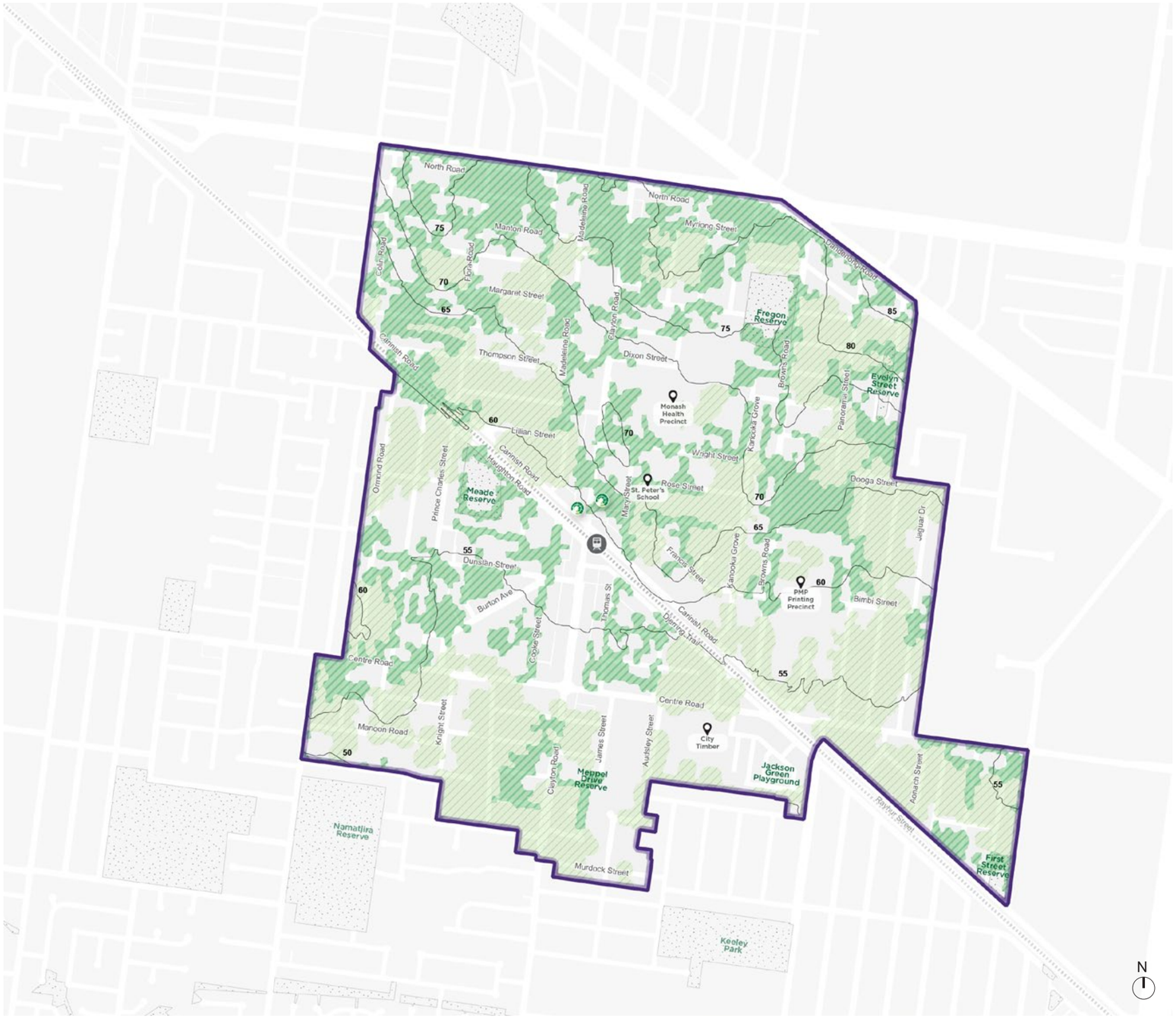


Figure 2.6: Topography and vegetation

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Medium tree density
- Low tree density
- Open space
- Contours every 5 metres

Land use

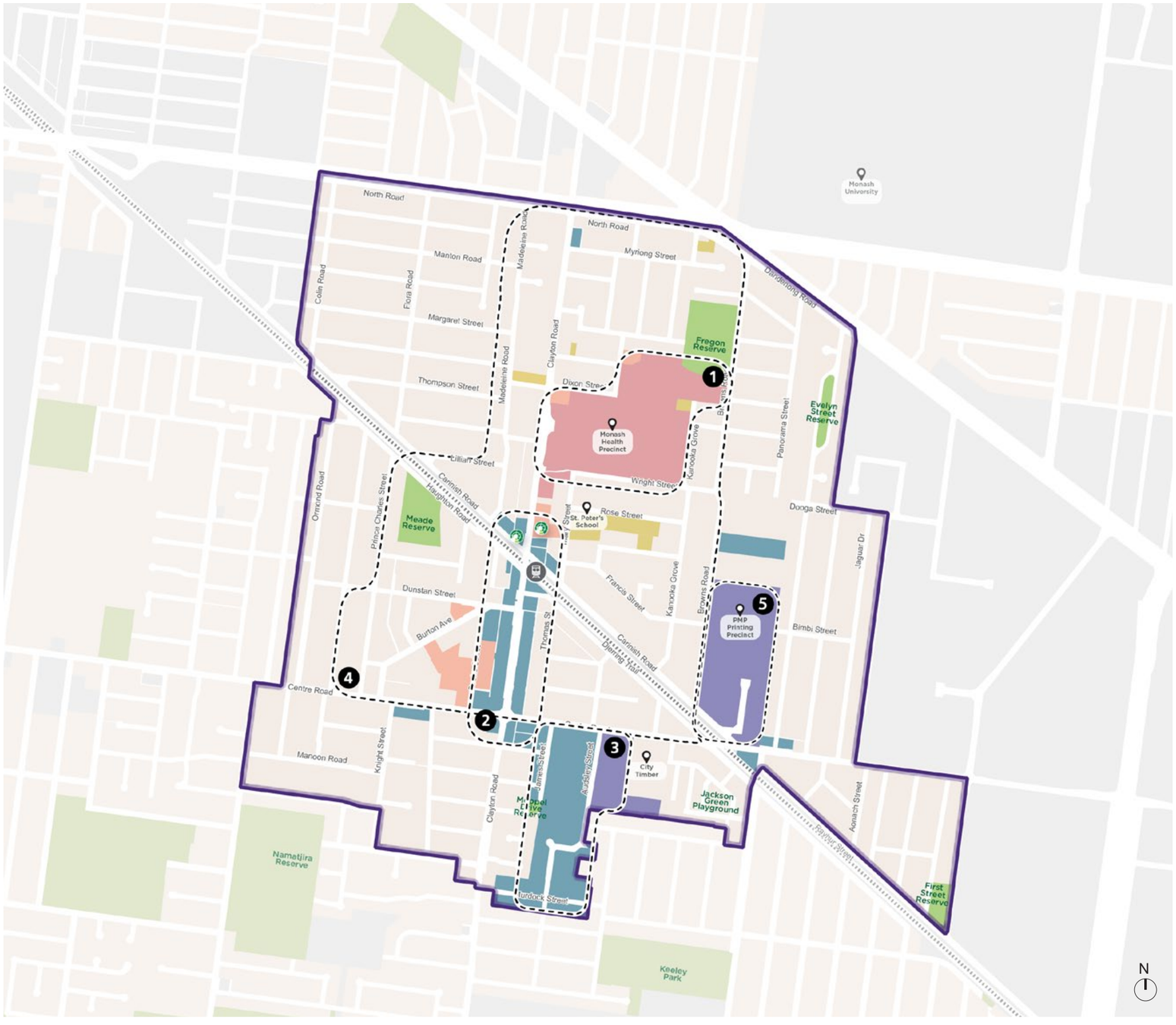
The land use mix and urban structure in the Clayton Structure Plan Area reflects its activity centre role, and the presences of the Monash Health Precinct and its proximity to Monash University and industrial areas.

The Clayton Activity Centre forms the heart of the area, with shops dominating the ground level and offices / commercial spaces occupying upper floors along Clayton Road. Key retailers include two Coles supermarkets, specialty stores, and the Clayton Fresh Fruit Market.

Health is the major employment sector. The Monash Health Precinct includes the Monash Medical Centre, Monash Children's Hospital, and Hudson Institute, serving local and regional needs. Additional research and specialist health facilities surround the Medical Centre, extending into nearby streets.

The core area transitions to suburban neighborhoods with dispersed open spaces which include Meade Reserve, Fregon Reserve, First Street Reserve and Remembrance Gardens. These neighbourhoods typically have small local shops and civic services like the Clayton Community Centre and Civic Hall, situated along a local road.

Smaller-medium sized industrial and manufacturing activities are located south of Centre Road and at the eastern edge of the Structure Plan Area boundary (the PMP Printing Precinct).



Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Residential
- Commercial / retail
- Education
- Mixed-use
- Health / medical
- Open space
- Public use

Land use clusters

1. Medical Health Precinct
2. Traditional Retail Core
3. Industrial Precinct
4. Clayton Activity Centre
5. PMP Printing Precinct

Figure 2.7: Existing land use

3 Public realm

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3.1 Introduction

This section outlines a Public Realm Framework to achieve the Vision for Clayton. It summarises the analysis that underpins the framework, and sets out design directions and strategies.

The Public Realm Framework builds upon strategies and background documentation developed by SRLA and the Victorian Government, as well as the City of Melbourne. These include:

- **Suburban Rail Loop East – Urban Design Strategy** (Suburban Rail Loop Authority 2023)
- **Open Space Assessment** (prepared by AJM Joint Venture for Suburban Rail Loop Authority 2024)
  Aboriginal Cultural Heritage Technical Report – SRL East Structure Plan (2023)
- **Flooding and Water Management Technical Report – SRL East Structure Plan** (2023)
- **Trees for Cooler and Greener Streetscapes:** Guidelines for streetscape planning and Design (Department of Environment, Land, Water and Planning 2019)
- **Future Streets Framework:** To guide the design and Delivery of Streets in the Hoddle Grid (City of Melbourne 2023)
- **Nature in the city:** Thriving Biodiversity and Healthy Ecosystems (City of Melbourne 2017)
- **Living Melbourne:** Our metropolitan urban forest (The Nature Conservancy and Resilient Melbourne, Melbourne 2019)
- **Movement and Place Framework** (Victorian State Government, Department of Transport)
- **Open Space for Everyone** (Victorian State Government, Department of Transport)
- **SRL Public Space and Public Life Study Report** (Gehl, 2024) (see SRL East Structure Plan - Gehl Public Space and Life Study - Attachment B)
- **SRL East Transport Technical Report** (Suburban Rail Loop Authority, 2024).

An analysis of the existing public realm in the Structure Plan Area was undertaken (see Appendix A), along with extensive research of best practice public realm typologies and mechanisms to deliver successful high-density places (see SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

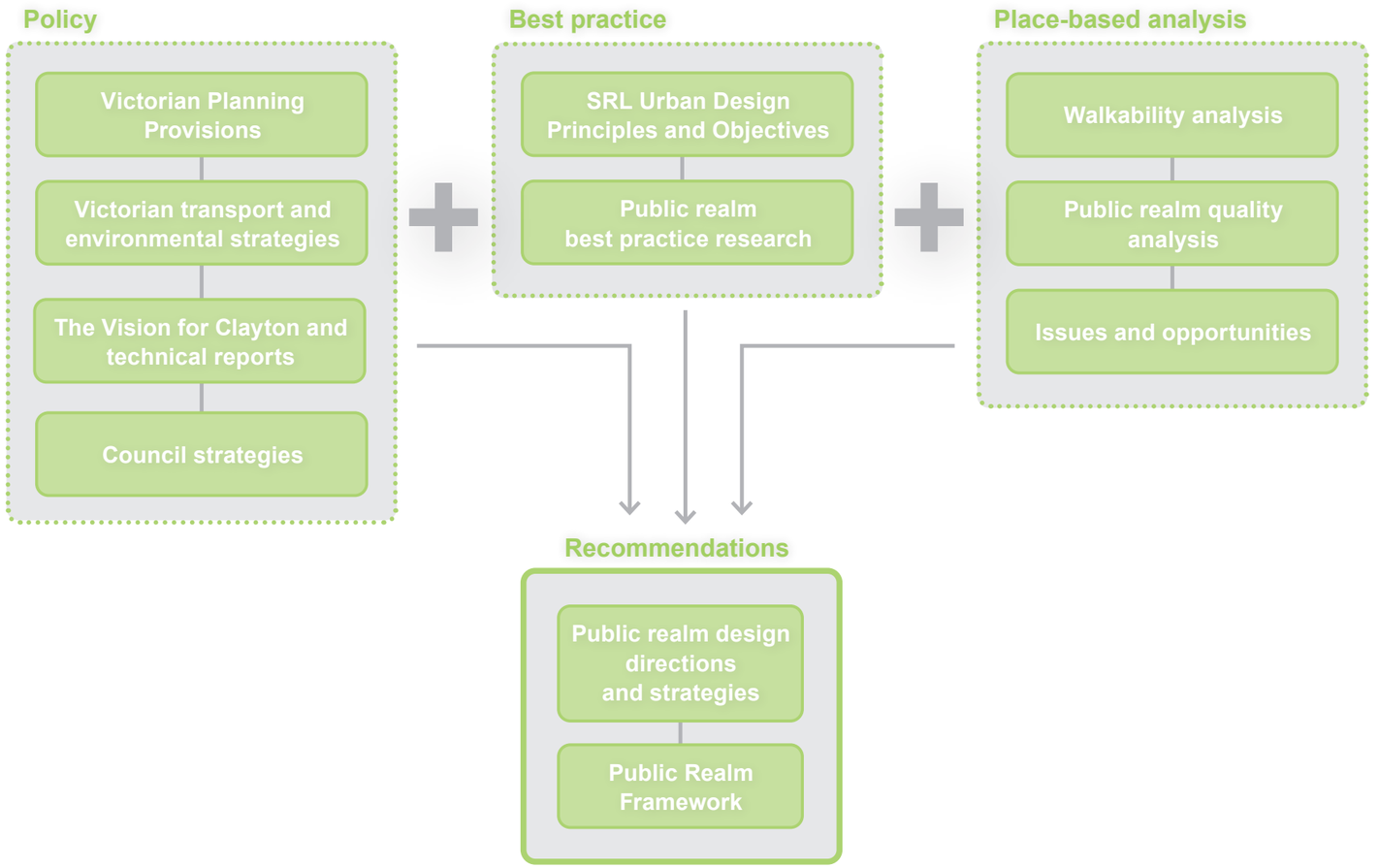


Figure 3.1: Methodology for developing the Public Realm Framework

3.2 Summary of analysis

Extensive analysis was undertaken to identify the issues and opportunities in delivering a public realm that supports the Vision for Clayton.

This section summarises the analysis. It focuses on the structural elements that must be addressed to deliver a public realm that encourages active and public transport, catering for the projected development growth in the Structure Plan Area. These elements include walkability, permeability and open space access and distribution.

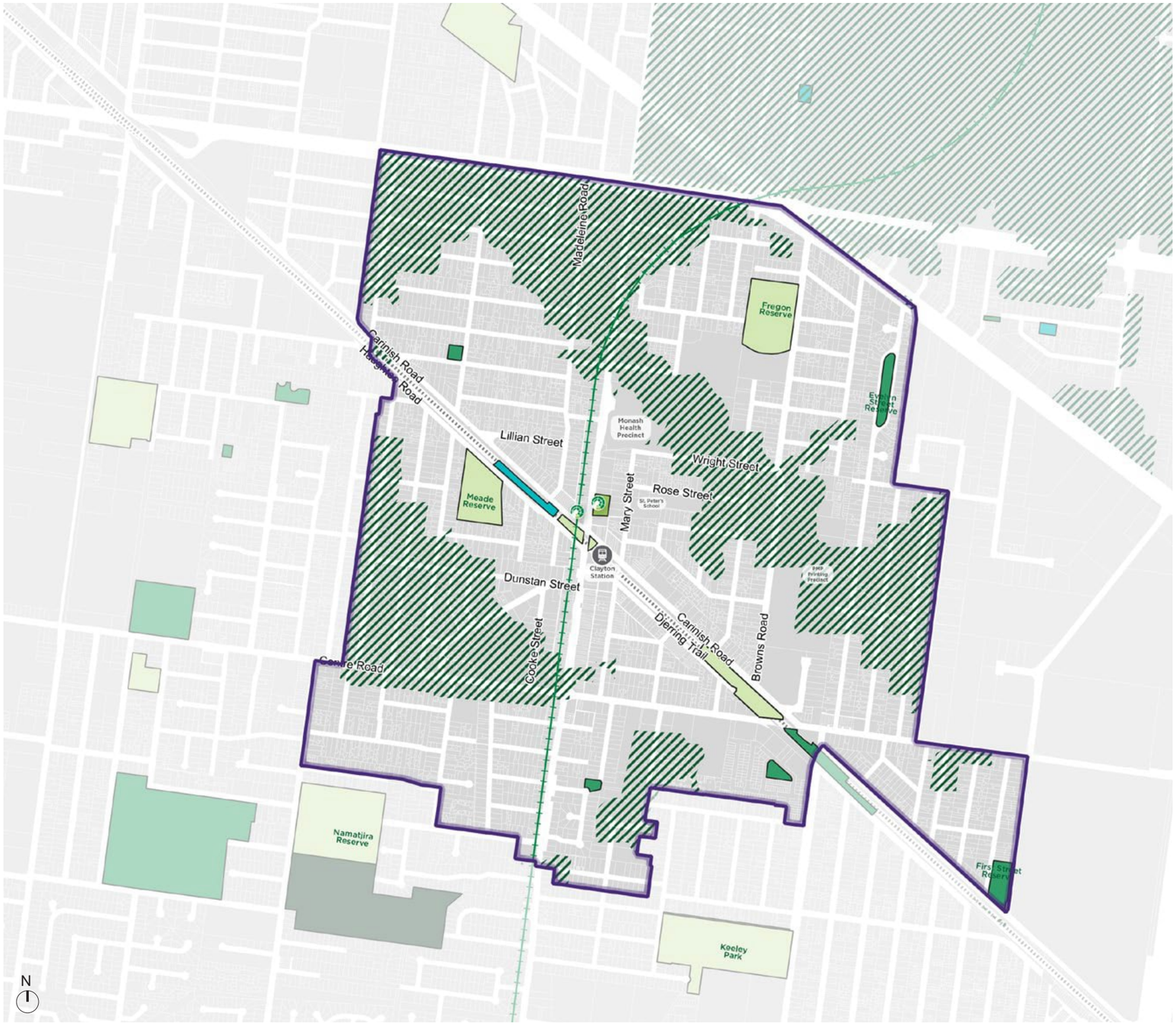
The Public Space and Public Life Study - Urban Baseline Study (Gehl, 2023) also informed this report (refer SRL East Structure Plan - Gehl Public Space and Life Study - Attachment B). The Gehl 'Public Space and Public Life Study' uses a similar method and has similar findings. For more details of this study refer to Attachment B.

Open space distribution and walkable access

There are 25 separate public open spaces with a combined area of approximately 630,000 square metres in the Clayton Structure Plan Area. These parks are primarily owned and/or managed by Monash and Kingston City Councils, and include Pocket, Neighbourhood, Community, and five District catchment parks.

Currently there is low walkable access to public open space. Substantial gaps are located in the north, some of which are near Monash University and large industrial and commercial areas. A number of public open spaces in Clayton are located within 400 metres of properties but they do not have walkable access. Residential areas close to industrial or commercial developments also lack access. Arterial roads such as North Road and Princes Highway act as barriers to movement and limit open space access. The former industrial area around Centre Road has recently been rezoned to Mixed Use and Residential Growth Zones. Future development is likely to provide additional open space resolving some of the access to open space issues for the surrounding area.

Figure 3.2 provides an overview of the public open space in the Structure Plan Area and the gaps in access to open space. These gaps may be addressed by improving access or providing new open space.



Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- SRL East alignment
- Cranbourne / Pakenham rail line
- Community park
- Conservation park
- Landscape park
- Linear park
- Sports park
- Gap in 400-metre walkable access to public space

Note: Categorisation of open space sourced from Draft SRL Open Space Assessment.
Note: This analysis does not include planned or proposed open spaces. Refer Public Realm Framework plan in 3.4

Figure 3.2: Gaps in walking access to open spaces in the Structure Plan Area

Walkability and strategic linkages

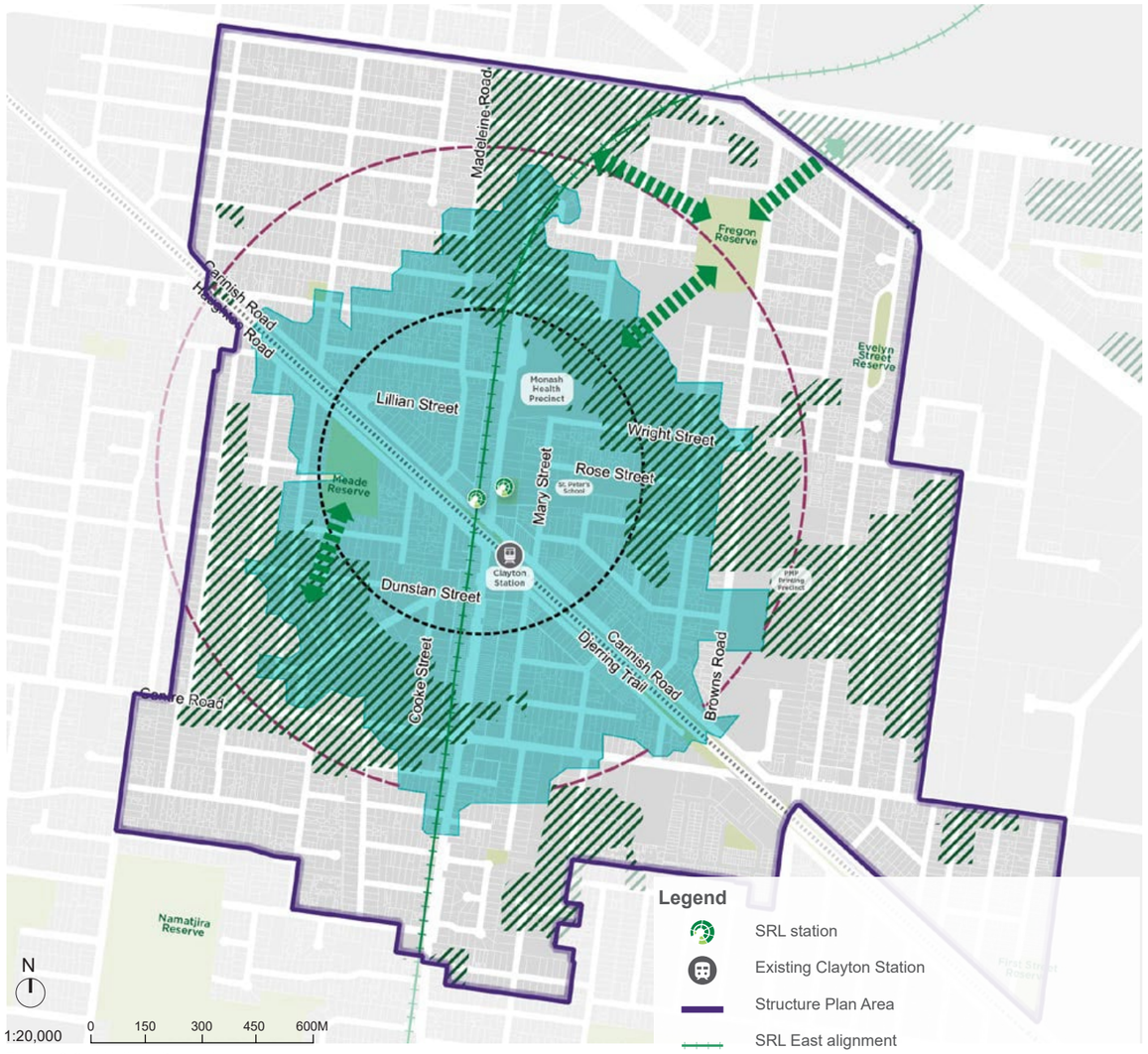


Figure 3.3: Walkability analysis

Good pedestrian connectivity to public transport (including the SRL station at Clayton) and public open spaces will be critical in achieving the Vision and unlocking the development potential of the Clayton Structure Plan Area.

The walkable catchment analysis shown in Figure 3.3 identifies the areas with poor pedestrian access to the SRL station at Clayton and the gaps in the walkable catchment to public open spaces, as well as the indicative links required to address these issues.

Local permeability and optimal block sizes

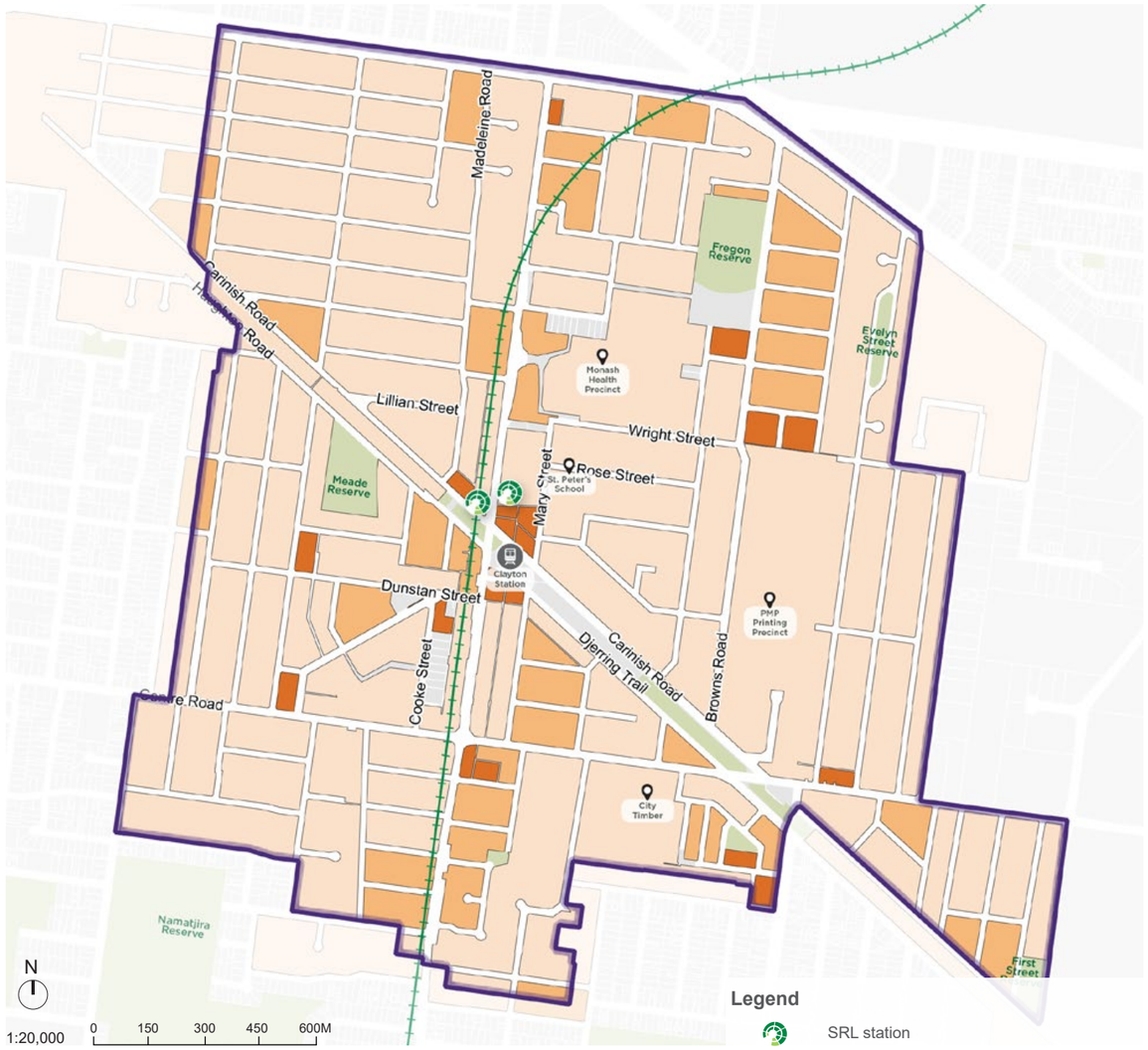


Figure 3.4: Permeability analysis

A permeable movement network is required to support active and public transport in the Structure Plan Area. Appropriate standards of permeability are outlined in Section 3.3 – Public Realm Design Directions under Design Direction 2: Promote active transport access.

To achieve good permeability, the commercial / retail core should have a maximum block length of 100 metres. All other areas should have a maximum block length of 180 metres. The permeability analysis identifies blocks that do not achieve these standards, and therefore require consideration of through-block links.

Public realm quality

The quality of all streets in the Structure Plan Area were assessed in terms of the pedestrian experience. Figure 3.5 summarises the findings of the assessment. It shows a general indication of the public realm quality in the area, and the variation between streets.

However, it should be noted the assessment is qualitative and does not reflect the role of each street in the Public Realm Framework. More work is required before street improvement requirements can be determined.

More detail about the public realm quality assessment is provided in Appendix C.

The Gehl ‘Public Space and Public Life Study’ uses a similar method and has similar findings. For more details of this study refer to Attachment B.

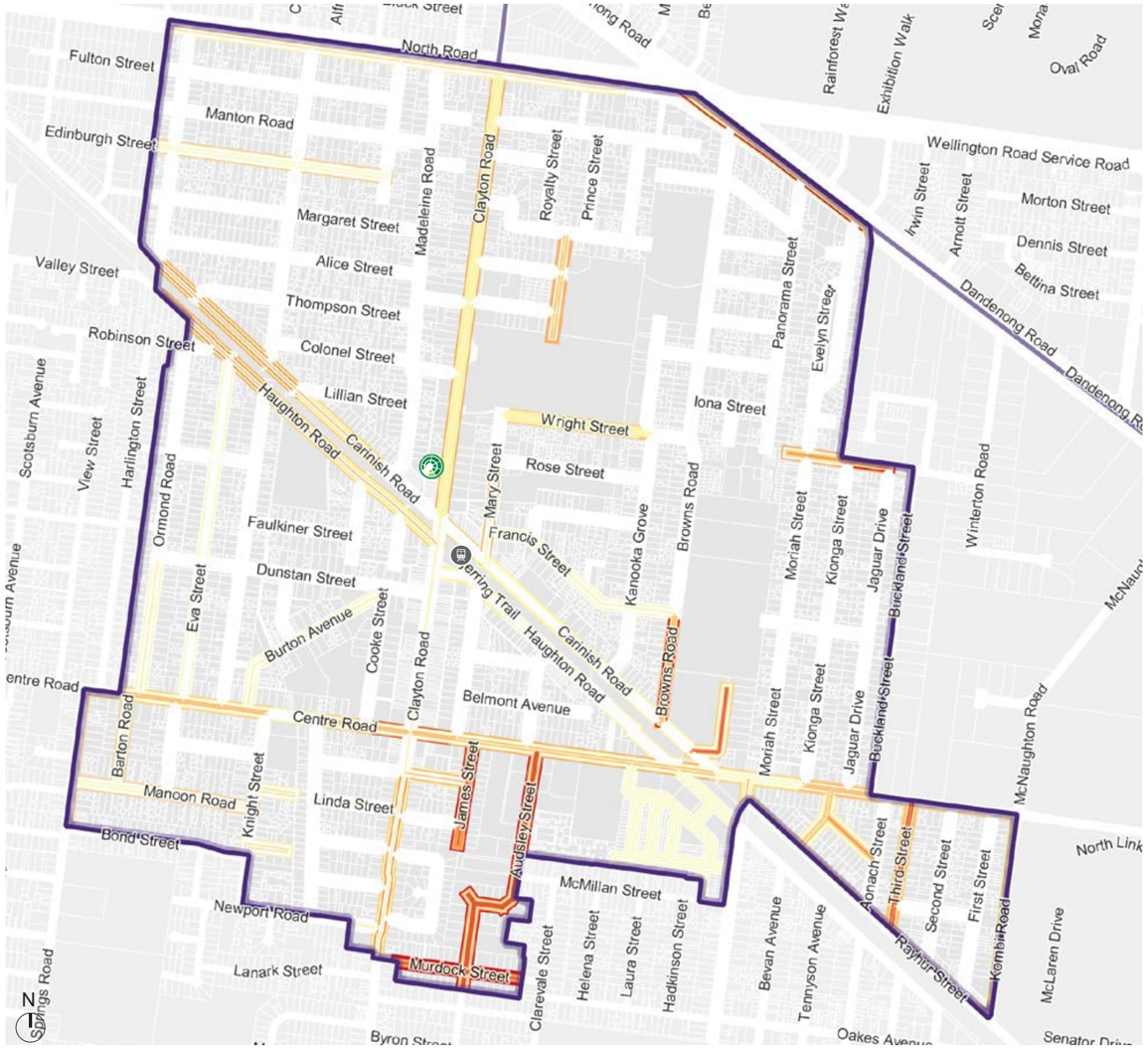


Figure 3.5: Streets quality assessment

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Issues and opportunities

Figure 3.6 shows the key issues and opportunities the public realm analysis identified in the Clayton Structure Plan Area.

These key issues and opportunities include:

- Leverage existing key open spaces by increasing connectivity to them, and further enhancing the quality and facilities within the parks
- Leverage from and expand the existing street-based activity centre environment to deliver a renewed and expanded activated core
- Increase fine-grain connectivity to areas with low permeability
- Overcome Clayton Road North, Dandenong Road and Wellington Road as barriers and improve pedestrian amenity and landscape quality
- Improve connectivity between key destinations
- Improve quality of public realm or activation in localised areas in response to public realm quality assessment (see appendix for more details)

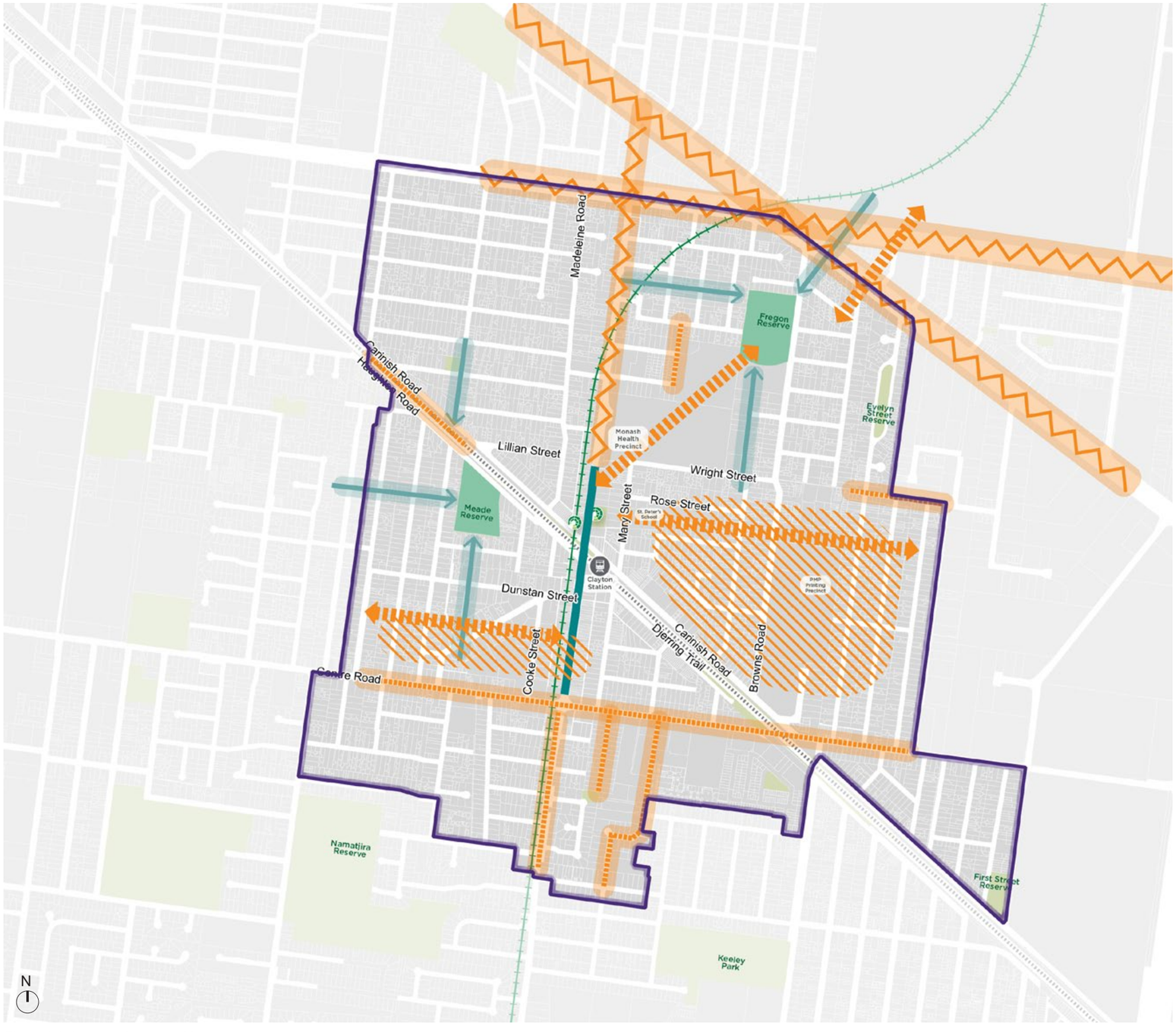


Figure 3.6: Issue and opportunities

3.3 Public realm design directions

The public realm design directions are proposed to achieve the Vision for Clayton. The design directions informed the development of the Public Realm Framework in Section 3.4 and the public realm outcomes identified in Section 6.

The order of the design directions does not imply an order of priority.

Design Direction 1: Ensure streets are inviting places that support community life

Why is this important?

Attractive streets are important for a thriving public life and to encourage healthy active lifestyles – and to draw residents, workers, visitors, businesses, developers and investors to the Structure Plan Area.

People are more likely to inhabit the public realm and choose to cycle or walk if streets are welcoming, safe, attractive and comfortable. A well inhabited public realm is self-reinforcing, with the presence of people further contributing to its appeal, and the success of commercial enterprises.

Streets also provide the address and setting for development, so their quality influences the appeal of the area to attract investors and developers. Again, this is self-reinforcing – as density increases, so does public realm use and footfall, which in-turn further increase the attractiveness for development to locate to the area.

Safety

In order for streets to be inviting for walking and social life, they need to be safe and provide a feeling of safety. Safeguarding pedestrian safety includes ensuring pedestrians are protected from traffic movement and have safe and convenient opportunities to cross streets. Pedestrians also need to have a perception of safety from crime and antisocial behaviour during the day and night.

Street experience

Streets not only provide a means to travel to a destination, they also provide for a social and experiential journey. The opportunity for social interaction and an interesting experience is part of the attraction of a successful urban area, and reinforces the appeal of walking over other travel modes. This includes space for people to stand and linger, sit or gather, and an engaging sensory experience.

Distinct streetscapes

Distinct streetscapes are more memorable. This supports the legibility and appeal of a successful urban area for pedestrians and cyclists.

A memorable and appealing street has a range of qualities which may include:

- A human scale
- Street trees and landscaping
- Protection from sun in summer, rain and wind
- Clean and well maintained surfaces and street furniture
- A pleasant sensory experience.

Alignment with SRL Urban Design Framework:

Design Direction 1 will help to achieve the following SRL urban design objectives (see Section 2.3):

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD2.3 Integration with context
- Objective UD2.4 Welcoming
- Objective UD3.1 Linkages
- Objective UD4.1 Universally inclusive
- Objective UD4.4 Safer design
- Objective UD5.1 Heritage
- Objective UD5.2 Responsive
- Objective UD5.4 Healthy
- Objective UD5.5 Quality design
- Objective UD6.1 Amenity
- Objective UD6.4 Places for people
- Objective UD6.5 Activation

What is happening now in Clayton?

Clayton Road is a key street providing a traditional 'main street' with a mix of uses set along the north-west aligned route. South of the rail line, Clayton Road successfully supports and encourages public life and activity. The level of vibrancy along Clayton Road is reduced beyond the shopping strip, particularly closer to Monash Health. North-south movement along Clayton Road was enhanced when the level crossing was removed.

A high level of pedestrian activity also occurs behind the shopping strip between Clayton Road and Cooke Street. The Cooke Street car park is connected to Clayton Road through an arcade, drawing pedestrian activity west.

Many streets do not provide the level of pedestrian, cycle, public transport priority or function desired. In particular:

- North Road, Dandenong Road and Clayton Road are dominated by vehicle traffic, detracting from their appeal for walking and cycling. This is especially problematic for Clayton Road between Lillian / Wright Street and Centre Road
- Some local streets do not provide especially inviting pedestrian links to key destinations such as the commercial / retail core, stations and larger parks.

Clayton Road is "a bustling street during the day, but dark and uninviting after sunset when shops are closing" - SRL Public Space and Public Life Study Report (Gehl, 2023)

How can this direction be achieved in Clayton?

Strategy PR1: Street hierarchy and identity

Establish a street hierarchy which supports each street's movement and place function, and place identity.

Strategy PR2: Boulevards and avenues

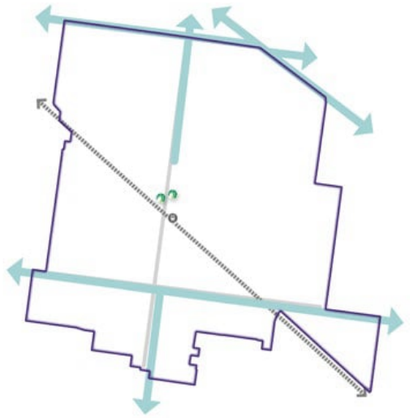
Optimise main roads for pedestrian movement and amenity while maintaining access by other travel modes, ensuring distinct and attractive setting for public life and development.

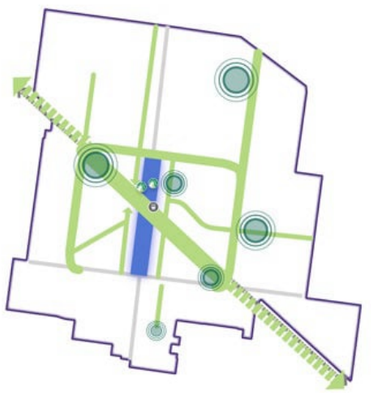
Strategy PR3: Activity Streets

Prioritise pedestrian movement and activity in streets and lanes within the commercial / retail core, and ensure they provide distinctive and attractive places for public life.

Strategy PR4: Green Streets

Provide a network of safe and inviting leafy streets for walking and cycling into the commercial and retail centres and to other key destinations.





Strategy PR5: Streets

Establish a minimum standard for all streets to ensure they provide a safe and inviting environment which is appropriate for the future needs of the community.

All streets within the Structure Plan Area should provide a minimum level of amenity to respond to the significant increase in population and their role and function. For example, they should have footpaths on both sides of the road, appropriate lighting and canopy tree planting wherever possible.

Design Direction 2: Promote active transport access

Why is this important?

An inviting environment for walking, wheeling and cycling is critical to a successful urban area.

Key factors for encouraging walking, wheeling and cycling include direct connections to major destinations and key places of employment, general permeability to support everyday movement by foot and bike, and a safe and inviting public realm. The quality of the public realm is addressed by Design Direction 1: Ensure streets are inviting places that support community life.

Missing links to key destinations

The street network should provide legible, safe and convenient links to key destinations, including public transport nodes, activity nodes, employment areas, health and education facilities, key open spaces and community areas. Where areas lack such links, they should be introduced.

Connections to existing open space

In order to improve the liveability of neighbourhoods with poor access to open space, new links to existing open spaces should be created. The Public Realm Framework in Section 3.4 identifies where new links are recommended.

Permeability

Addressing barriers to active transport involves enhancing the permeability of the existing block structure. The appropriate standard of permeability in an activity centre is generally defined by block lengths no greater than 100 metres — for example, City of Melbourne DDO1 and DDO61. In higher-density urban areas outside activity centres, a maximum block length of 180 metres is considered appropriate. This is the mid-point of the range of block lengths promoted by the Urban Design Guidelines for Victoria (120 to 240 metres), approximately mid-way between the 100 metre block length for activity centres identified above and the maximum 240 metres required by Clause 56 of the Victorian Planning Provisions for typical subdivisions, and consistent with the maximum block length recommended by the NSW Movement and Place – Network Planning in Precincts Guide.

Links created by private development

Private development that incorporates new links should be designed to provide direct, attractive and well-lit public connections. They should be safe and free of entrapment areas, and be located at ground level. Passive surveillance should be maximised from both ground floor and upper levels. Consideration should be given to the function of the link and it's implementation to maintain safety and amenity.

Public realm quality

A successful walking, wheeling and cycling network also depends on the quality of the connections. Connections should be safe, attractive and designed for the specific purpose, as outlined in Design Direction 1: Ensure streets are inviting places that support community life.

What is happening now in Clayton?

Within the Clayton Structure Plan Area, walking, wheeling and cycling access is indirect, inconvenient and unsafe from some areas to key destinations including Clayton Rail Station, Clayton Road shopping strip, Monash Health, Monash University and the industrial / employment area to the south.

The level crossing removal at Clayton Station has enhanced north-south pedestrian movement, and east-west active transport movement along the Djerring Trail, although the rail line remains a key barrier in the residential hinterland.

A number of areas have large block sizes, impacting the permeability of the area and discouraging walking and cycling.

Alignment with SRL Urban Design Framework:

Design Direction 2 will help to achieve the following SRL urban design objectives (see Section 2.3):

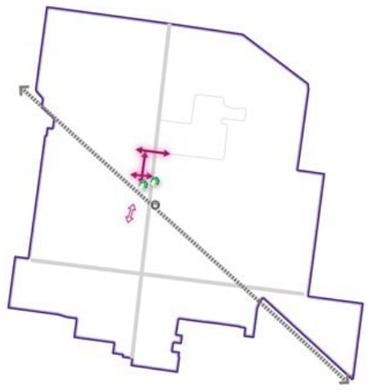
- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD2.1 Strategic alignment
- Objective UD2.3 Integration with context
- Objective UD3.1 Linkages
- Objective UD3.2 Transport integration
- Objective UD3.3 Legible
- Objective UD3.4 Green network
- Objective UD4.2 Twenty-minute neighbourhoods
- Objective UD4.3 Active transport

How can this direction be achieved in Clayton?

Strategy PR6: Critical and important links

Create new links to improve access to key destinations.

Critical and important links should be designed to provide direct, attractive, well-lit public connections, be safe and free of entrapment areas, reduce barriers to movement, and be located at ground level. Consideration should be given to the function and implementation of the link to support user safety and amenity.



Strategy PR7: Local links

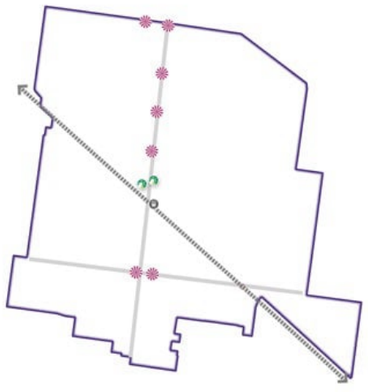
Require the provision of new mid-block links to enhance pedestrian permeability.

Local links should be designed to provide direct, attractive, well-lit public connections, be safe and free of entrapment areas, reduce barriers to movement, and be located at ground level. Consideration should be given to the function and implementation of the link to support user safety and amenity.

Strategy PR8: Pedestrian crossings

Introduce new controlled pedestrian crossings and improve existing crossings where needed to support walking, wheeling and cycling.

Opportunities to enhance pedestrian crossings or provide new crossings should be explored to reduce barriers to movement and create a convenient, safe and accessible active transport network.



Design Direction 3: Foster resilient urban environments

Why is this important?

A healthy ecosystem is a critical component of healthy, liveable and resilient urban environments.

The street and open space system presents an opportunity to improve the environmental performance of the Structure Plan Area by thinking about it as part of the broader eco-system. This includes:

- Increased tree canopy and vegetation cover to reduce the urban heat island effect
- Landscaping to provide habitat and wildlife corridors and / or support urban biodiversity
- Water sensitive urban design treatments to sustainably treat and re-use water and to improve health of trees and vegetation
- Strengthening the metropolitan Melbourne open space network.

As urbanised environments are densified, urban forests play a critical role in mitigating the urban heat island effect, and contribute valuable ecological amenity such as water filtration, shade and habitat value. The SRL East Climate Response Plan has identified a tree canopy cover target of 30 per cent. Street tree planting is valuable in defining a sense of place and identity as well as providing thermal comfort for human and non-human communities. The management and conservation of trees in urban settings creates healthy and resilient ecosystems for a changing climate.

Corridors of diverse flora and fauna are essential to biodiversity. Protecting, enhancing and providing habitat in existing and new corridors can foster connection between people, plants and animals, and prevent habitat fragmentation. Biodiversity Sensitive Urban Design principles should be integrated within the network of streetscapes and open spaces to provide for diverse animal species, including shelter (such as dense, protective shrubs), food (such as flowers, fruits, seeds, pollen, nectar), nesting sites (such as tree cavities), and water.

Water Sensitive Urban Design (WSUD) works to mitigate the impact of urbanisation on the surrounding environment and waterways. WSUD strategies treat and reduce stormwater flows, improve cooling, reduce potable water demand, increase soil moisture, and passively irrigate planting in urban environments. Embedding water sensitive design strategies across all public realm scales and typologies is critical to reducing flood risk, stormwater runoff, reducing the urban heat island effect, and improving the health and performance of trees and vegetation.

There is also opportunity in the Structure Plan Area to strengthen the metropolitan Melbourne open space network as critical green infrastructure. These open spaces provide a network of natural systems that support urban ecosystems across a broader area, while mitigating the impacts of urban heat.

Increasing canopy coverage within the private realm is discussed in Design Direction 8.

What is happening now in Clayton?

The Clayton Structure Plan Area has a relatively low level of tree canopy cover. Most streets in residential areas are tree lined and some front gardens further contribute to canopy cover although trees in private space are generally small in size or have upright canopies.

Higher levels of canopy cover are provided in public parks and open spaces including the Namatjira Park and the edges of Fregon Reserve.

Canopy trees line the Princes Highway / Dandenong Road, and North Road which has a wide central landscape median with mature trees.

“Tree coverage is especially sparse along the larger roads and within industrial areas trees are missing” - SRL Public Space and Public Life Study Report (Gehl, 2023)

Alignment with SRL Urban Design Framework:

Design Direction 3 will help to achieve the following SRL Urban design objectives (see Section 2.3):

- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD3.4 Green network
- Objective UD5.2 Responsive
- Objective UD5.4 Healthy
- Objective UD6.2 Landscape values

How can this direction be achieved in Clayton?

Strategy PR9: Public realm landscaping

Optimising tree canopy cover and other planting in streets and public open spaces that support cooling, greening and urban biodiversity.

The existing leafy streetscape character should be maintained and enhanced, particularly in areas which are a further distance from the SRL station at Clayton. Streets and public open space should contribute to a broader ecosystem while providing local amenity and urban heat island relief.

Strategy PR10: Water sensitive urban design

Incorporate water sensitive urban design treatments into streets and public open spaces to optimise sustainable water management outcomes.

Streets and public open spaces should contribute to treating and reducing stormwater flows, improving cooling, reducing potable water demand, increasing soil moisture, and passively irrigating urban planting.

Design Direction 4: Facilitate outdoor recreation

Why is this important?

Access to distinctive and high quality open space increases the attractiveness of the Structure Plan Area to live and work.

A collection of diverse open spaces is required to fulfill the full range of human and environmental needs in the Structure Plan Area. This includes provision for recreation, social engagement, connectivity, biodiversity, habitat and integrated water management. In denser urban areas such as this, it is important to optimise the functionality of open spaces. This includes consideration of multi-purpose spaces.

The quality of open space enhances amenity and recreational opportunities. The programming, amenities and facilities provided by open spaces serve different people with the community with higher quality spaces supporting a large proportion of community need. Therefore, existing open spaces should be optimised to ensure they are providing the amenity and recreational needs required for the existing and future population.

When connected into a network, the value of a collection of public open spaces is greater than the sum of its parts, offering increased public realm opportunities and benefits than those provided by the spaces in isolation. A holistic network provides a diversity of experiences, landscape opportunities and outcomes which ensures that the public realm serves as many purposes as possible.

What is happening now in Clayton?

A number of community sports facilities and open spaces in the Clayton Structure Plan Area are located beneath the elevated section of the rail line.

Meade Reserve and Fregon Reserve feature a children's playground, club rooms and sports field.

Namatjira Park to the south of the Structure Plan Area provides additional sport and recreation facilities, as well as wetlands and open space.

The SRL Open Space Assessment (2024) identifies that while there are some areas that do not have walkable (400 metres) proximity to public open space, overall there is a moderate to high walkable access to public open spaces within 400 metres within the Structure Plan Area. This is illustrated in Section 3.2: Summary of Analysis.

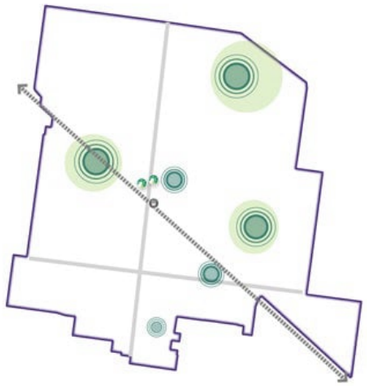
"The newly established linear park and Djerring Trail provides much needed public space across the precinct" - SRL Public Space and Public Life Study Report (Gehl, 2023)

How can this direction be achieved in Clayton?

Strategy PR11: Enhance existing open spaces

Enhance the functionality, character and safety of existing public open spaces.

Open spaces should service and cater for the diverse needs of the existing and future community. These open spaces should have improved safety through passive surveillance, activation and lighting.



Strategy PR12: Connections to open space

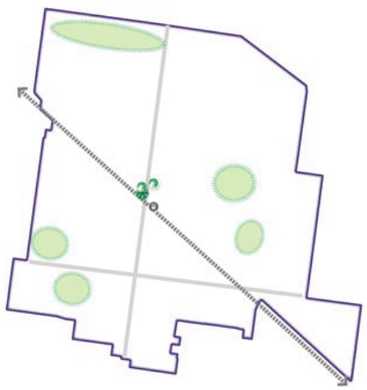
Create new connections that improve accessibility to open space and create a network of spaces.

Opportunities for new connections through redevelopment of abutting properties should be explored.

Strategy PR13: New open spaces

Introduce new open spaces where required.

New open spaces should provide suitable opportunities for the community and address identified gap areas.



Alignment with SRL Urban Design Framework:

Design Direction 4 will help to achieve the following SRL Urban design objectives (see Section 2.3):

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.4 Environmentally sustainable
- Objective UD2.1 Strategic alignment
- Objective UD2.2 Functional urban structure
- Objective UD2.4 Welcoming
- Objective UD3.4 Green network
- Objective UD4.1 Universally inclusive
- Objective UD4.2 Twenty-minute neighbourhoods
- Objective UD4.4 Safer design
- Objective UD5.2 Responsive
- Objective UD5.4 Healthy
- Objective UD5.5 Quality design
- Objective UD6.1 Amenity
- Objective UD6.2 Landscape values
- Objective UD6.4 Places for people
- Objective UD6.5 Activation

3.4 Public Realm Framework

The Public Realm Framework has been developed by applying the relevant public realm design directions presented in Section 3.3. The key features of the framework are outlined below.

Public realm outcomes

Figure 3.7 outlines the broad strategic intent behind the public realm strategies proposed in this report. These are further detailed in the Public Realm Framework plan, Figure 3.8.

The actions needed to realise these strategies are detailed within Section 6: Outcomes.

Key moves

- Clayton Road's established 'high street' character will be improved and extended north to the Monash Health Precinct, with high-quality public realm, including greening, to support activated street frontages
- Streets and public spaces immediately north of the Cranbourne / Pakenham rail line, towards the Monash Health Precinct, will be transformed to create a platform for future redevelopment
- High-quality public realm connections and spaces in the core will support a vibrant retail environment
- Transformative major active transport links along Dandenong Road / Wellington Road will improve pedestrian and cycling crossing
- Improved pedestrian crossing of Dandenong Road / Wellington Road at Panorama / Cobain Streets to improve north-south connectivity
- Legible routes and improved connections with Clayton Road and Djerring Trail
- New and improved east-west pedestrian connections connecting to Clayton Road and the Activity Centre, and employment areas to east and community facilities to the west.

Figure 3.7: Public realm outcomes

The following indicative sections illustrate the street typologies envisaged in the Public Realm Framework. Precedent case studies for each typology is provided in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Sections are typical and indicative only to communicate intended outcomes and to establish a hierarchy of streets. The final arrangement and design of the streets and associated infrastructure (including carparking, paths, landscaping etc) would be subject to further resolution that would consider the local context, site constraints, and other technical and relevant authority requirements.

Boulevard

Wide, generous primary road and public transport corridor that serves multiple uses and provides strong landscape and pedestrian outcomes including canopy trees and pedestrian crossing opportunities.

Figure 3.8: Indicative section, Boulevard

- Canopy tree planting and expanded understorey planting
- Multi-modal transport opportunities
- Pedestrian pathways, refuge and crossing points
- Opportunities for public art
- Potential threshold zones that promote pedestrian crossing / land use relationships
- High quality furniture zones at regular intervals for pedestrians to pause and rest

Avenue

Wide and tree-lined ‘connector’ street that accommodates active and / or public transport with nodes of pedestrian amenity to create places for people to move and dwell.

Figure 3.9: Indicative section, Avenue

- Public transport connectivity (bus stops / waiting zones)
- High amenity public transport waiting facilities for users
- Potential active transport link
- Streetscape and landscape outcomes
- Generous pedestrian zones
- Wayfinding, regular seating points and leafy shade

Activity Street

Highly urbanised street that supports public life and provides an attractive and comfortable pedestrian experience, with generous pedestrian circulation space, streetscape treatments that encourage activation of street frontages and provide durable, high quality materials.

Figure 3.10: Indicative section, Activity Street - Type A

Figure 3.11: Indicative section, Activity Street - Type B (flush kerb)

- High quality paving
- Street trees
- Expanded areas for outdoor dining and activity
- Awnings, shelter and lighting
- Understorey planting and rain gardens
- Public street infrastructure (such as, seating, lighting, drinking fountains, signage, creative and interpretive elements etc.)
- PTV shelters and seating
- Micro mobility infrastructure storage (such as, bicycle hoops)

Green Street

A broad classification for a collective network of local streets that should be prioritised for improvement due to their significance for sustainable travel and their ability to support pedestrian experience to key destinations (such as recreational facilities, public transport stops and stations and key employment areas), environmental outcomes, and bike and public transport routes.

Figure 3.12: Indicative section, Green Street section- Type C - Cycling

- Street trees and biodiverse under-storey planting WSUD initiatives
- Active transport (walking and cycling) paths and connections
- Activity nodes and pause points with seating
- Street lighting to one side to light the full street
- Separation between transport modes
- Micro mobility infrastructure storage (such as, bicycle hoops)
- Bus Stop shelters and seating
- Indented parking for pick-up and drop off

Key Links

New or improved links that provide connections to key destinations, or through large urban blocks or impermeable corridors (such as railway lines or arterial roads). These links typically have limited or no vehicular access, may include provision for cycling and seek to prioritise pedestrian circulation.

Critical links: connections that provide direct pedestrian access to the SRL station at Clayton.

Important links: connections that reduce gaps in walking access to key destinations such as areas of employment or major open spaces and may support a biodiversity corridor.

Local links: connections that generally improve permeability and local walking access, particularly where there are long blocks or barriers preventing through movement.

Key links in the Public Realm Framework plan can be either ‘fixed’ or ‘flexible’. Fixed key links are where the location of the link has been established and it is unlikely to change. Whereas for flexible key links the exact location is still to be determined and may adjust to respond to an opportunity or circumstance, provided the link delivers on the intended outcome – whether this is to connect to a key destination (critical or important link) or to improve general permeability and walkability (local link).

Figure 3.13: Indicative section pedestrian link- Type A - Urban amenity

Figure 3.14: Indicative section pedestrian link Type C - Shared path

- CPTED, clear sight lines, lighting and wayfinding.
- Generous pedestrian and shared-use paths.
- Support activation through outdoor dining and urban furniture.
- WSUD and biodiverse vegetation.

Public Realm Framework

The Public Realm Framework shows the key elements of the public realm strategy.

Figure 3.15 shows the recommended new and improve pedestrian links and crossings in the Structure Plan Area, along with proposed new open spaces.

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Boulevard
- Avenue
- Activity Street
- Green Street
- *Work with land manager / owner to improve links and access through site*
- Critical key link (new) - fixed
- Critical key link (new) - flexible
- Important key link (new) – fixed
- Important key link (new) - flexible
- Local key link (new) – fixed
- Local key link (new) – flexible
- Existing open space
- Open space (new) - SRL East
- Open space (new) - planned or proposed
- Open space (new) – investigation area
- Pedestrian crossings (new or upgraded)
- Pedestrian crossings (new or upgraded) - SRL East

Transport legend*

- Upgraded strategic corridor
- Active transport - C1, C2, C3
- Major active transport link

**Refer to Structure Plan Transport Plan for more details*

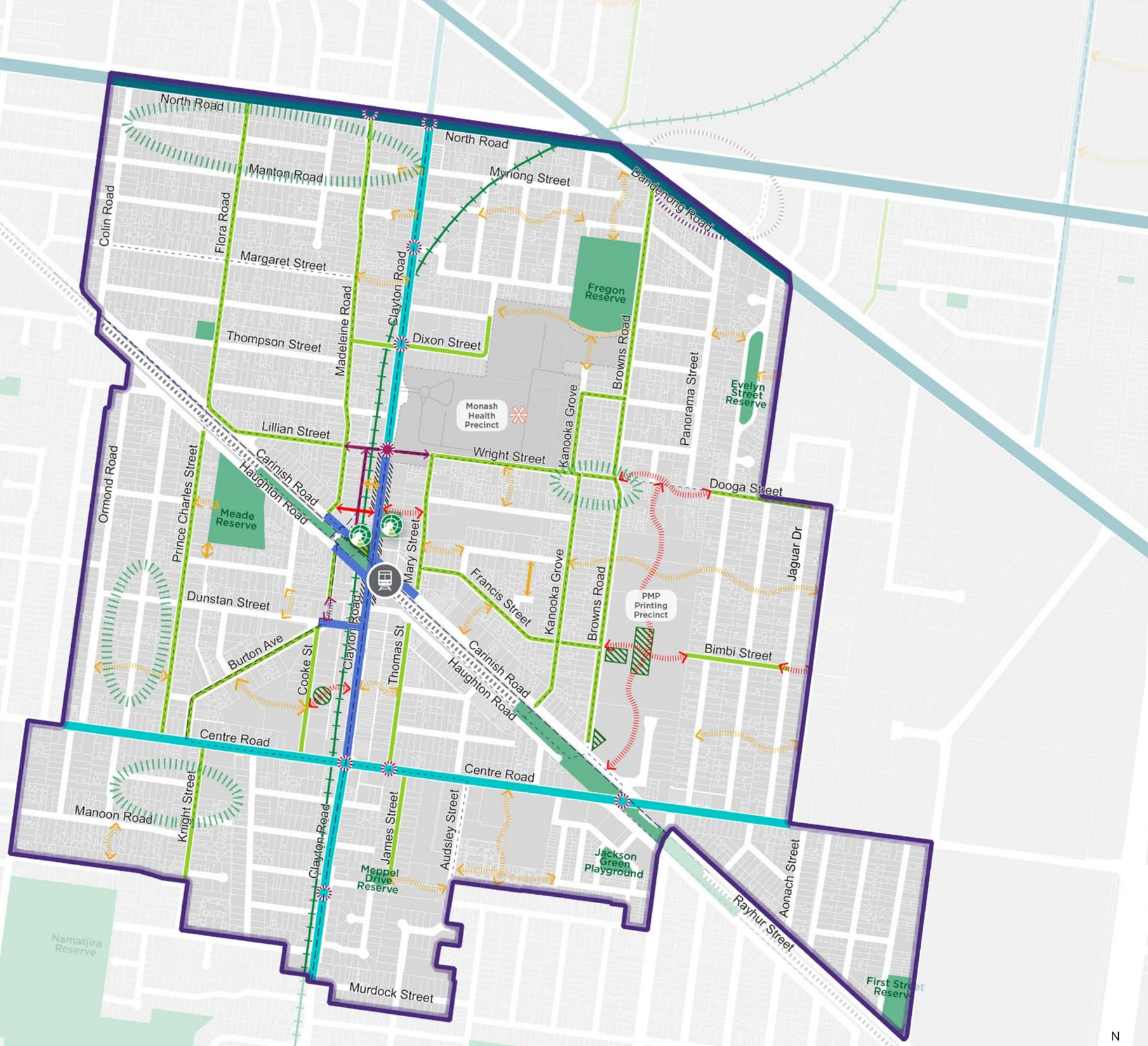


Figure 3.15: Recommended improvements to the public realm

4 Urban Form

AJM
Joint Venture

4.1 Introduction

This section outlines an Urban Form Framework to achieve the Vision for Clayton. It summarises the analysis that underpins the framework, and sets out design directions and strategies.

The design directions, strategies and Urban Form Framework was informed by the SRL Urban Design Framework and the Vision for Clayton. This was supplemented by an analysis of the existing development conditions (see Appendix A) and extensive research into best practice urban development typologies provided in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

The Urban Form Framework was developed concurrently with the Public Realm Framework, and Built Form Framework and each informs the other.

The methodology for developing the Urban Form Framework is summarised in Figure 4.1.

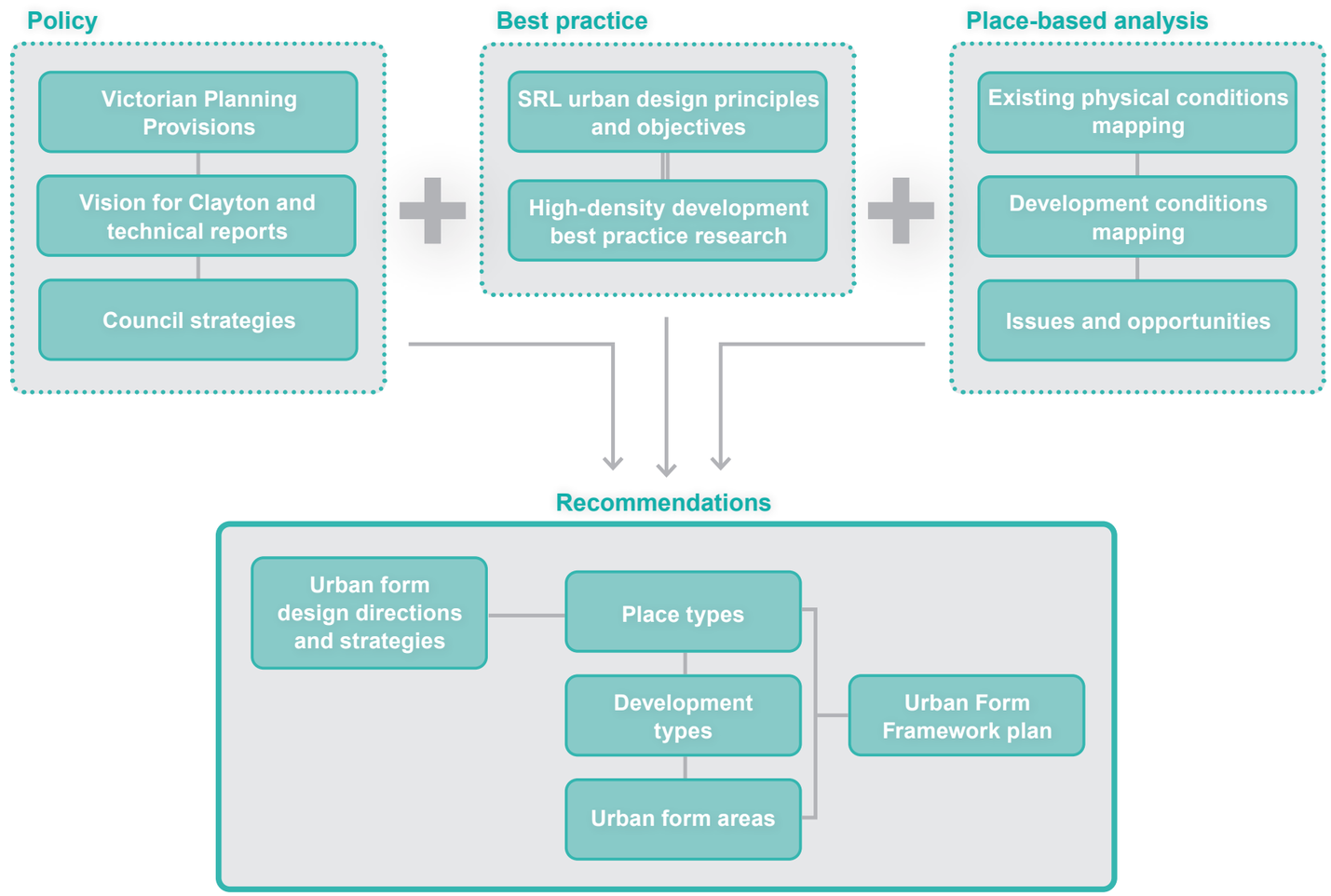


Figure 4.1: Methodology for developing the Urban Form Framework

4.2 Summary of analysis

Extensive analysis was undertaken to identify opportunities and constraints in achieving an urban form that supports the Vision for Clayton.

Opportunities

Figure 4.2 shows the key opportunities the urban form analysis identified in the Clayton Structure Plan Area.

These key issues and opportunities include:

1. Health and education employment area, dispersing pedestrian activity beyond the commercial / retail core
2. Clayton Road, south of the rail line, has a vibrant high street character that can be extended north by potential new development
3. Strengthening connection to Monash Health Precinct by creating a new entry experience for pedestrians from Mary Street
4. Cooke Street Car Park - Opportunity site
5. PMP Printing Precinct - Opportunity site
6. 1400 Centre Road - Opportunity site

Residential hinterland with an established landscape character and moderate tree density

Open spaces

Low rise residential area with lot sizes suitable to mid-rise building typologies, including apartments on amalgamated lots and townhouses on single lots

Wide roads, which can accommodate mid-high density development and enhanced pedestrian infrastructure

- Road width greater than 40 metres
- Road width 30-40 metres
- Road width 20-30 metres

Heritage buildings which strengthen the place identity

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Cranbourne / Pakenham rail line

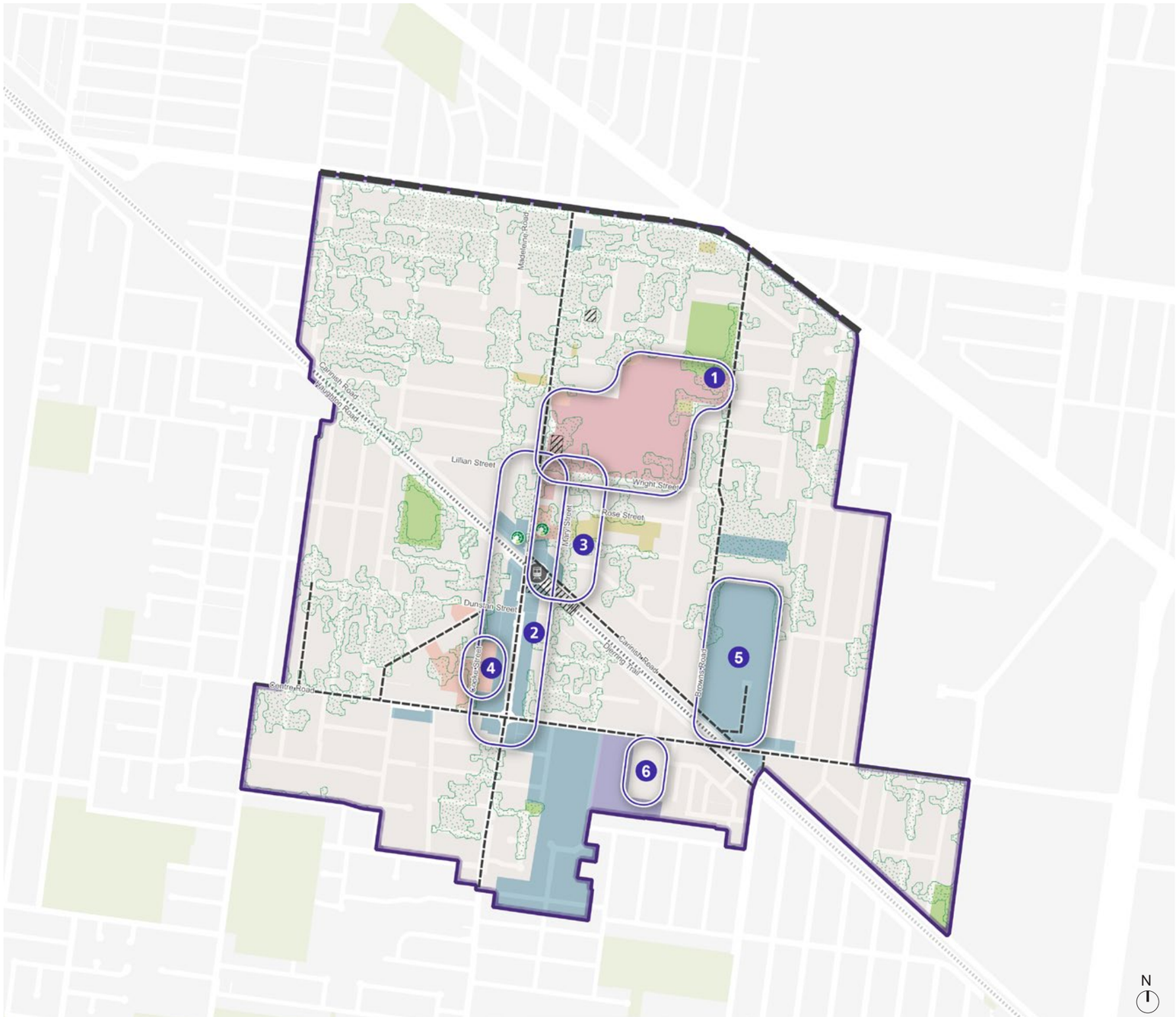


Figure 4.2: Opportunities for urban form in Structure Plan Area

Constraints

Figure 4.3 illustrates development constraints that affect the potential for change to the existing urban form character. Constraints to change in urban form character may relate to the lot pattern, lot ownership, existing development height or age, or character overlays associated with a specific property or group of properties within the Structure Plan Area. Combined, these constraints play a major role in shaping the feasibility, nature of development and built form character that can be achieved within the Structure Plan Area.

For this assessment constraints to change in urban form character have been categorised in order of significance (low to high) within the following groups:

- Lot size and ownership
- Character overlays
- Building heights
- Recently developed buildings.

Health and education land uses, existing buildings above 13 metres high and character restrictions, including heritage and significant landscape overlays, have also been included in the analysis.

Development within the Structure Plan Area is moderately constrained. The majority of the Structure Plan Area is comprised of 1 and 2-storey dwellings, alongside townhouses divided into 2 to 3 strata titles.

Properties fronting Clayton Road south of the train station feature narrow lots and buildings which limit redevelopment and contribute to a valued fine-grain urban fabric. Along the Princes Highway and North Road corridors, there is a concentration of townhouses with residential strata titles typically ranging from 4 to 6 units, and dispersed new developments that could limit development opportunities. On Centre Road, there is a limited number of residential strata-titled large industrial lots, located next to recently developed 4-storey residential buildings and townhouses.

Note: A range of constraints were identified across the Structure Plan Area. The more notable development constraints have been included on this page. Where a property is affected by multiple constraints, only the greater constraint is shown here. Further detail on the development constraints identified can be found in Appendix B.

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- SRL East alignment
- Cranbourne / Pakenham rail line
- Heritage overlay
- Victorian heritage register
- Large landholders
- Large landholders - health and education land use
- Small lots (0-400 sqm)
- Flooding
- Residential strata title 2 to 3
- Residential strata title 4 to 5
- Residential strata title 6+
- Recent developments / unbuilt approvals > 12 storey
- Recent developments / unbuilt approvals < 12 storey
- Recent developments / unbuilt approvals < 8 storey
- Recent developments / unbuilt approvals < 4 storey
- Existing buildings > 13 metres height

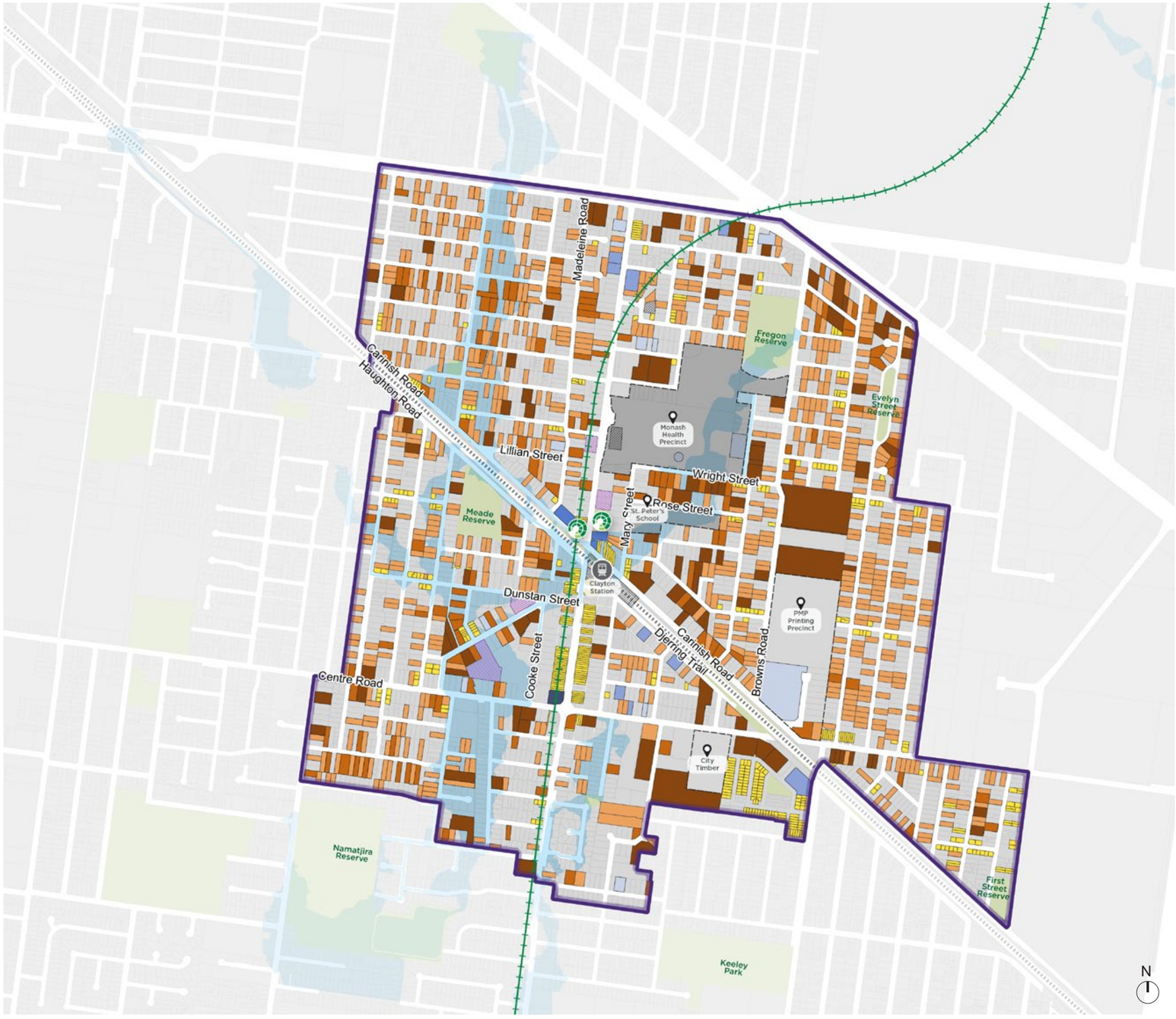


Figure 4.3: Constraints to change in urban form character in Structure Plan Area

4.3 Urban form design directions

This section outlines the urban form design directions to achieve the Vision for Clayton.

The design directions informed the development of the Urban Form Framework in Section 4.4 and the built form outcomes identified in Section 6.

The order of the design directions does not imply an order of priority.

Design Direction 5: Provide for growth in a form that delivers high amenity environments

Why is this important?

Substantial change

SRL will significantly amplify accessibility to employment, services, education and community facilities across Melbourne. Therefore, a substantial increase in residential development is warranted to enable more people to have good access to jobs and services. A significant increase in employment and health facilities close to the SRL station is also merited to improve accessibility to jobs and services for people elsewhere on Melbourne's rail network, further reinforcing the justification for increased residential density within the Structure Plan Area.

Denser areas with a mix of uses have an improved environmental performance, because they reduce travel distances and encourage sustainable modes of travel. They also increase support for local businesses, and make better use of existing infrastructure.

Increased residential density helps to create 20-minute neighbourhoods with local services within walking distance, supporting liveability and better health (as sought by Plan Melbourne 2017-2050). Denser areas offer a more vibrant environment and a more diverse range of opportunities for cultural and recreational experiences.

A significant increase in residential, employment, health and commercial uses within the Structure Plan Area is supported by Clause 11.01-1R of the City of Monash Planning Scheme, which states that 'the Suburban Rail Loop will 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'.

The level of growth envisaged in the Structure Plan Area represents a transformative change in character. A significant uplift in development potential is also necessary to stimulate redevelopment.

Therefore, in general, existing character should not act as a constraint on the level of growth proposed. However, the built form design directions outlined in Section 5 seek to manage the transition over time between the existing and proposed future characters.

Development capacity

Demand for additional dwellings and jobs within the Structure Plan Area has been forecast to 2041. Consistent with orderly planning, the Structure Plan should provide for at least this level of growth, subject to acceptable amenity outcomes.

More specifically, the development capacity provided for by the Structure Plan should not be limited to the need to accommodate these forecasts for the following reasons:

- Demand is likely to continue to grow after 2041. If the Structure Plan sets built form parameters which limit growth to that needed to accommodate the forecast growth to 2041, it may not be possible to accommodate further demand given the likely predominance of strata-titled buildings that are difficult to redevelop
- Demand forecasting is an imperfect science - past experience indicates that the actual demand may be greater than forecast
- There is uncertainty about the rate of redevelopment and number of properties that will occur between now and 2024. If the Structure Plan relies on all properties being redeveloped to provide for the forecast demand but this does not occur, the demand will not be able to be accommodated
- It is State planning policy to encourage intensification close to public transport, jobs and other services to promote public transport and active transport over car dependency for a range of environmental, economic and social reasons.

Building scale

Given the Structure Plan Area's very high level of accessibility to education, jobs and public transport, and the benefits of urban density, it should generally have a level of intensification greater than that intended for the surrounding residential hinterland or close to most other passenger stations or activity centres within Melbourne (other than Central Melbourne and the other SRL Structure Plan Areas), which are less well served by jobs and public transport.

Residential zones generally support building heights of 2 to 4 storeys, and phase 2 of the *Future Homes* initiative is planned to support heights of 5 storeys in the General Residential Zone within 800 metres of a passenger station or any activity centre. Therefore, in general, building heights within the Structure Plan Area should be at least 6 storeys to capitalise on the planned accessibility to jobs and public transport. Exceptions to this may include areas with heritage values, an identified special character, areas relatively distant or disconnected from the SRL station, or where development is relatively constrained.

Building form

As noted above, greater density has a range of benefits. However, if designed poorly, it can adversely affect the public and private amenity of an area, and therefore its attractiveness as a place to live, work and play. Tall buildings cause longer shadows and tend to have greater wind effects. Bulky buildings reduce access to daylight and sky views. These effects are increased in relatively narrow streets.

Therefore, higher-density development needs to be shaped to ensure a high standard of amenity.

What is happening now in Clayton?

The majority of the Clayton Structure Plan Area is comprised of 1 and 2-storey dwellings, alongside townhouses divided into 2 to 3 strata titles. As there has been limited change in the Clayton Activity Centre, buildings currently range from 1 to 3 storeys, with more recent developments emerging at 3 to 6 storeys along Burton Avenue and the corner of Haughton Road and Centre Road.

Monash Health Centre also has taller built form ranging in height from 5 to 12 storeys. The majority of industrial and manufacturing building heights range between 2 to 4 storeys.

In December 2023, a development was approved on the corner of Clayton Road and Centre Road which will have 12 to 17 storeys.

Most streets within the Structure Plan Area are 15 to 20 metres wide (road reserve width), and typical lot sizes are 15 to 20 metres wide and 30 to 45 metres deep.

Alignment with SRL Urban Design Framework:

Design Direction 5 will help to achieve the following SRL Urban Design Objectives (see Section 2.3):

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD5.2 Responsive
- Objective UD5.3 Sensitive
- Objective UD5.5 Quality design

How can this direction be achieved in Clayton?

Strategy UF1: Substantial change

Provide for higher-density development throughout the Structure Plan Area, except in isolated, sensitive or constrained areas.

Strategy UF2: Mid-rise development

Promote mid-rise development throughout the Structure Plan Area, except immediately around the SRL station where high-rise buildings are preferred.

Higher-density development within the Structure Plan Area will deliver growth in this extremely well-serviced location, and the environmental, economic, liveability and health benefits of urban density.

In order to reflect the greater accessibility of this location to jobs and services, building heights should be generally greater than 5 storeys. However, a lower height may be appropriate in isolated, sensitive or constrained areas as follows:

1. Isolated areas are those more than approximately 10 minutes by foot or local public transport from a train station or major employment, health or education campus, which are considered to have lesser accessibility to public transport or jobs, and therefore less suitability for intensification. Exceptions to this include properties:
   - Fronting a large open space, whose amenity benefits should be capitalised upon
   - Large enough to form a distinct character pocket.
2. Sensitive areas are pockets of land with particular sensitivities that limit the appropriateness of greater height, including:
   - On the north side of a narrow open space
   - Affected by a Heritage Overlay and in the outer parts of the Structure Plan Area
   - Affected by a Neighbourhood Character Overlay
   - Adjacent to properties zoned GRZ or NRZ outside the Structure Plan Area.
3. Constrained areas are those where comprehensive redevelopment is relatively unlikely due to a high proportion of:
   - Properties with more than 3 strata-titled lots
   - Small or narrow lots.

Most streets within the Structure Plan Area are 15 to 20 metres wide (road reserve width), and typical lot sizes are 15 to 20 metres wide and 30 to 45 metres deep. Mid-rise buildings (those between 5 and 12 storeys) are the most appropriate way to provide for substantial growth in these circumstances because they can deliver higher densities while maintaining good public realm and internal amenity.

In particular, the typical street widths and lot sizes can accommodate mid-rise buildings without unreasonable shadow, visual and wind impacts[1]. Mid-rise buildings can also be sited and shaped in a way that manages their impact on the existing character of low-rise areas[2,3].

Mid-rise buildings have a range of other attributes that would complement the opportunities provided by higher-rise and lower-rise buildings. These include:

- Research indicates that mid-rise residential buildings have positive outcomes in terms of social connectedness and well-being[4,5]
- Mid-rise buildings are said to be suitable for families, because parents are able to supervise children's outdoor play[6]
- Mid-rise development is less expensive to build than taller buildings per square metre of sellable or leaseable area, likely because of the lesser requirements for structure and services[7]
- Mid-rise residential development is more likely to be owner-occupier standard than speculative investor-grade housing
- Mid-rise apartments offer a distinctly different housing choice, compared with high-rise buildings and townhouses[8,9]
- Fewer properties need to be amalgamated to create a mid-rise development site than a high-rise development site
- The same number of dwellings is spread across more mid-rise than high-rise buildings, increasing competition between developers and choice for purchasers and renters
- There is a greater number of developers and builders who can create mid-rise than high-rise buildings, increasing the capacity of the industry to deliver the desired number of dwellings and increasing competition between them.

Adopting a mid-rise development pattern across the Structure Plan Area would result in the same amount of growth being spread over a larger area. Given that the factors listed above are strongest for residential buildings, and commercial buildings have a stronger need to be close to the SRL station and activity centre, the mid-rise preference is not recommended to be applied in the vicinity of the SRL station.

Mid-rise buildings range from 5 to 12 storeys. Therefore, a general preference for this form of development does not preclude the potential for distinct characters within the Structure Plan Area.

Mid-rise precedents

1. *Ewing, R., & Cervero, R. (2010). Travel and the Built Environment: A Meta-Analysis. Journal of the American Planning Association, 76(3), 265-294*
2. *SRL Housing Recommendations Report*
3. *Congress for the New Urbanism. (2001). Charter of the New Urbanism. McGraw-Hill*
4. *Gehl, J. (2010). Cities for People. Island Press.*
5. *Gifford, R. (2007). The Consequences of Living in High-Rise Buildings. Architectural Science Review, 50(1), 2-17*
6. *Heenan, Dr R. (2017). Healthy Higher Density Living for Kids. NSW Government & City of Parramatta*
7. *Urban Land Institute. (2013). The Economics of Mid-Rise versus High-Rise Construction.*
8. *SRL Housing Needs Assessment*
9. *Glaeser, E. L. (2011). Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier, and Happier. Penguin Press*

Design Direction 6: Establish diverse, liveable and productive neighbourhoods

Why is this important?

Clusters of buildings with similar scale and massing contribute to distinct place identities. The variation between these identities enhances the experience and legibility of the broader urban area. Varied building types also contributes to a diverse range of housing and business accommodation types, creating a more mixed and balanced community.

As noted in Strategy UF2: *Mid-rise development*, mid-rise buildings generally range from 5 to 12 storeys and are no greater than 15 storeys. Therefore, a general preference for this form of development need not result in uniform character outside the area around the SRL station. Distinct characters can be created by adopting a more specific height range within the mid-range scale, along with particular building siting and setback parameters (and land use mixes).

These built form choices should be based on the particular characteristics of the area and factors such as:

- Accessibility to public transport, jobs and services
- Housing choice, affordability and diversity
- Desired land use, including an aspiration to connect distinct activity nodes
- Accessibility to parkland
- Valued existing character including urban structure and topography.

In summary, specific built form attributes should be promoted in different parts of the Structure Plan Area, to create places with distinct identities, contribute to legibility, facilitate housing and business accommodation diversity across the whole area, and to support the land use and transport aspirations for those urban form areas.

Main streets

Although the aspiration to accommodate growth generally outweighs that to maintain the existing character, activity centres featuring fine-grain main streets are an exception. This is because their narrow lots present a particular challenge for viable floorplates, disincentivising redevelopment compared with other locations. Their fine-grain subdivision pattern also creates a distinctive character of small tenancies that support local, independent retailers. This character contributes to a more engaging public realm and is generally highly valued by local communities.

Existing small retail strips have a different character and present an opportunity to be comprehensively redeveloped due to their relatively small size. Therefore, these areas are proposed to have bespoke outcomes that complement their surrounding retail character.

The challenges of redeveloping narrow lots mean that it is likely that many such lots in a strip will remain undeveloped for the foreseeable future. Therefore, the form of development that is promoted in such areas should complement the existing fine-grain, low-rise character.

Public transport oriented development

Denser development supports greater use of public transport that is within easy reach. However it can also change the character of an area and the amenity its public realm and private spaces.

In each part of the Structure Plan Area, there is a need to strike a balance between providing for growth and moderating change to amenity and character. This balance should be weighted towards growth in the central core and SRL station environs, where access to jobs and services is greatest, and the need for sensitivity to existing character within and immediately outside the Structure Plan Area is least.

In contrast, it should be weighted towards maintaining the existing amenity and complementing the existing character towards the edges of the Structure Plan Area (without ignoring the need for growth). The areas between the core and edge should have a more balanced weighting.

This pattern creates the classic cone form of increasing building scale towards the centre of the Structure Plan Area, which contributes to the legibility of the broader area. The gradient of this cone should respond to the scale of public transport, jobs and services in the core, such as reaching taller buildings in centres with more than one rail line and/or a particularly significant number of jobs, such as Box Hill / Monash / Clayton and lower buildings in centres with only one rail line and/or a lesser number of jobs, such as Burwood.

Main roads generally carry public transport and are wider than local streets. Public transport provides a high level of accessibility to jobs and services. Greater width enables taller buildings to be accommodated without overwhelming the street. Therefore, denser buildings should be provided for along main roads. A mix of commercial and residential uses is appropriate to capitalise on the higher level of accessibility, along with adaptable buildings able to respond to changes in market demand for different uses. Denser, mixed-use buildings will contribute to a distinct 'boulevard' character.

Land use facilitation

Different forms of development facilitate different land use outcomes. For example:

- Taller buildings contribute to more vibrant environments, suited to commercial uses, and lower buildings support quieter places with higher environmental amenity, suited to residential uses
- Larger floorplates support commercial uses and narrower floorplates support residential uses
- Some industrial uses require large to very large floorplates with generous loading areas
- Buildings that are built close to the street frontage support commercial uses (notably those forming a continuous street wall for retail uses) and those that are set back from the street and freestanding provide more privacy and amenity for residential uses.

There is a desire to establish a stronger connection between the Box Hill Hospital and surrounding associated uses, and the commercial / retail core.

Demand for different uses varies over time, and is not possible to predict with any accuracy. Designing adaptable buildings that can accommodate a land use change over time is one possible solution. Adaptable buildings facilitate changes in use without the need for redevelopment, which is environmentally and financially costly. Adaptability is supported by a modest street setback, ground floor facades oriented towards the street, generous floor-to-floor dimensions to support commercial uses, and relatively shallow floorplates to provide good internal residential amenity.

Areas immediately adjacent to the commercial / retail core with an existing medium-density character are most suited to accommodate mixed-use and adaptable buildings, because they are contiguous with existing commercial activity and because the change in built form character is less abrupt than it would be in lower-density areas.

Diversity of housing

As discussed in Design Direction 5, residential typologies need to provide a diversity of housing options, allowing for future residents to have access to suitable 'right sized' and affordable accommodation. Accommodating for these diverse housing options will result in different areas requiring a different place identity.

Employment neighbourhoods

Areas with a high concentration of employment uses require careful consideration of the ambitions and expectations of these industries to ensure the built form and public realm support them. To attract and foster technology-led life science, health and education sectors, these neighbourhoods need to be sustainable, connected and desirable places. These areas need to support the needs of all-hour workers by ensuring a safe and attractive public realm at night and day. The public realm and built form should also foster incidental social connections and transfer of knowledge between workers.

Alignment with SRL Urban Design Framework:

Design Direction 6 will help to achieve the following SRL Urban Design Objectives (see Section 2.3):

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.4 Environmentally sustainable
- Objective UD2.1 Strategic alignment
- Objective UD2.2 Functional urban structure
- Objective UD2.3 Integration with context
- Objective UD2.4 Welcoming
- Objective UD3.1 Linkages
- Objective UD3.2 Transport integration
- Objective UD3.3 Legible
- Objective UD3.4 Green network
- Objective UD4.2 Twenty-minute neighbourhoods
- Objective UD5.2 Responsive
- Objective UD6.1 Amenity
- Objective UD6.3 User experience
- Objective UD6.5 Activation

What is happening now in Clayton?

The Clayton Activity Centre has a significant commercial and retail area running along Clayton Road, in the form of fine-grain commercial buildings. This forms the heart of the Clayton Structure Plan Area and has the highest level of pedestrian activity.

The Monash Medical Centre comprises a range of health facilities, predominantly to the east of Clayton Road. These vary from more recent buildings of larger scale and more contemporary architecture, through to smaller scale buildings, associated servicing, parking and limited landscaping.

South of Centre Road is a key employment area which is comprised of fine-grain industrial uses.

Clayton Road and Centre Road are public transport corridors and are predominantly lined with low-rise dwellings along them.

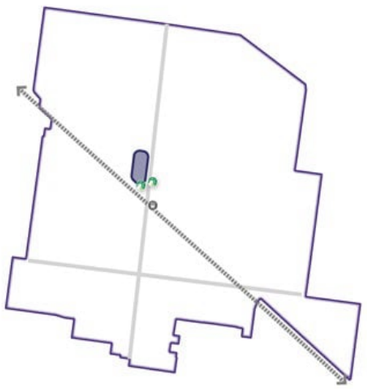
Outside the commercial / retail core are predominantly residential areas characterised by low-rise detached dwellings in a garden setting.

How can this direction be achieved in Clayton?

Strategy UF3: Vibrant core

Promote higher-density mixed-use development in the Structure Plan Area core.

Taller built form should be facilitated within the commercial / retail core to complement the existing and desired built form intensity of the area, while supporting a range of land use types.

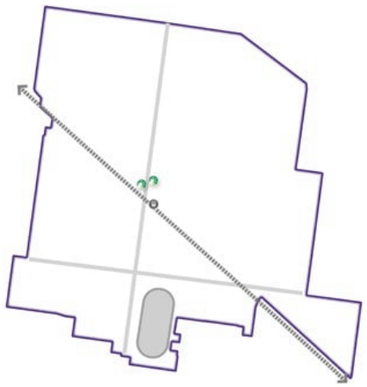


High-rise precedents

Strategy UF4: Enterprise neighbourhoods

Provide for fine-grain and large lot enterprise land uses.

The enterprise neighbourhood should support the moderate intensification of jobs growth, providing space for enterprise businesses in small or large footprint buildings. The landscape character and street level activation of this area should be enhanced.

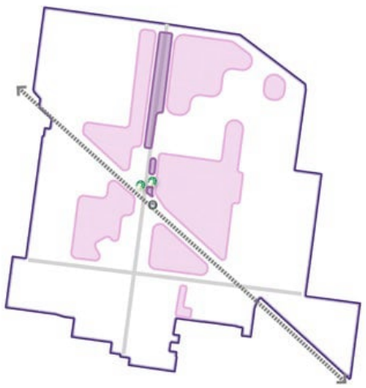


Enterprise neighbourhood precedents

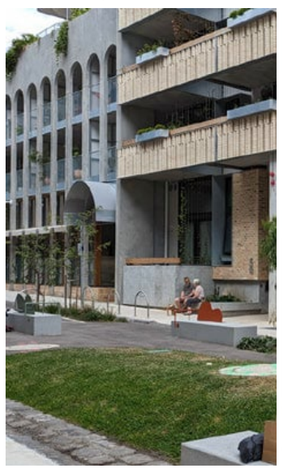
Strategy UF5: Mixed-use neighbourhoods

Facilitate mid-rise mixed-use neighbourhoods adjacent to the urban core or nearby transport nodes.

An adaptable building typology which can accommodate a range of land uses and has a commercial-capable ground floor design should be provided in mixed-use neighbourhoods.



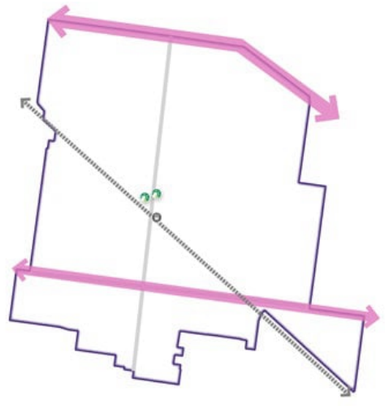
Mixed-use precedents



Strategy UF6: Boulevards and Avenues

Facilitate continuous, mixed-use, mid-rise built form along main roads.

Buildings should strongly frame the wide roads, and provide an adaptable building typology with commercial-capable ground floors.

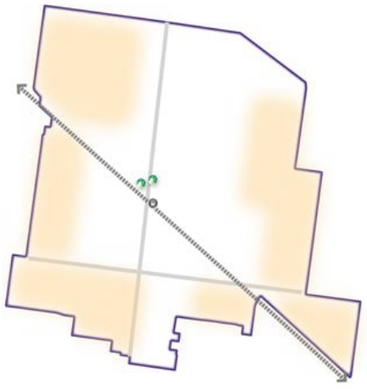


Boulevards and avenue precedent

Strategy UF7: Residential neighbourhoods

Promote low to mid-rise apartment buildings and townhouses in a garden setting in most residential neighbourhoods.

Buildings should promote the existing garden setting and feature front, side and rear landscape setbacks, on single and consolidated lots.

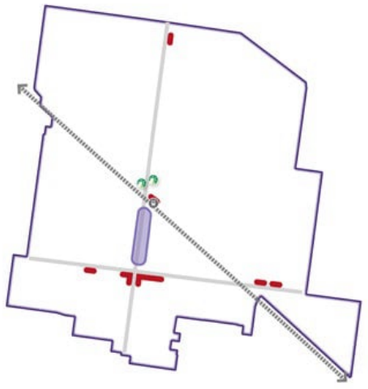


Residential precedents

Strategy UF8: Main streets and existing small retail strips

Complement the fine-grain, low-rise character of local shopping strips.

Main street buildings and buildings located within existing small retail strips should complement the existing scale and rhythm of the streetscape, maintain amenity to the public realm and support a retail ground floor.

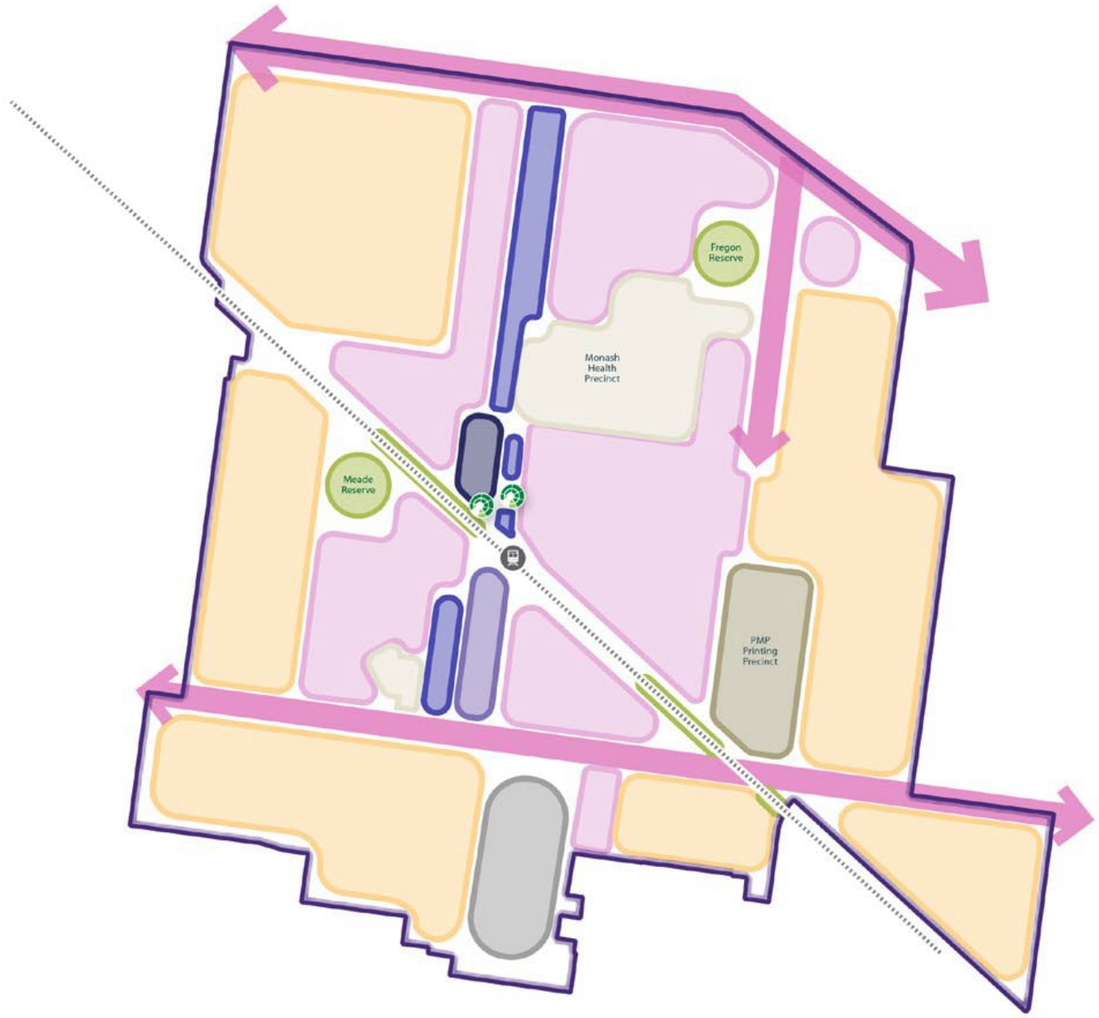


Main street precedents

Place types

As a result of the urban form design directions and strategies, a pattern of distinct place types has emerged within the Structure Plan Area.

Each place type represents a different urban form outcome which capitalises on its existing attributes and supports its desired land use function, reinforcing their collective diversity, individual identity and sense of place.



Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Central Core
- Central Flanks
- Main Streets
- Key Movement Corridors
- Urban Neighbourhood
- Residential Neighbourhood
- Public Open Space
- Enterprise Neighbourhood
- Civic Areas: Monash Health Precinct and Clayton Community Centre
- Recently Approved Development Plan

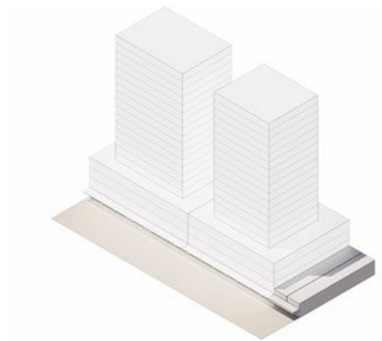
Figure 4.4: Place types

Development types

A range of development types was explored for each place type based on their specific opportunities and constraints, and desired land use outcomes.

While the development types were employed to develop the Urban Form Framework for the Structure Plan Area, the proposed typologies are indicative and, in reality, a range of built form outcomes is likely to occur.

The development types were informed by research into best practice development typologies, contained in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

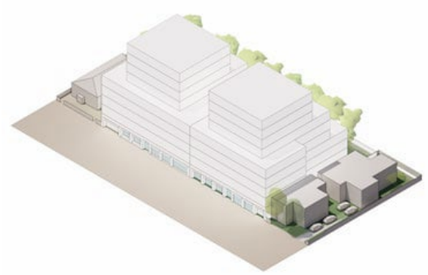


Place type: Central Core

The development type recommended in the Central Core is the high-rise podium-tower. Medium-high rise towers in the form of podium-tower buildings can deliver the level of intensification envisaged for the Central Core. Smaller lots will require lot amalgamation to enable the development of podium-tower buildings.

Provided it is appropriately-scaled, the podium provides a street-edge form that facilitates good public realm amenity in terms of human scale, sky views, sun and wind conditions, and complements the existing character, which generally comprises low-rise street walls. Best practice podium-tower design includes active street facades with any above-ground car parking ‘sleeved’ behind other uses, and well-separated towers with generous setbacks.

A mix of uses is necessary to deliver the desired vibrancy and activation. The podium-tower format enables a range of retail types in the podium and office and/or residential uses above.



Place type: Central Flanks

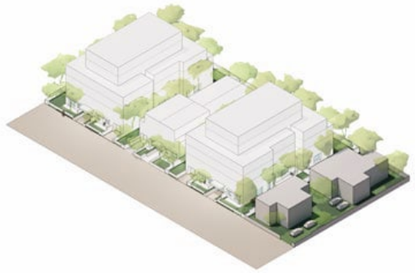
The development type recommended in the Central Flanks is the mid-rise podium-tower. It delivers high density while maintaining good solar provision to the public realm. This type typically requires a large lot or lot amalgamation.

The zero front setback and lack of side setbacks at the base of the building ensure a highly-activated and strongly-framed public realm. This will complement the prevailing existing character of low-rise buildings.

The strong relationship with the street also supports commercial uses at ground and potentially upper levels to provide the desired vibrancy and activation. Best practice design provides for car parking in a basement or ‘sleeved’ behind other uses.

Behind the street wall, the base of the building is set back from the side and rear boundary to provide space for tree planting. This typology provides a 5 to 10 per cent deep soil area at the sides and rear of the lot.

Above the street wall, the upper levels are setback from all sides to maintain sunlight, sky views and a sense of openness in the public realm. These setbacks also maintain good internal amenity and equitable development opportunities on neighbouring properties.



Place type: Residential Neighbourhoods

The development types recommended in the Residential Neighbourhoods are the garden apartments, which are apartments on amalgamated lots, generally equal or greater than 24 metres in width, and townhouses on single lots, generally less than 24 metres in width.

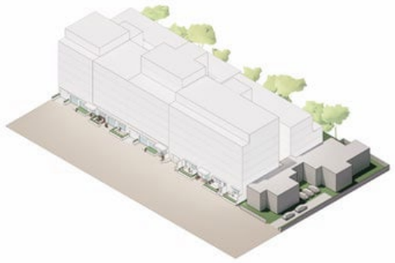
The garden apartment development type provides for the same type of development on amalgamated lots as proposed in Phase 2 of the Future Homes program or, going back further, the art deco apartment boom of the 1920s and 30s, but with a slightly increased density, which is considered appropriate because these areas are within walking distance of a higher order (SRL) station. However, the density is limited to mediate the transition in character and provide a different housing choice than that offered in other urban form areas. In particular, approximately 20 per cent of the apartments will have generous ground level gardens, making them suitable for families.

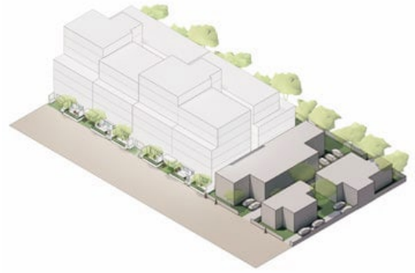
The development of 4 to 6-storey garden apartments rely on the amalgamation of two typical lots, generally equal or greater than 24 metres in width, which is necessary to deliver higher-density while providing good-quality internal amenity and providing a well-landscaped perimeter.

Importantly, lot amalgamation enables generous side and rear setbacks which will provide for high-quality on-site amenity and significant contribution to tree canopy cover. This typology provides a 35 per cent deep soil area across the front, sides and rear of the lot.

The substantial provision for canopy trees in front, side and rear setbacks will retain and strengthen the leafy character that predominates in these areas. These trees will significantly mitigate the visual presence of taller buildings on the existing streetscape and backyard character of these areas

The development of 3-storey townhouses with lesser side setbacks are appropriate on typical single lots, generally less than 24 metres in width. Low front fences and front doors and windows facing the street will provide passive surveillance of the street.





Place type: Key Movement Corridors and Urban Neighbourhoods

The development type recommended in the Key Movement Corridors and Urban Neighborhoods is Urban Infill 1 and 2. These highly adaptable buildings are able to accommodate commercial and / or residential uses. They deliver moderately high density along main roads, in accordance with Strategy UF6: Boulevards and Avenues, without the potentially adverse impacts of taller buildings on local character and amenity. Importantly, this development type can be developed on the vast majority of the lots found in these urban form areas without the need for lot amalgamation.

Urban infill development provides a vibrant and memorable urban character, good private amenity and protection of neighbouring amenity to the rear, adaptability for mixed and changing uses, and reasonable space for tree canopy cover. The minimal front setback and lack of side setbacks ensure a well-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground or upper levels where desired.

The primary orientation of accommodation to the street and middle of the block enables differing uses to comfortably exist side-by-side where relevant. Generous rear setbacks ensure good amenity for accommodation facing towards the middle of the block, including adjacent properties to the rear, and space for tree planting.

As the Key Movement Corridors and Urban Neighbourhoods evolve through new urban infill development, they will experience a substantial change in character. As noted in Design Direction 5, this is considered to be an inevitable outcome of the vision for transformational change. This kind of transition in character is consistent with other transforming areas such as Brunswick Activity Centre, Cremorne and Box Hill between Whitehorse Road and the hospital. Low-rise dwellings will no longer represent the preferred character, and will increasingly become anomalies.

The sheer on-boundary side walls of urban infill development will change the amenity of any neighbouring low-rise dwellings to the side However, the lack of side setbacks is necessary to enable viable development of appropriate density on single lots and avoid constraining development on neighbouring properties to the side, in accordance with Strategy BF11: Building Orientation. The introduction of side setbacks to protect the existing amenity and character would mean that lot amalgamation is required to achieve a viable floorplate, and greater height is needed to maintain the density envisaged by Strategies UF5: Mixed-use neighbourhoods and UF6: Boulevards and Avenues.

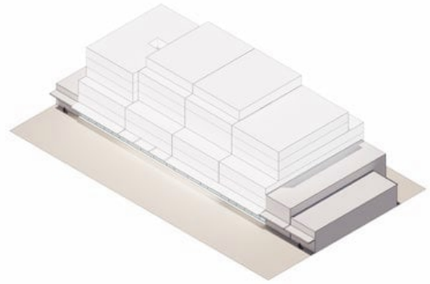
The majority of lots in this place type are occupied by detached dwellings whose primary orientation is towards the street and a rear garden, rather than towards side boundaries. Therefore, the impact of sheer on-boundary side walls will be generally limited to the secondary rooms that face side boundaries.

Urban Infill development is proposed to have a generous rear setback, which will limit its impact on the amenity and equitable development of neighbouring rear gardens. The rear setbacks of existing and future development will ultimately combine to form a large green space in the middle of the block.

The building height and upper level street setbacks vary based on street width to ensure an appropriate balance between openness and enclosure in the street, along with reasonable solar access. In the Key Movement Corridors, urban infill provides a taller street wall, with upper levels maintaining a 1:1 ratio with the street. In the Urban Neighbourhoods, it provides a street wall equal to the street width, with upper levels setback to maintain an open character.

This development type includes a landscaped front setback as well as a generous, landscaped rear setback, resulting in a combined 10 to 15 per cent deep soil area.

The proposed use-mix varies with the role and function of the urban form area.



Place type: Main Streets

The development type recommended in the Main Street place type is shoptop infill.

This development type provides for employment and housing growth and increased vibrancy, particularly outside retail hours, while complementing the existing character and providing a high level of pedestrian amenity.

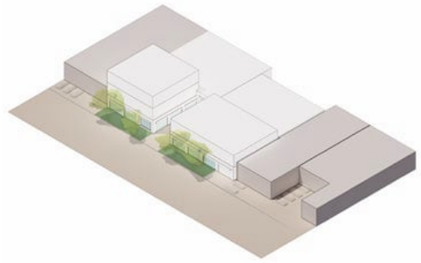
It relies on the amalgamation of up to three typical lots, to create a feasible site width.

The proposed type incorporates a 2 to 3 storey, zero setback, boundary-to-boundary street wall that will complement the existing vibrant and memorable character created by low-rise, continuous, active streetscapes.

The street wall is articulated to reflect the existing fine-grain character and activated by commercial ground floor uses.

Above the street wall, upper levels are set back to ensure an appropriate balance between openness and enclosure in the street, along with good solar access.

The proposed use-mix varies with the role and function of the urban form area.



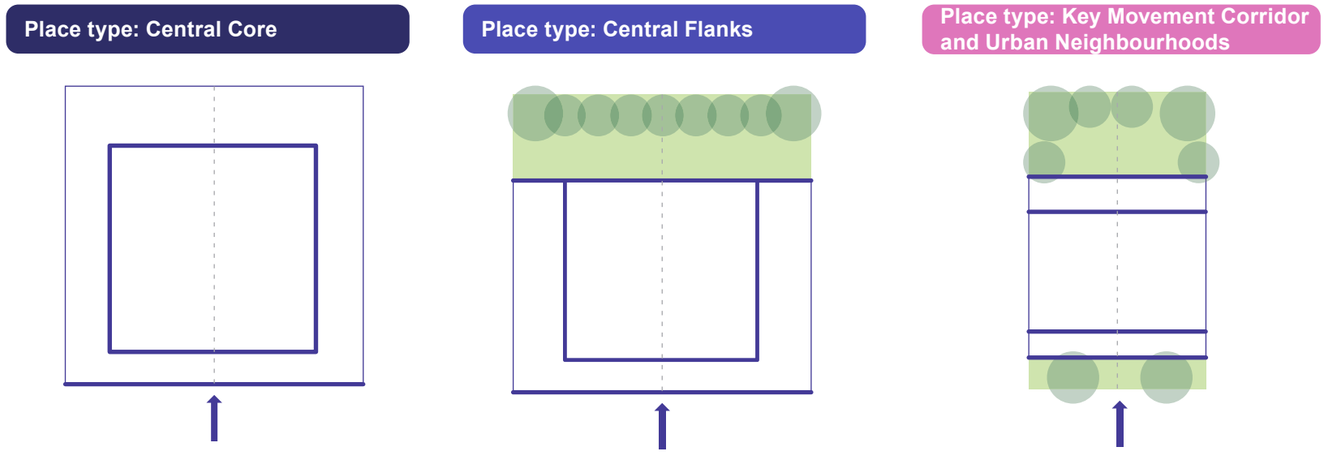
Place type: Enterprise Neighbourhood

A range of development types are envisaged in Enterprise Neighbourhoods. In order to host a wide range of employment uses. This may include a freestanding building on larger or amalgamated lots, or a boundary-to-boundary infill building on narrower lots.

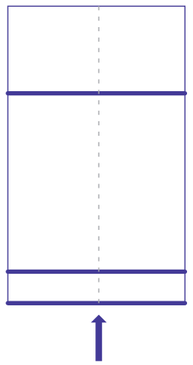
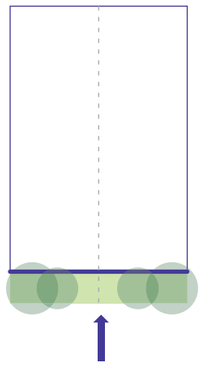
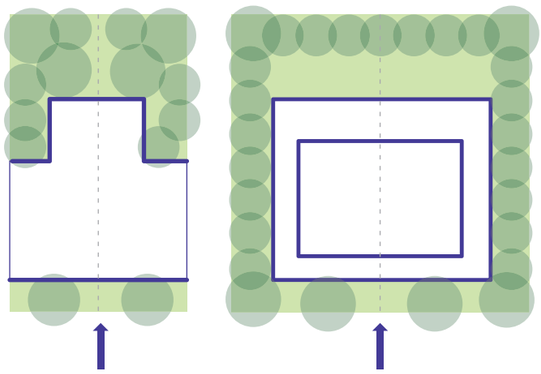
Importantly, buildings in these areas should position loading and servicing activities away from the street frontage, and instead address the street with their most active uses and incorporate a modest landscaped setback. This will contribute to a more inviting streetscape, attracting new businesses to the area. This typology provides a 5 to 10 per cent deep soil area at the front of the lot.

Development type outcomes

The following diagram provides a comparison of the general outcomes achieved by each development type.



Height	15+ storeys	8 to 15 storeys	6 to 8 storeys
Density	6+:1	5.5 to 6.5:1	3-3.5:1
Deep soil area and canopy trees	0 per cent	5 to 10 per cent	10 to 15 per cent
Use mix	Mixed-Use	Mixed-Use	Mixed-Use
Application	Commercial / retail core / SRL station area	Outer Core	Mixed-use or Higher Density Area

	Place type: Main Streets	Place type: Enterprise Neighbourhood	Place type: Residential Neighbourhoods	
				
Height	6 to 7 storeys	2 to 6 storeys	2 to 3 storeys	4 to 6 storeys
Density	4:1	2.5:1	1.2:1	2:1
Deep soil area and canopy trees	0 per cent	5 to 10 per cent	20 to 25 per cent	35 per cent
Use mix	Mixed-Use	Commercial	Residential	Residential
Application	Mixed-use or retail streets	Employment area	Residential Area Single Lot	Residential Area Two Lots

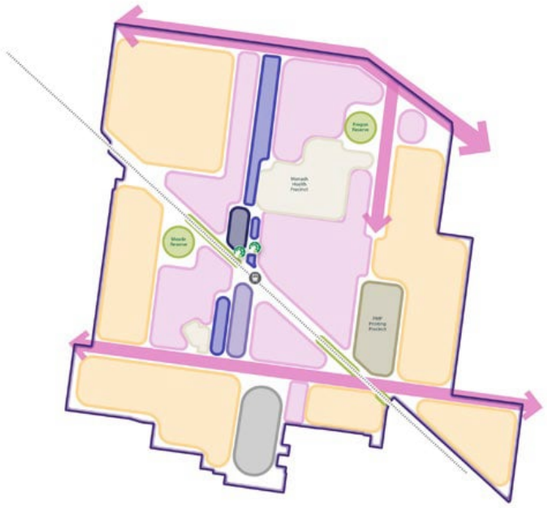
4.4 Urban Form Framework

The Urban Form Framework outlines the future urban form and land use attributes for the Structure Plan Area. It has been developed by refining the pattern of place types into collections of more precise urban form areas within the Structure Plan Area based on:

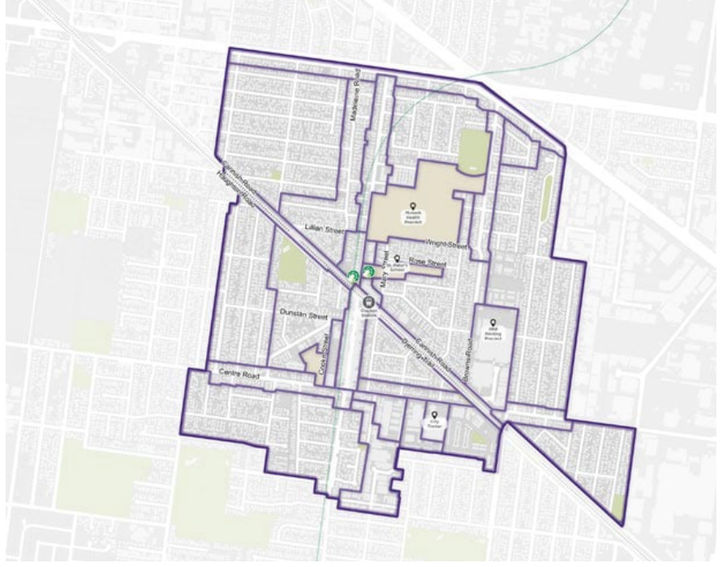
- Existing urban structure such as key movement corridors, barriers and key anchors (see Section 2.5)
- Existing character attributes
- Areas with a similar level of constraints to urban form change (see Figure 4.3)
- Existing land use pattern
- The Vision for Clayton
- Land use directions.

The urban form areas are outlined on the following pages.

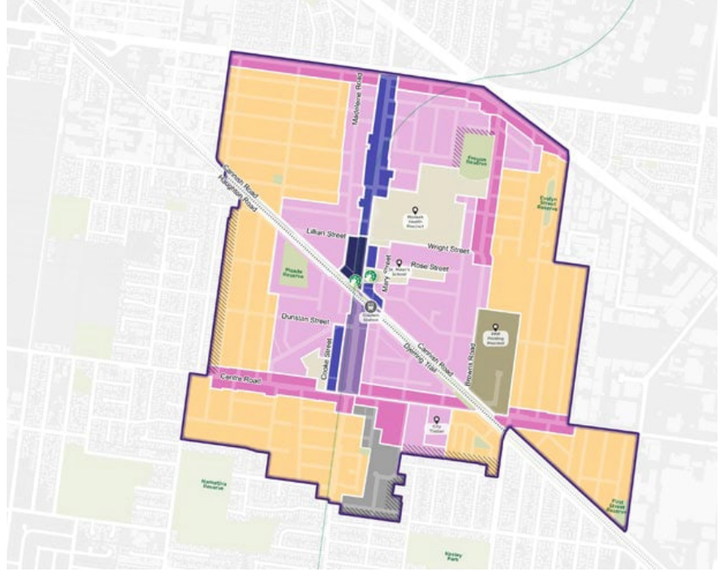
Place types



Urban form areas



Urban Form Framework plan



4.5 Urban form areas

Figure 4.5 identifies the future urban form areas and the following pages describe their attributes, grouped by place types.

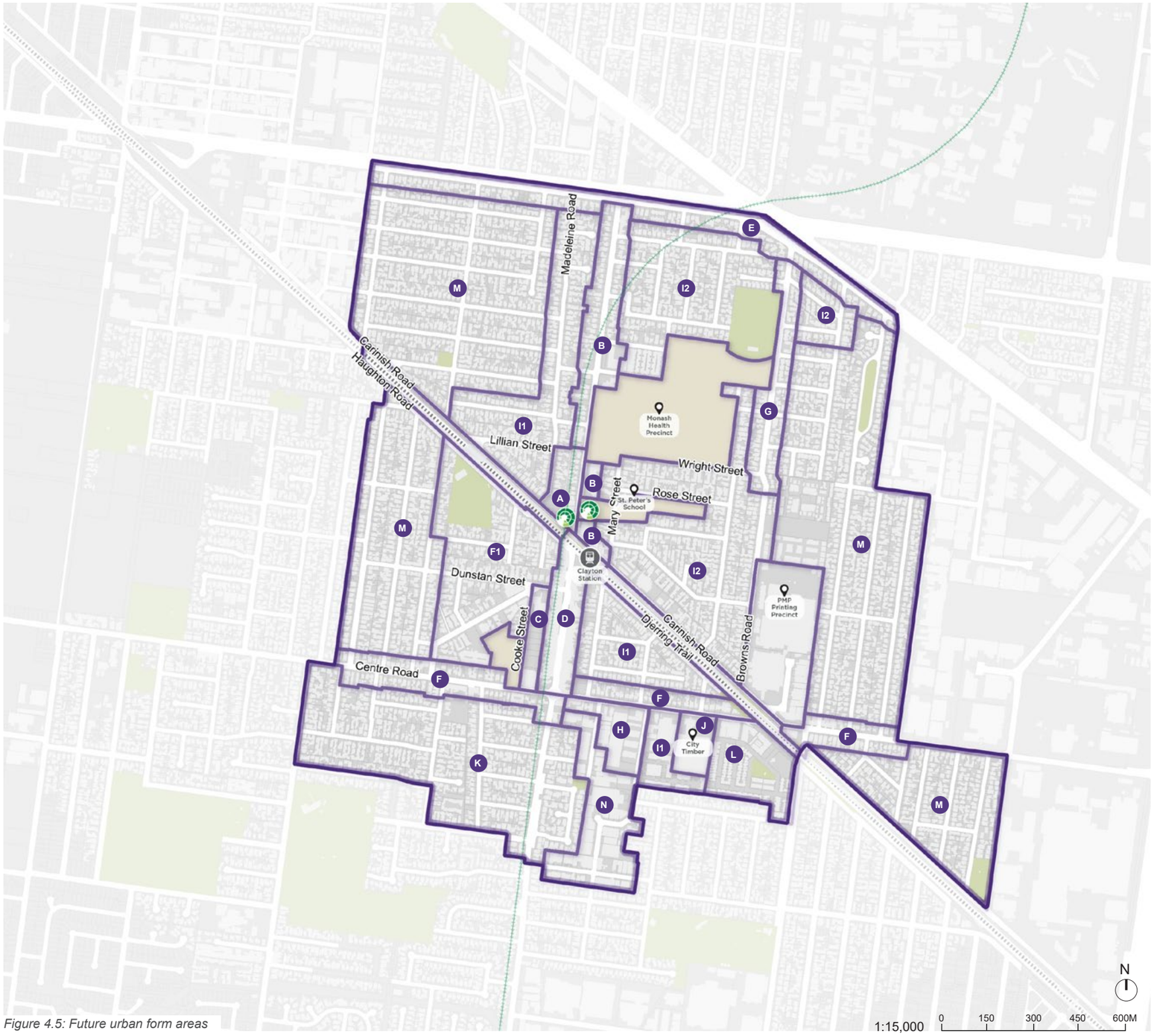


Figure 4.5: Future urban form areas

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- SRL East alignment
- Cranbourne / Pakenham rail line
- Urban form area Boundary
- Civic Areas - State or local government or institutional land not envisaged for substantial change.

Place type: Central Core

The urban form areas within the Central Core are the most accessible and contain the SRL station at Clayton, connection to the existing Clayton Station and the majority of the centre's retail uses. To continue to provide for high-density employment and retail uses,and capitalise on the high level of accessibility and services available, a podium-tower development type is recommended.

A Core Area

The Core Area is the most accessible part of the Structure Plan Area and contains the majority of approved high-rise buildings (see Development constraints map). It contains the SRL station at Clayton and the Station development areas (Strategic Sites), along with a row of shops on Carinish Road. It also lies between the Clayton Activity Centre core to the south and the Monash Health Precinct to the north-east. The accessibility provided by the SRL station at Clayton and proximity to the Health Precinct warrant high-density redevelopment. The area is currently zoned a mix of C1Z, RGZ and GRZ.

Place type: Central Flanks

The urban form areas within the Central Flanks are highly accessible and comprise health, education, commercial, and residential land uses. To continue to provide for mid-density employment and retail uses, a mid-rise podium-tower development type is recommended. This form also supports pedestrian-favoured streets with good amenity and street life.

B Clayton Road North

Clayton Road North comprises land fronting Clayton Road north of the Core Area. It carries bus routes and abuts the Monash Health Precinct. The urban form area is currently characterised by an eclectic mix of detached dwellings, residential units, shops and medical buildings. The width and accessibility of the road, and proximity to Monash Health Precinct and the SRL station at Clayton, present a distinct opportunity for taller buildings. There are relatively few development constraints, presenting the opportunity for wholesale character change through widespread redevelopment to contribute to a new, higher-density character along both sides of the road. The area is currently zoned a mix of C1Z and RGZ.

C Cooke Street car park

Cooke Street Car Park is a very large, underutilised property that offers a rare opportunity for a master planned development that provides a different offer to the surrounding urban form areas. It is currently zoned a mix of PUZ, C1Z and RGZ.

Place type: Main Streets

The urban form area comprises the traditional retail strip and commercial properties along Clayton Road. To continue to provide mid-density uses while ensuring the 'Main Street' Character of Clayton Road is maintained.

D Clayton Road South Activity Centre

Clayton Road South Activity Centre comprises narrow commercial properties fronting Clayton Road at its centre. It is currently characterised by small, 1 to 2 storey shops built boundary-to-boundary. Its adjacency to the SRL station at Clayton creates and the width of Clayton Road provide an opportunity for an increase in development scale, although the narrow frontages and small size of most properties here will constrain redevelopment. The land is currently zoned C1Z.

Place type: Key Movement Corridors

The urban form areas within Key Movement Corridors have varying degrees of accessibility, and comprise a mix of low-rise commercial development and detached residential dwellings set along grand Boulevards and avenues. To frame the public realm and provide adaptable buildings, the urban infill development type is recommended.

E Dandenong Road

The Dandenong Road urban form area comprises land fronting the southern sides of North Road and Dandenong Road, at the northern edge of the Structure Plan Area close to the Monash Structure Plan Area. The area is currently characterised by low-rise residential units. There is a relatively high proportion of strata-titled property, which will constrain redevelopment. However, the proximity of public transport, width and exposure provided by these roads, and the area's strategic location between the Monash and Clayton Structure Plan Areas—and Monash University and the Monash Health Precinct in particular—create a distinct opportunity for taller buildings that may overcome these constraints and enable a new, higher-density character to be established. The land is currently zoned RGZ and GRZ.

F Centre Road Corridor Flanks

Centre Road Corridor comprises land fronting the western and eastern ends of Centre Road. It is currently characterised by an eclectic mix of detached houses, low-rise residential units, large duplexes, apartment buildings and shopping strips. There is a relatively high proportion of strata-titled property, which will constrain redevelopment. However, the public transport, width and character of Centre Road creates a distinct opportunity for taller buildings. The area is currently zoned a mix of GRZ and C1Z.

G Browns Road Corridor

Browns Road Corridor comprises land fronting Browns Road up to Monash Green Drive. The area is currently characterised by low-rise residential units. There is a relatively high proportion of strata-titled property, which will constrain redevelopment. However, the width provided by this road, and the area's strategic location between the Monash and Clayton Structure Plan Areas—and Monash University and the Monash Health Precinct in particular—create a distinct opportunity for taller buildings that may overcome these constraints and enable a new, higher-density character to be established. The land is currently zoned RGZ and GRZ.

H Centre Road Enterprise

An extension of the Centre Road Corridor Flanks, this urban form area captures the distinct opportunity for employment densification utilising the large lot sizes zoned IN1Z.

Place type: Urban Neighbourhoods

The urban form areas within Urban Neighbourhoods are residential-focused, mixed-use neighbourhoods close to the commercial / retail core and / or public transport. To create a continuous, activated street wall which complements the scale of the street, with a landscape setback and mid-rise building form, the urban infill development type is recommended.

I1 Clayton Inner

Clayton Inner is three residential areas immediately northwest, southwest and southeast of the Core Area. The southwest area contains Meade Reserve. They are currently characterised by a mix of residential units and detached dwellings. The area's proximity to the SRL station at Clayton and activity centre support an increase in density. The detached dwellings have few development constraints, presenting the opportunity for redevelopment to create a more consistent mixed-use, higher-density character. The land is currently zoned a mix of RGZ and GRZ.

I2 Clayton Inner East

Clayton Inner East is a residential area surrounding the Monash Health Precinct. It contains Fregon Reserve. The area is currently characterised by various forms of low-rise, medium density housing, and a few remnant detached dwellings. Its proximity to the Monash Health Precinct, SRL station at Clayton and activity centre present the opportunity for redevelopment to provide for allied health uses and higher-density residential development. The land is currently zoned a mix of RGZ and GRZ.

J 1400 Centre Road

1400 Centre Road is an industrial / warehouse site east of Clayton Industrial in the south of the Structure Plan Area. It is bound by Centre Road to the north, residential developments to the east and industrial land to the west and south. The site has few development constraints, presenting an opportunity for future redevelopment. It was recently rezoned to RGZ1.

Place type: Residential Neighbourhoods

The urban form areas within Residential Neighbourhoods are comprised of low-rise residential areas in the outer parts of the Structure Plan Area. To maintain the 'leafy' character while providing for increased residential density, the garden apartment development type is recommended. In places with specific character attributes requiring protection, or at the edge of the Structure Plan Area, a 4-storey garden apartment development type is recommended.

K Clayton Road South

Clayton Road South comprises residential properties along Clayton Road south of Centre Road, extending east to the Clayton Industrial urban form area. It is currently characterised by detached dwellings in a garden setting. The area has relatively little unit development or other development constraints, presenting the opportunity for wholesale character change through widespread redevelopment. It is currently largely zoned GRZ.

L Jackson Green

Jackson Green is a recent redevelopment of a former industrial site for medium-high density housing, including apartments and townhouses surrounding Jacksons Green Park. It is unlikely to see redevelopment in the near future. The area is zoned a mix of RGZ and GRZ.

M Clayton Residential

Clayton Residential comprises four residential neighbourhoods in the outer reaches of the Structure Plan Area. They are currently characterised by a mix of residential units and detached dwellings in a garden setting. The detached dwellings have few development constraints, presenting the opportunity for redevelopment to create a more consistent medium-density character. These neighbourhoods are currently largely zoned GRZ.

Place type: Enterprise Neighbourhood

The urban form areas within Enterprise Neighbourhood are comprised of low-medium rise light-industrial buildings with front setbacks set along streets. To support a wide range of employment uses, a specific development type is not recommended. However, buildings should enhance the public realm through front setbacks and by locating loading and servicing activities away from the street.

N Clayton Industrial

Clayton Industrial comprises industrial land in the south of the Structure Plan Area, east of Clayton Road. It is bound by Centre Road to the north and residential land to the west, east and south. The land has few development constraints, other than a some strata-titling, presenting an opportunity for redevelopment for higher-order employment uses. It is currently zoned INZ, MUZ and GRZ.

Urban Form Framework Plan

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- SRL East alignment
- Cranbourne / Pakenham rail line
- Strategic site - Station development area
- Civic Areas - State or local government or institutional land not envisaged for substantial change.
- Sensitive Area (5)
- Recently Approved Development Plan

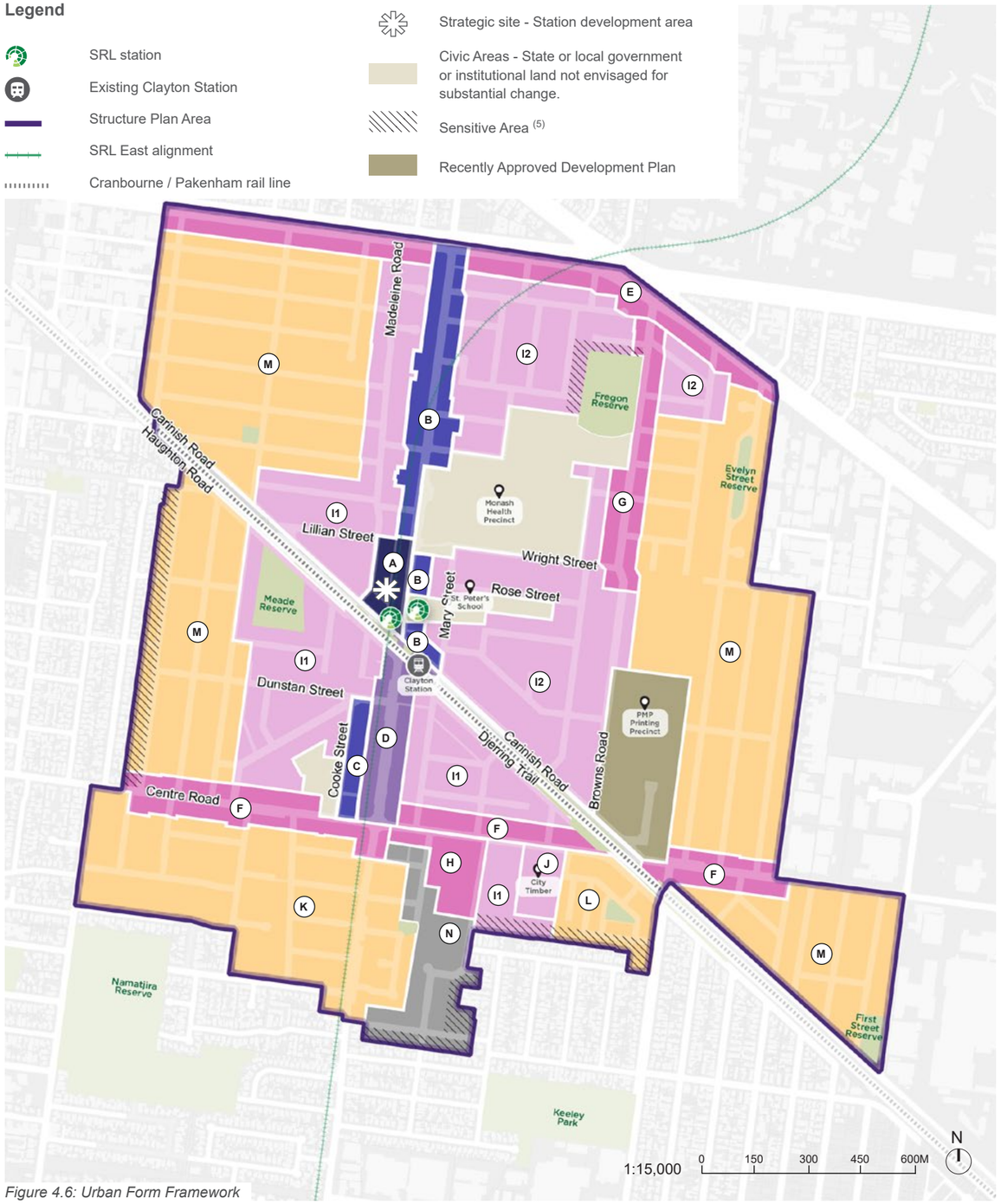


Figure 4.6: Urban Form Framework

Legend	Place type	Urban form area	Indicative density (1)	Indicative building height (2)	Land use priority (3)
	Central Core	A - Core Area	FAR 6 (4)	41 metres (10 to 11 storyes)	Commercial
	Central Flanks	B - Clayton Road North	FAR 5.5 to 6.5	27 to 49 metres (8 to 15 storeys)	Health / Commercial / Mixed use
		C - Cooke Street car park			
	Main Streets	D- Clayton Road South Activity Centre	FAR 4	24 metres (6 to 7 storeys)	Commercial
	Key Movement Corridors	E - Dandenong Road F - Centre Road Corridor Flanks	FAR 3.5	27 metres (7 to 8 storeys)	Residential / Mixed use
		G - Browns Road Corridor			Health / Mixed use
		H - Centre Road Enterprise			Employment
	Urban Neighbourhoods	I1 - Clayton Inner	FAR 3	24 metres (6 to 7 storeys)	Residential
		I2 - Clayton Inner East	FAR 4	27 metres (7 to 8 storeys)	Health / Residential
		J - 1400 Centre Road			Residential / Mixed use
	Residential Neighbourhoods	K- Clayton Road South	Garden Apart. FAR 2 Townhouses FAR 1.2	Garden Apart.: 21 metres (4 to 6 storeys) Townhouse: 11 metres (3 storeys)	Residential
		L - Jackson Green			
		M - Clayton Residential			
	Enterprise Neighbourhood	N - Clayton Industrial		24 metres (6 storeys)	Employment

Figure 4.7: Urban Form Framework table

1. *Indicative densities, which may vary based on specific circumstances. Densities are provided to indicate the intensity of development, not because they are proposed to be translated into planning controls.*
2. *Indicative heights, which may vary based on specific circumstances. Refer to Section 5.3 for preferred building heights.*
3. *Based on the Land Use Scenario and Capacity Analysis work.*
4. *Central Core FAR based on an allowance of 30 per cent of the site area for internal roads and open space.*
5. *These areas are described in Strategy UF1: Substantial change..*

5 Built Form

AJM
Joint Venture

5.1 Introduction

This section sets out a Built Form Framework to achieve the Vision for Clayton, and summarises the design directions and strategies.

The Built Form Framework and strategies were informed by the SRL Urban Design Framework and the Vision for Clayton. This was supplemented by an analysis of the existing development conditions (see Appendix A) and extensive research into best-practice urban development typologies provided in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

The Built Form Framework was developed concurrently with the Public Realm Framework and each informs the other.

The methodology for developing the Built Form Framework is summarised in Figure 5.1.

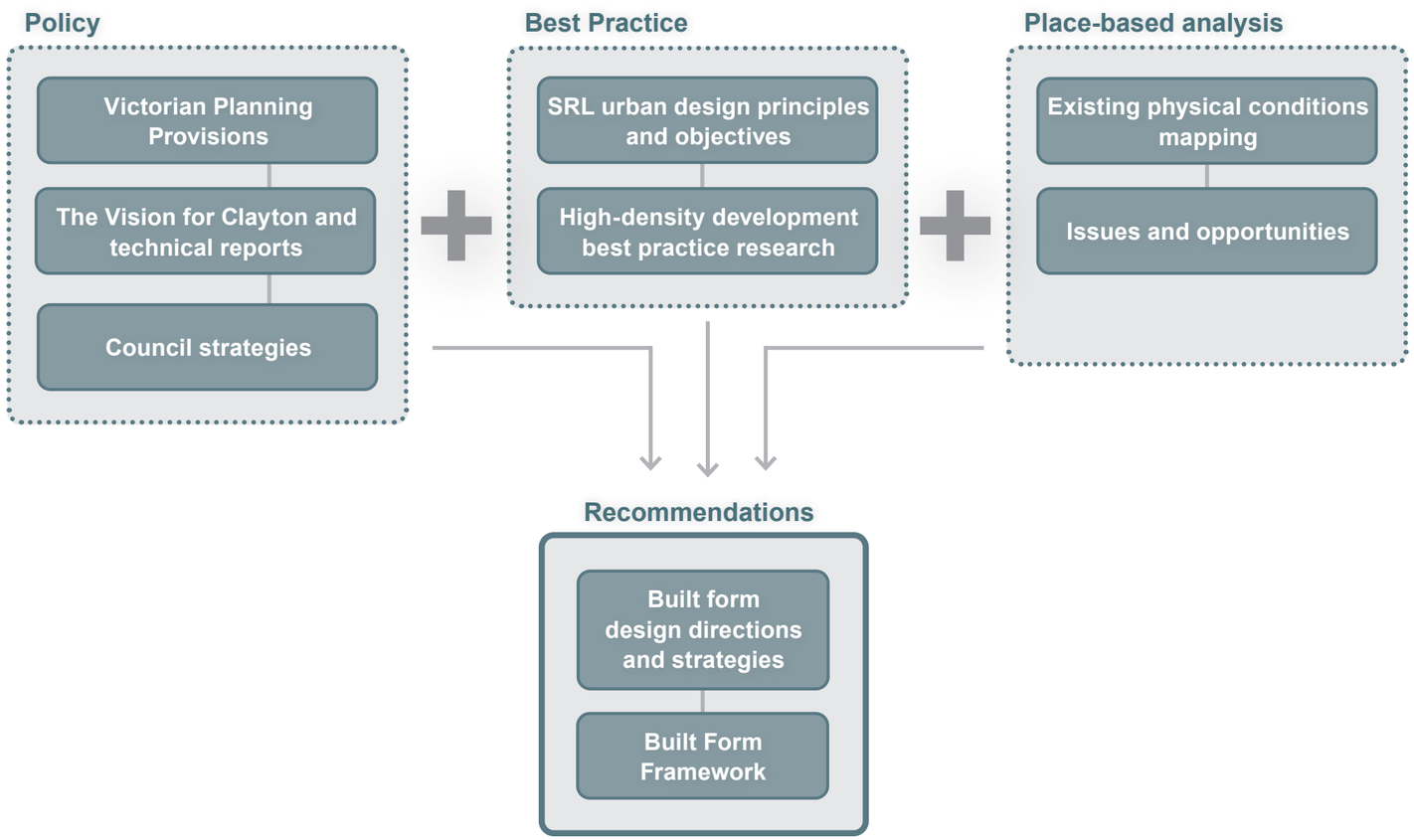


Figure 5.1: Methodology for developing the Built Form Framework

5.2 Built form design directions

This section outlines the urban form design directions proposed to achieve the Vision for Clayton.

The design directions informed the development of the Built Form Framework in Section 5.3 and the built form outcomes in Section 6.

The order of the design directions does not imply an order of priority.

Design Direction 7: Support an inviting public realm

Why is this important?

Built form should support an inviting and engaging public realm through the distribution of its mass and street edge detail.

<u>Distribution of mass</u>

Development shapes the public realm and strongly influences its amenity. The siting, height and massing of buildings can positively influence the amenity of the adjoining public realm by:

- Framing streets and open spaces, which makes them more memorable
- Maintaining a sense of openness including sky views
- Maintaining solar access to pedestrian spaces.

Continuous street walls provide a more engaging street wall.

Where taller buildings are needed to deliver the desired density, a sense of openness and reasonable access to daylight and sunlight should be achieved.

<u>Engaging facades</u>

Lower-level building facades should contain detail that is visually engaging to enhance the pedestrian experience.

Active building frontages are also key to an inviting and safe public realm. The level of activation that is appropriate varies between employment areas and residential areas.

This includes consideration of:

- Building alignment
- Building massing and composition including rhythm and grain
- Design detail and building facade materials.

Buildings in high pedestrian activity areas should have the highest level of activation, given their pedestrian density.

Employment areas tend to have lower levels of pedestrian activity, so a lesser level of activation is acceptable. However consideration should be given to employment areas needing to support 24-hour workers.

Residential areas benefit from a quieter environment. However, it is important they provide passive surveillance to contribute to the safety of the public realm. ‘Back of house’ uses such as car parking and car park entries, building services cabinets and loading areas should be positioned away from the primary frontage.

What is happening now in Clayton?

Most of the Clayton Structure Plan Area is characterised by low density suburban detached housing of 1 to 2 storeys. This type of built form is generally set back significantly from the street, providing a small degree of passive surveillance to the street and a low level of street activation. Its contribution to the public realm is through architectural style and vegetation, rather than framing the streets.

The commercial / retail core includes low-rise, fine-grain shop top buildings along Clayton Road with a highly activated ground floor interface.

Mid-rise developments along Burton Avenue and the corner of Haughton Road and Centre Road provide maintain the human-scale of the street.

Monash Health Centre attracts workers throughout the night with pedestrian movements concentrated along Clayton Road and Mary Street south to existing Clayton Station and shopping strip.

“Clayton Road offers a long stretch of active and small scale frontages with lots of things to see and do” - SRL Public Space and Public Life Study Report (Gehl, 2023)

Alignment with SRL Urban Design Framework:

Design Direction 7 will help to achieve the following SRL urban design objectives (See section 2.3):

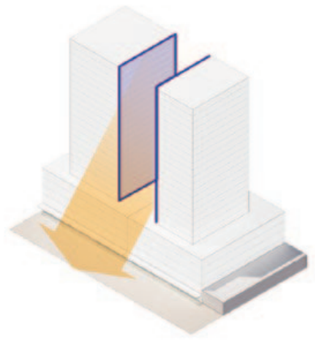
- Objective UD2.4 Welcoming
- Objective UD4.4 Safer design
- Objective UD5.1 Heritage
- Objective UD5.5 Quality design
- Objective UD6.1 Amenity
- Objective UD6.3 User experience
- Objective UD6.4 Places for people
- Objective UD6.5 Activation

How can this direction be achieved in Clayton?

Strategy BF1: Tower separation A

Provide sky views and access to daylight in the public realm through setbacks to and gaps between towers in high-rise areas.

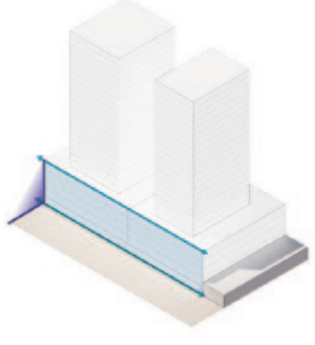
Towers should be set back and separated to support an attractive public realm, allowing for daylight, sky views and shafts of sunlight.



Strategy BF2: Podiums

Create a well-defined urban space in high-rise areas by providing continuous street wall of podium facades.

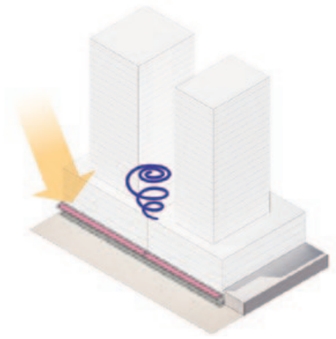
Podiums should be set on the front boundary and extend to both side boundaries to clearly frame the public realm and maximise passive surveillance and activation, with podium car parking 'sleeved' behind active land uses.



Strategy BF3: Weather protection

Podium facades should support pedestrian comfort by providing protection from rain, wind and summer sun.

Where appropriate, rain, wind and summer sun impacts should be minimised through the appropriate design of awnings, architectural articulation and building massing.

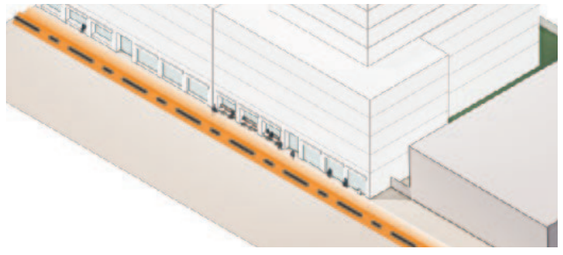


The Wind Technical Report (August 2024) found that when compared to today, the overall wind speeds in the highly-developed future scenario of Structure Plan Area will be reduced and overall wind comfort conditions improved. While some localised unsafe wind conditions were also found in this scenario, these conditions are proposed to be managed through building design at planning permit stage.

Strategy BF4: Footpath widening

Ensure buildings are set back from the street edge to widen the footpath where needed.

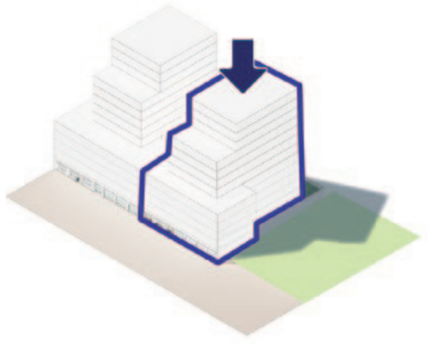
Where a wider footpath is sought, buildings should help to achieve the desired outcome by setting back from the street edge.



Strategy BF5: Sunlight to public realm

Require development to maintain reasonable solar access to key streets and open spaces.

Key streets and open spaces in the Central Core, Central Flanks and Main Streets, and residential parks, should be appropriately protected from overshadowing to support public life and outdoor recreation. A set of solar access standards have been developed which seek to balance the provision of solar access and growth for each type of street and open space. These are informed by recently introduced solar access planning provisions in Victoria, related studies and Planning Panel reports, and site-specific testing (see Attachment C - Assessment of Solar Access to the Public Realm).



Type of space	Recommended standard
Primary public open space(s) in Central Core	50 per cent of the open space for a minimum of 3 hours at mid-winter
Footpaths in Activity Streets	50 per cent of southern, eastern and western footpaths for a minimum of 3 hours at the spring equinox
Main Street footpaths	100 per cent of southern, eastern and western footpaths for a minimum of 3 hours at the spring equinox
Medium-large parks	70 per cent of the open space for a minimum of 3 hours at mid-winter
Small open spaces in Central Flanks	75 per cent of the open space for a minimum of 3 hours at the spring equinox
Small and narrow parks outside Central Core and Central Flanks	50 per cent of the open space for a minimum of 3 hours at the mid-winter

These standards are varied in specific circumstances where the size or configuration of the open space or street, and/or the scale of development envisaged around it, warrant a different solar access outcome.

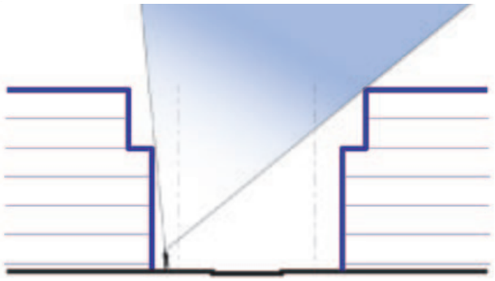
Strategy BF6: Street scale

Balance street definition and openness outside the precinct core.

Buildings should be appropriately massed to define the street, and upper levels should allow for wider sky views.

Street walls should be designed to minimise the impact of taller buildings on the public realm, and contribute a sense of enclosure.

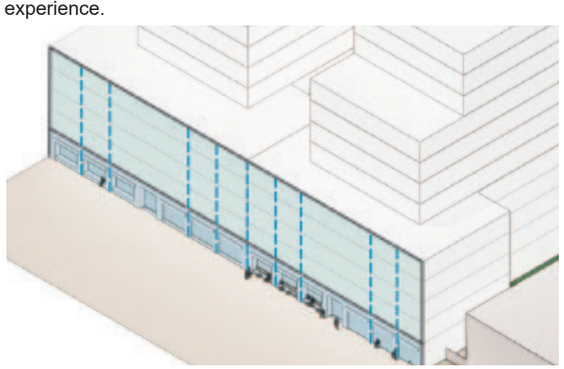
Upper level setbacks should contribute to a legible composition, rather than adopting a profile that follows minimum setback requirements which can result in unattractive outcomes.



Strategy BF7: Engaging facades

Ensure street walls provide visual interest at a pedestrian scale and pace.

Design detail of street walls should balance transparency and solid elements, create a fine-grain vertical rhythm and provide a level of depth, detail and texture to enhance the pedestrian experience.

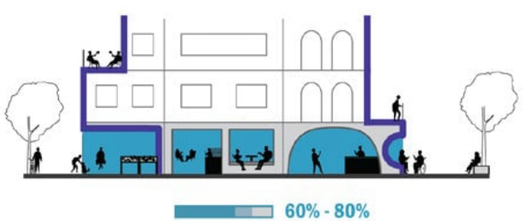


Strategy BF8: Active frontages

Ensure buildings contain active facades in commercial and Mixed-use areas, to provide interest and activity through visual engagement between the street and the building and ensure pedestrian links support safety and user experience.

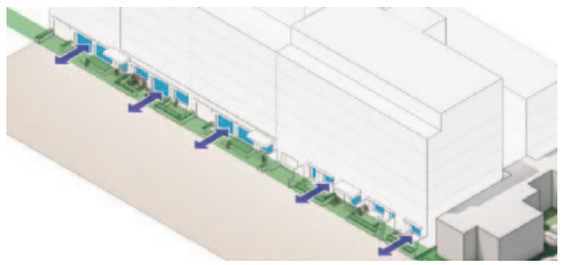
A **highly active frontage** should be provided in the commercial/retail core, main streets and existing small retail strips. This type of frontage should incorporate:

- Building frontages which are set on or within 0.4 metres of the public realm boundary except where an activated front setback is specified (such as outdoor dining or public realm widening)
- Primary ground floor functions that are relevant to passing pedestrians, such as shops and food and beverage outlets (retail, hospitality and entertainment uses)
- An at-grade connection between ground-level tenancies and the street- transitions in floor levels should not rely on external ramps and stairs in the public realm
- 60 to 80 per cent of the combined length of the ground-level interfaces of a building to streets and laneways as a pedestrian entry or clear glazing with regularly spaced solid elements to avoid a predominately glazed appearance along frontages
- A continuous fixed canopy that provides shelter from the rain and summer sun and maintains exposure to the winter sun
- Upper level uses that are active for the majority of the day and evening.



A **moderately active frontage** should be provided in the primary street interfaces of Mixed-use and employment areas. This type of frontage aims to improve the use, safety and experience of the public realm and ensure a high-quality interface between buildings and the street at ground level, which promotes pedestrian amenity and further activation as the precinct evolves. This type of frontage should incorporate:

- A minimum of 40 per cent of the combined length of the ground-level interfaces of a building to streets and laneways as a pedestrian entry or clear glazing
- A floor-to-floor height of at least 4 metres on the ground floor to allow for the adaptation of building uses over time
- Reduced number of vehicular access points to prioritise the experience and safety of pedestrians
- Provide an at-grade connection between usable space within ground-level tenancies and the street. Transitions in floor levels should not rely on external ramps and stairs in the public realm.



Strategy BF9: Residential frontages

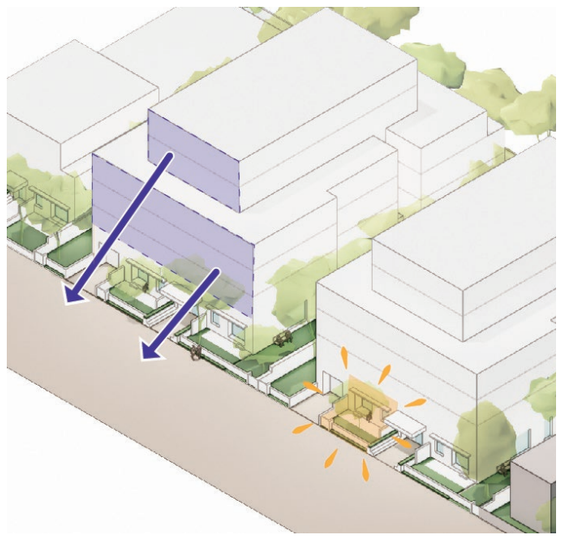
Ensure development within the Residential Neighbourhoods balances sense of address, passive surveillance and privacy, and contributes to street greening.

Residential frontages should enhance the street edge by:

- Orientating balconies and habitable rooms to the street
- Ensuring building facades identify individual dwellings
- Providing low front fences
- Providing ground floor entrances to individual ground floor dwellings facing the street
- Providing canopy trees and understorey planting to green the street and enhance privacy of ground floor dwellings.

Residential frontages should enhance pedestrian links by:

- Orientating balconies and habitable rooms to pedestrian links
- Providing ground floor entrances to individual ground floor dwellings facing the link where appropriate.



Design Direction 8: Ensure high quality and responsive built form

Why is this important?

Building orientation, solar access and setbacks

Built form can strongly influence internal amenity and the amenity of neighbouring properties. The siting, height and massing of buildings can adversely affect amenity in terms of:

- Access to sunlight
- Access to daylight
- Visual bulk
- Overlooking.

In residential areas, setbacks are typically required from common boundaries with adjoining properties to avoid unreasonable impacts on their amenity and future development potential. Clause 55 of the Victorian Planning Provisions provides setback standards for buildings up to 4 storeys high.

In higher-density areas, apartments facing side or rear boundaries often have relatively poor internal amenity due to the need for privacy screen and limited access to daylight. Mid-rise buildings can also have a significant effect on the amenity of neighbouring properties in terms of sunlight, daylight and outlook, and on their future development potential.

Clause 58 of the Victorian Planning Provisions provide internal amenity standards, however it doesn't provide prescriptive set back guidance.

Therefore, strategies are needed to ensure good internal amenity for development and its neighbours.

Scale transition

Increased building heights can create inappropriate visual bulk at interfaces with lower-rise areas, either inside or outside the Structure Plan Area. Care is needed to manage these transitions.

Increasing tree canopy cover

Landscaping associated with new development can contribute to environmental performance, amenity, health and character outcomes. In particular:

- Increased tree canopy cover can reduce the urban heat island effect
- Landscaping can provide wildlife habitat and stormwater infiltration
- Trees can provide building shading and resident amenity.
- Nature supports mental health
- Trees can complement the existing character of leafy areas and help to integrate new, denser development.

Achieving these objectives will rely on forms of development that contribute to tree canopy cover, not only trees in the public realm.

Clause 58 of the Victorian Planning Provisions contains requirements for deep soil planting. However, this is not sufficient to achieve the tree canopy cover target, nor does it apply to non-residential development.

What is happening now in Clayton?

The Clayton Structure Plan Area features low-rise dwellings with a high internal amenity and good tree canopy cover.

Mid-rise developments along Burton Avenue and on the corner of Haughton and Centre Road provide good on-site landscaping.

Alignment with SRL Urban Design Framework:

Design Direction 8 will help to achieve the following SRL urban design objectives (see Section 2.3):

- Objective UD1.1 Legacy
- Objective UD1.2 Future ready
- Objective UD1.3 Resilient
- Objective UD1.4 Environmentally sustainable
- Objective UD5.2 Responsive
- Objective UD5.3 Sensitive
- Objective UD5.5 Quality design

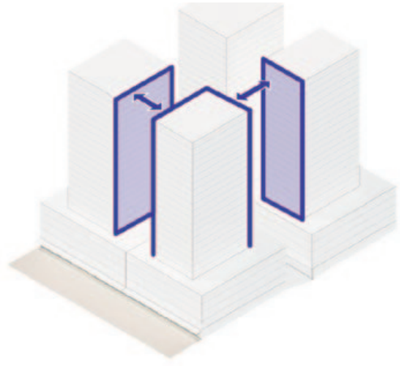
How can this direction be achieved in Clayton?

Strategy BF10: Tower separation B

Ensure reasonable internal amenity and equitable development opportunities through side and rear tower setbacks.

Maintaining good internal amenity in towers requires consideration of access to daylight, outlook and overlooking. Ensuring appropriate upper level setbacks will help to achieve good internal amenity while maintaining equitable development opportunities of neighbouring lots.

Towers should be separated to avoid the need for privacy screening, and to ensure reasonable visual amenity and daylight. This separation should increase with the height of the towers.



Strategy BF11: Building orientation

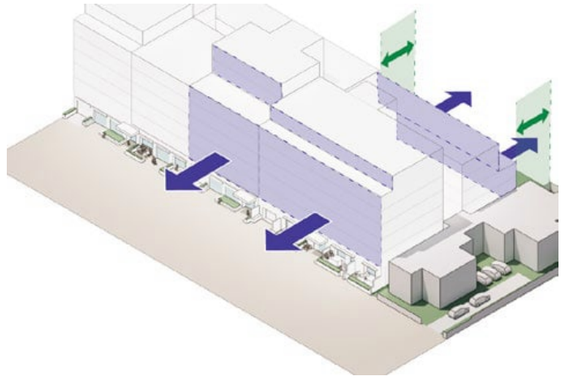
Encourage development to face the street and the rear of the property, and require generous rear setbacks.

In order to maximise internal amenity including access to daylight, outlook and privacy, habitable rooms (living, kitchen, dining, primary bedroom) should be orientated to the street or rear, and incorporate generous rear setbacks.

This helps to optimise development, as a wall without a window or balcony can be built to the side boundaries.

Additionally, to maximise internal amenity and maintain equitable development, the primary outlook of a dwelling should be adequately setback from the side boundary. A primary outlook is defined as a balcony or habitable room window.

Where lower rise residential building typologies are envisaged, buildings should be designed to provide appropriate space between dwellings in order to maximise internal amenity while providing for density within a landscaped setting. However, apartments and townhouses should still maximise primary orientation towards the street and rear boundary.



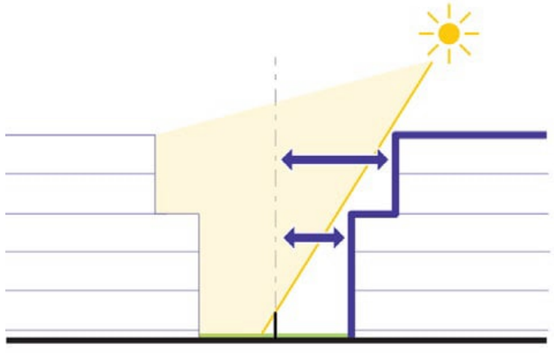
Strategy BF12: Rear amenity plane

Require rear setbacks to maintain good amenity in neighbouring properties.

Upper level setbacks should be established which ensure the appropriate protection of sunlight and daylight access and limit visual bulk to neighbouring properties.

The number of hours on the September equinox during which solar access to private open space should be consistent with Clause 55 of the Victorian Planning Provisions where the affected property is outside the Structure Plan Area (5 hours), gradually reducing as development increases in density towards the centre, to reflect the different balance between intensification and environmental amenity.

In contrast, upper levels should only be required to be set back from side boundaries in Residential Neighbourhoods sufficiently to maintain reasonable daylight, and solar access to neighbouring ground floor dwellings or recessed terraces at the desired side setback in garden apartment buildings. This reflects the proposed urban morphology in which primary open spaces are generally sited at the rear of lots, rather than to the side, to enable efficient development of single lots.



Strategy BF13: Transition

Transition building heights at the interface between taller and lower built form areas.

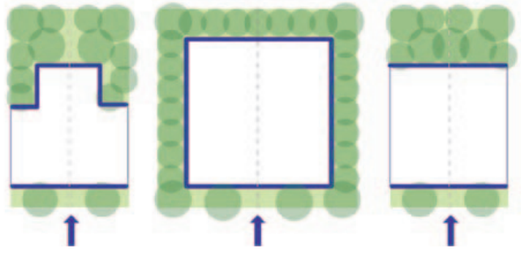
Buildings heights should step down from a higher area to a lower area to manage amenity impacts.

Strategy BF14: On-site landscaping

Encourage landscaping and canopy trees as part of new development, outside the Central Core.

Landscaping and canopy trees should be encouraged across all non-core areas, to enhance canopy cover, buffer built form transitions and contribute to outlook from dwellings.

However, the provision of on-site open space for trees is in competition with the aspiration for intensification, particularly given the preference for mid-rise development types. Therefore, the greatest opportunity for tree canopy cover is in the outer areas of the Structure Plan Area, where there is less aspiration for intensification.

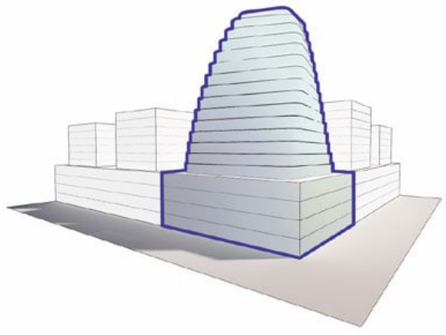


Strategy BF15: Landmark buildings

Encourage taller buildings to mark key locations in the urban structure.

Landmarks are natural or built elements that stand out from their surroundings. They contribute to the legibility of an area by creating memorable incidents on a journey through it. Built landmarks can be formed by a particularly notable use, such as a library, a distinctive design, or greater height than their surroundings.

In order to reinforce the legibility of the Clayton Structure Plan Area, landmark buildings should be encouraged at key points in the urban structure, such as station entries, major intersections and gateways or entries to key places. In the absence of a notable use, landmarks can be created by greater height and lesser setbacks than those of the surrounding buildings. However, greater height should be complemented by a higher level of design excellence.



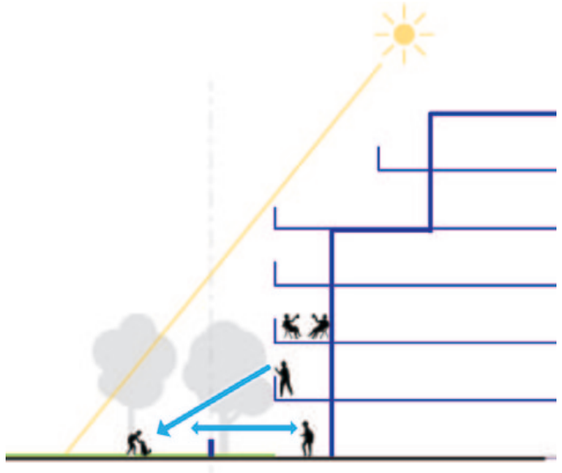
Strategy BF16: Public open space interface

Ensure buildings with an interface to public open space provide passive surveillance and a well-designed building profile.

Building facades facing public open space, including those abutting a public open space on a rear or side boundary, should balance privacy and activation through a generous, landscaped setback combined with windows and balconies.

These interfaces should be designed to maximise passive surveillance on the open space without privatising it and avoid unreasonable overshadowing of the open space. This includes orienting ground-floor active uses, communal spaces, habitable rooms and balconies towards the open space, ensuring fence design and height retain visual links to the open space, and providing a gate to access the open space.

Building facades facing open space are highly visible from the public realm. Therefore, it is important that they have visual appeal and a legible composition. For example, by avoiding multiple setbacks of the upper levels (e.g. a ‘wedding cake’ effect) and avoiding visible blank exposed walls.



5.3 Built Form Framework

Preferred building heights

Figure 5.2 shows the distribution of preferred maximum heights and street wall heights across the Structure Plan Area.

These heights have been developed by applying the preferred form of development to each urban form area and considering specific interface conditions. They are further explained in Section 6.

- SRL station
- Existing Clayton Station
- Bus Interchange
- SRL East alignment
- Cranbourne / Pakenham rail line
- Structure Plan Area
- Open Space - Existing and planned / proposed
- Recently Approved Development Plan
- Potential Landmark Building

  Landmark buildings, which may exceed the maximum height by 20 per cent, and have lesser or no tower street setbacks, provided wind effects are managed and they achieve design excellence as supported by independent design review or a design competition that endorses the proposed design (see Strategy BF15). Exceptions to the 20 per cent height increase are the landmark buildings located in the Central Core. In these locations, the preferred maximum height for landmark buildings is 69 metres (17 to 20 storeys).

Preferred maximum building heights

- 49 metres (15 storeys)
- 41 metres (10 to 11 storeys)
- 39 metres (10 to 12 storeys)
- 33 metres (8 to 10 storeys)
- 27 metres (7 to 8 storeys)
- 24 to 25 metres (6 to 7 storeys)
- 21 metres (5 to 6 storeys)
- 14 metres (4 storeys)
- 11-12 metres (3 storeys)

Preferred maximum street wall heights

- 21 metres (5 to 6 Storeys)
- 17 metres (4-5 Storeys)
- 14 metres (4 Storeys)
- 11 to 12 metres (3 storeys)
- None Specified

In addition to the preferred heights and setbacks, surrounding development should consider solar access to public realm. Refer to overshadowing guidelines in Section 6

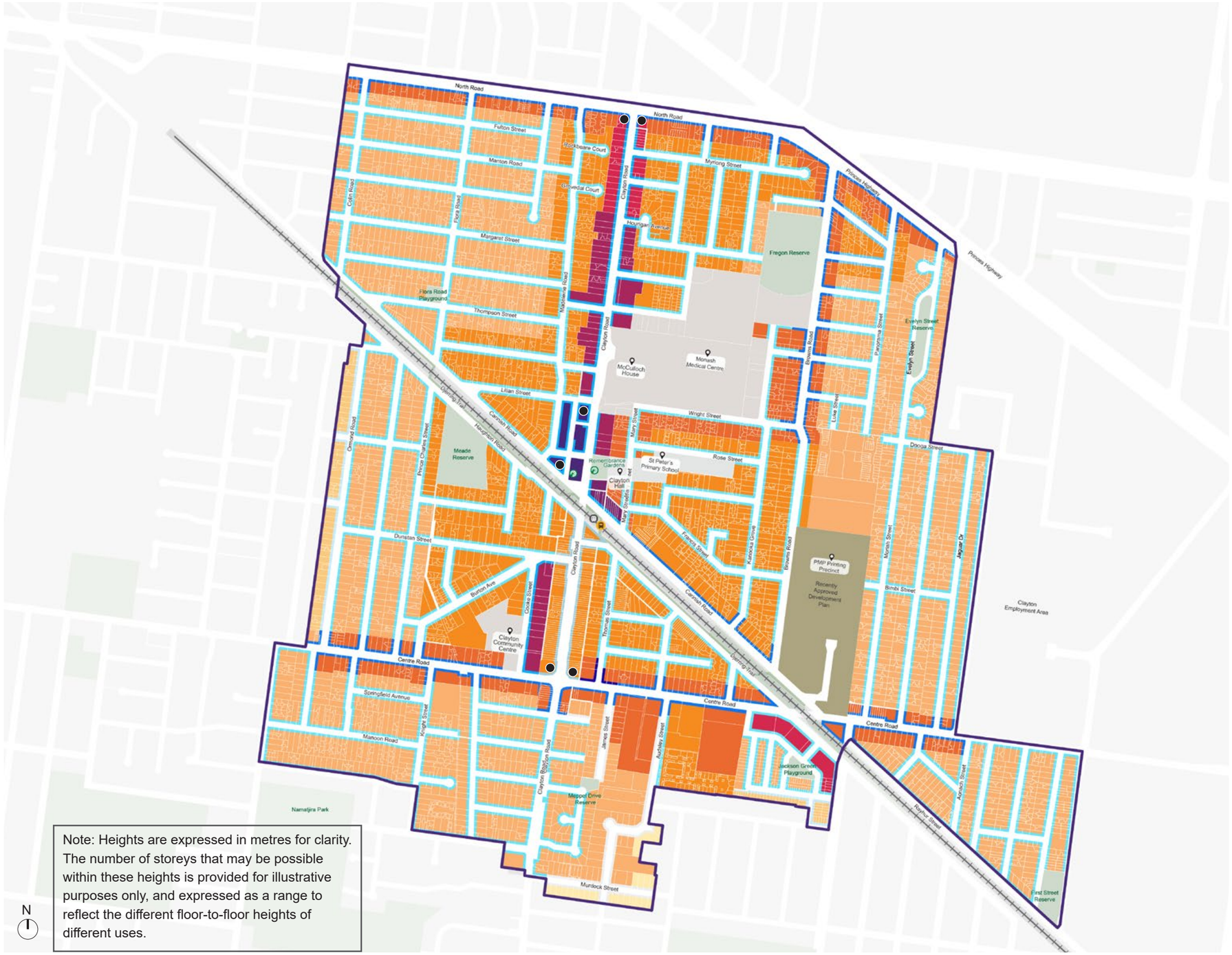
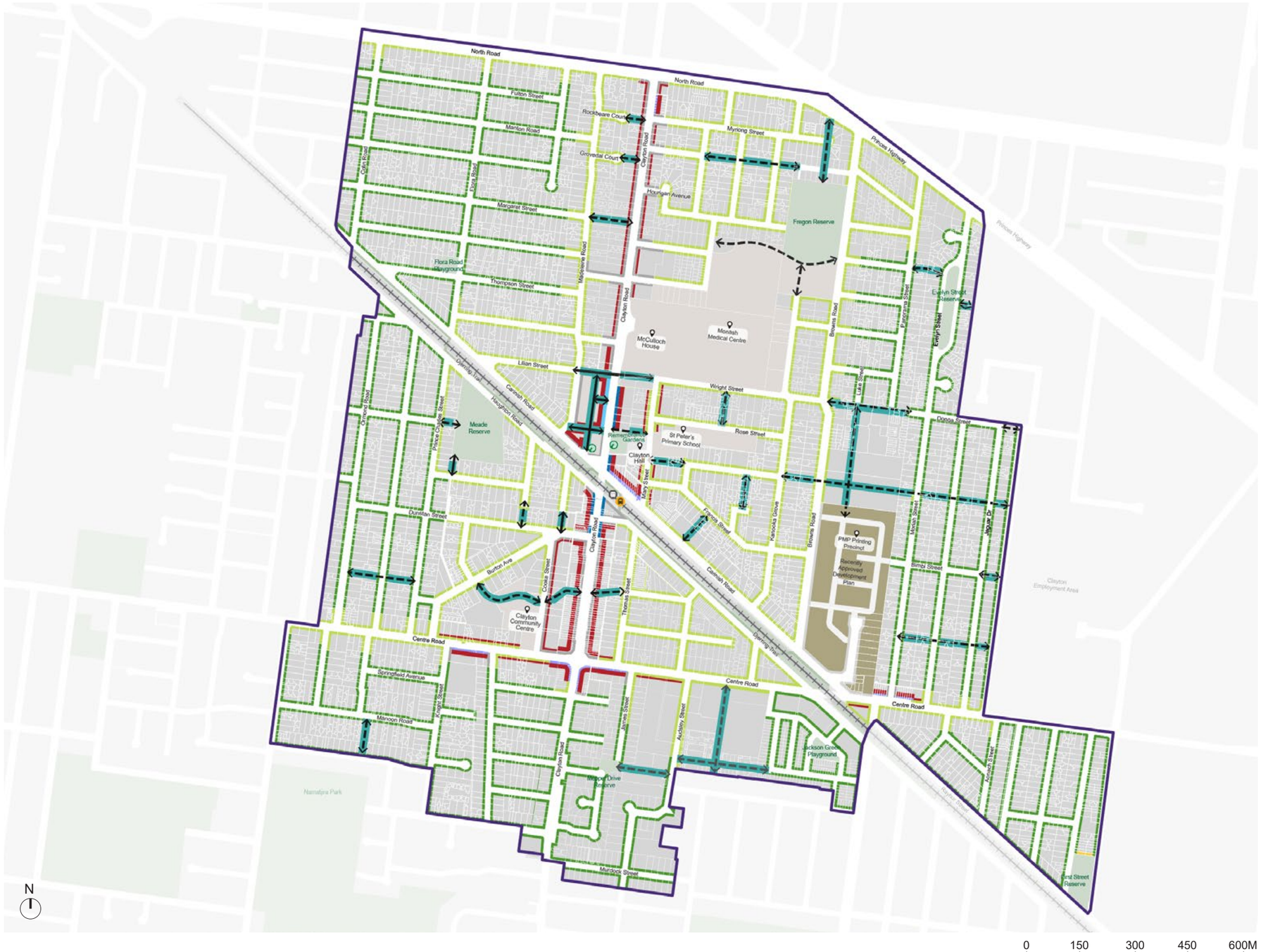


Figure 5.2: Preferred building heights in Structure Plan Area

Preferred street frontage types and setbacks

Figure 5.3 shows the preferred street frontage types and setbacks throughout the Structure Plan Area.

These have been developed by applying the built form strategies to each street, taking account of the desired role and function of each urban form area. They are further explained in Section 6.



- SRL station
- Existing Clayton Station
- Bus interchange
- SRL East alignment
- Cranbourne / Pakenham rail line
- Structure Plan Area
- Open Space - Existing and planned / proposed
- Recently Approved Development Plan
- Key link (new) - Fixed
- Key link (new) - Flexible

Front setbacks

- 0 metre setback
- Match the prevailing street edge
- 3 metre setback
- 4 metre setback
- Widening to achieve a consistent footpath width
- Widening to achieve a consistent 5m minimum footpath

Interfaces

- Indicative link interface
- Highly active frontage - zero setback
- Moderately active frontage

Note: Where a building abuts an open space, additional setback controls apply. See chapter 6 for further information.

Figure 5.3: Preferred street frontage types and setbacks in Structure Plan Area

Preferred side, rear and front upper level setbacks

This plan illustrates the distribution of side, rear and front upper level setbacks throughout the Structure Plan Area.

These were developed by applying the preferred forms of development and built form strategies to each urban form area. They are explained in Section 6.

In addition to the setbacks summarised below, overshadowing provisions are proposed to protect solar access to neighbouring properties. These are outlined in Section 6.

Setbacks

	Front - upper level	5 metres from podium facade up to a height of 66 metres 7.5 metres from podium facade above a height of 66 metres
	Side and rear - podium	0 Or 4.5 metres (primary outlook) (1)
	Side and rear - tower	4.5m for towers up to a height of 27m 6m for towers up to a height of 41m 7.5m for towers up to a height of 66m 10m for towers higher than 66m
	Front - upper level	3 metres, plus 0.6 metres per metre of height above 33 metres from the podium facade, except 0.8 metres per metre of height above 23 metres on the north side of east-west streets.
	Side - podium	0 metres or 4.5 metres (primary outlook)
	Side - tower	4.5 metres for towers up to a height of 27 metres 6 metres for towers up to a height of 41 metres 7.5 metres for towers higher than 41 metres
	Rear- podium and tower	6 metres, landscaped
	Minimum rear - interface with Urban Neighbourhood	6 metres plus 0.6 metres per metre of height above 17 metres
	Front - upper level	3 metres, plus 1 metres per metre of height above 21 metres from the podium facade
	Side - podium	0 metres
	Rear - abutting Urban Neighbourhoods or strategic sites	4.5 metres above ground floor
	Front - upper level	4 metres from podium facade
	Side	0m or 4.5m (primary outlook)(1&2)
	Rear	6m landscaped, plus 0.7m per metre of height above 11m (2)
	Front - upper level	Setback above 14 metres to remain below 45 degree plane from opposite street boundary
	Side	0 metres or 4.5 metres (primary outlook) (1)
	Rear	6 metres, landscaped, plus 0.7 metres per metre of height above 11 metres
	Front - upper level	None specified
	Side and rear	1 metres for every metre above ground floor where abutting a property where dwellings are permissible
	Front - upper level	0.5 metres per metre of height above the street wall from the podium facade
	Side - lots ≥ 24 metres wide	4.5 metres plus 0.8 metres per metre of height above 14 metres (2)
	Side - lots < 24 metres wide, front half of site above a height of 6.9 metres	2 metres
	Side - lots < 24 metres wide, rear half of site	2 metres plus 1 metres per metre of height above 6.9 metres (2)
	Rear	6 metres, landscaped, plus 0.7 metres per metre of height above 11 metres(2)
	Open space - existing / planned / proposed	

1. *4.5 metres applies to the parts of the building that provide a primary outlook to the rear and side boundaries. If interfacing with side/rear service lanes, the setback is measured from the centre of the laneway.*
2. *Setback standard does not apply to existing small retail strips in this area - refer to Section 6 for existing small retail strips setbacks.*
3. *Where a building abuts an open space, additional setback controls apply. See Section 6 for further information.*

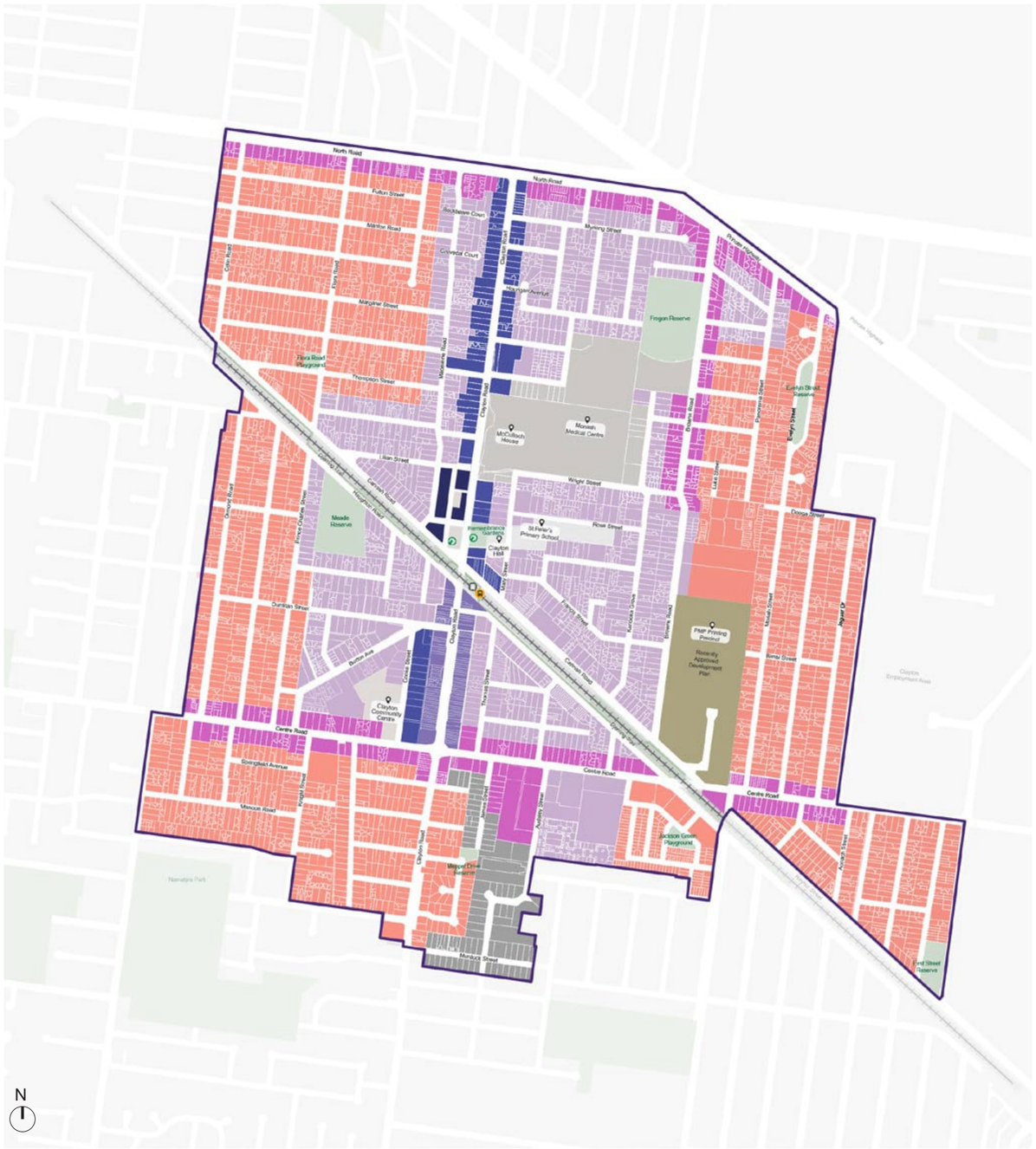


Figure 5.4: Preferred side and rear setbacks in Structure Plan Area

6 Outcomes

AJM
Joint Venture

6.1 Introduction

This section presents the specific Urban Form and Public Realm initiatives proposed to achieve the Vision for Clayton. It is largely organised by place type, followed by an examination of each place interface, and a summary of the urban development typology testing method.

The initiatives in this section are informed by the analysis in the Appendices, and SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

Place types

Place types have been derived by grouping urban form areas, as described in Section 4, into 8 categories as illustrated in Figure 6.1.

The preferred forms of development have been identified for each place type, based on the Urban Form Strategies. The place types are illustrated here and explored further in Sections 6.2 to 6.9.

For each place type, this section presents:

- A statement outlining the future character for the place type based on existing conditions and key drivers
- A summary of the built form and public realm outcomes required to deliver future character
- Cross-sections combining the typical building and public realm profile
- Cross-sections of specific places particularly where there is a variation to the standard development type is proposed to achieve the desired public realm outcome.

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- SRL East alignment
- Cranbourne / Pakenham rail line
- Strategic site - Station development area
- Civic Areas - State or local government or institutional land not envisaged for substantial change.
- Sensitive Areas
- Recently Approved Development Plan

Place types

- Central Core
- Central Flanks
- Main Streets
- Key Movement Corridors
- Urban Neighbourhoods
- Residential Neighbourhoods
- Enterprise Neighbourhood

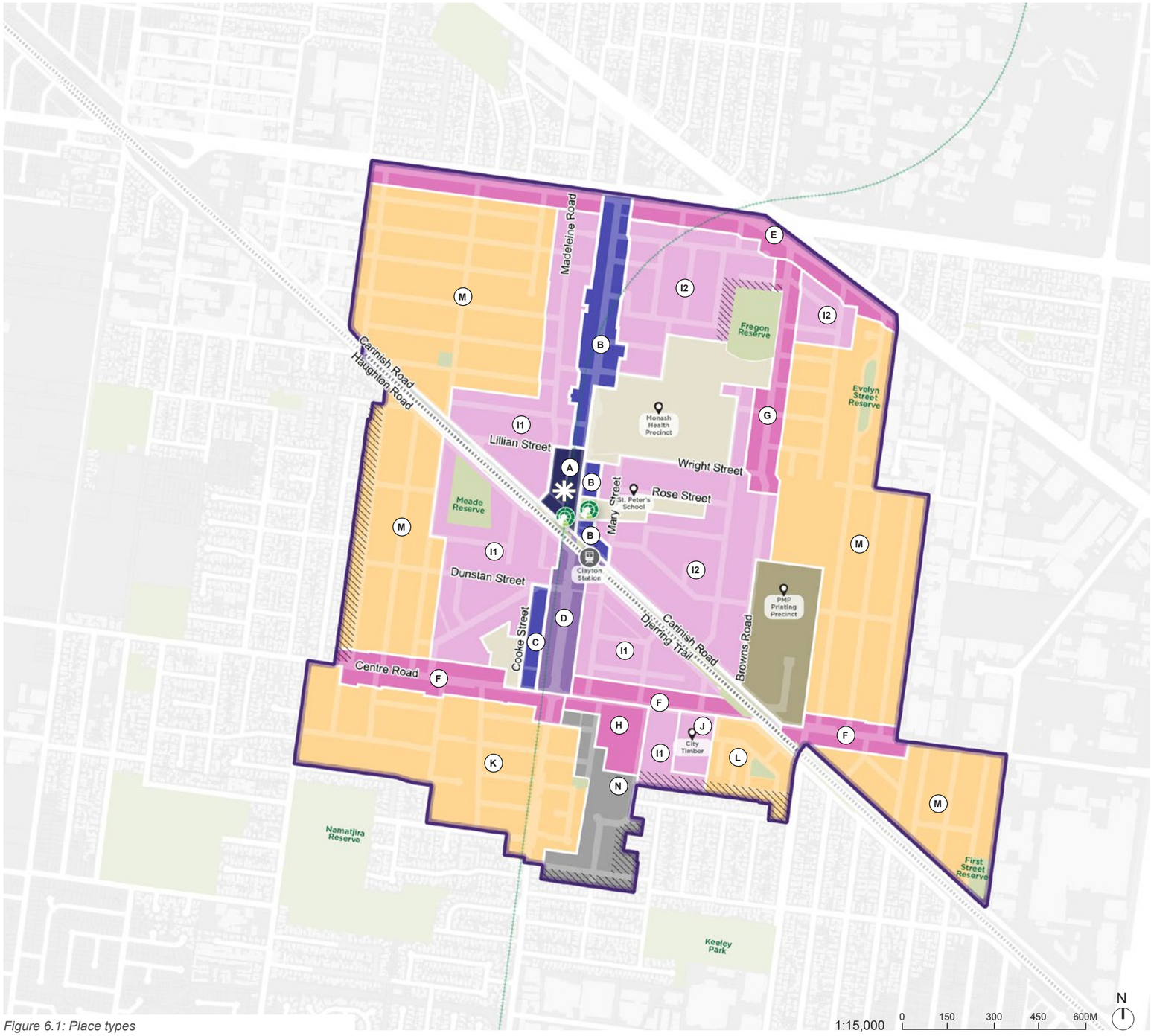


Figure 6.1: Place types

6.2 Central Core

The core of the Clayton Structure Plan Area

The urban form area identified as belonging to this place type is:

- A - Core Area

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.2: Key map - Central Core

Future role and function

Substantial change of built form, delivering mixed-use neighbourhoods which provide space for jobs growth and local services

The Central Core will provide the greatest accessibility to jobs and services from the SRL catchment. Therefore, it is where the level of intensification and provision of jobs and services should be highest.

Future drivers

High level of activation to the street

The Central Core is where the highest level of pedestrian activity will occur as a result of its intensity of development and people accessing public transport, jobs and services. This includes activity in the evening and weekends. Therefore, it is critical that a high level of activation is provided to ensure safety, consistent with SRL urban design objectives *Activation* and *Safer design*.

Maintain solar amenity to key public spaces

Solar access remains important in the Central Core. However, the desire for intensification means that solar access is only prioritised in the key public spaces.

Future urban form

The Central Core will feature a fine-grain network of highly urbanised streets and pedestrian links that supports public life and provides an attractive and comfortable pedestrian experience. Clayton Road will be a high-quality Activity Street for pedestrians with a consistent footpath width, shade and greening. A new urban place along Carinish Road, that well-integrated with the community space located below the existing railway viaduct, will contribute to the creation of active edges and encourage people to spend time in Clayton's centre. New pedestrian links and a cycling connection between Carinish Road to the extension of Lillian Street, will improve access to the SRL station and to Clayton Road.

The Central Core will provide retail activity, along with high density employment and housing in the form of high-rise buildings, while maintaining an activated and continuous street wall. Towers will be set back above the street wall and be well separated from each other to ensure good amenity in the public realm and neighbouring buildings.

Figure 6.3: Examples of the form of development envisaged for the Central Core.

Built form outcomes

The development type recommended in the Central Core is the podium-tower. Medium-high rise towers in the form of podium-tower buildings can deliver the substantial level of intensification envisaged for the Central Core.

Provided it is well designed, the podium-tower format provides for a street-edge scale that facilitates good public realm amenity in terms of human scale, sky views, sun and wind conditions, and complements the existing character. Best practice podium-tower design includes active street facades with any above-ground car parking 'sleeved' behind other uses, and well set back and separated towers.

A mix of uses is necessary to deliver the desired vibrancy and activation. The podium-tower format enables a range of retail types in the podium and office and / or residential uses above.

Building height and density

The maximum building height has been determined based on:

- The importance of the Central Core in terms of its envisaged provision of jobs and retail floorspace, which should be expressed by building scale
- The number of rail lines serving the Central Core area, which is an indicator of its public transport accessibility and consequent suitability for growth
- Proximity to sensitive interfaces, such as Urban or Residential Neighbourhoods, which should temper height.
- The width of abutting roads, which influence the capacity of the public realm to accommodate height without unreasonable amenity impacts
- Emerging built form character, which new development should complement.

The Central Core is entirely formed by the SRL Rail and Infrastructure project. Building heights in this area will need to be carefully calibrated to respond to the sensitivity of its interfaces with residential land to the west and an Activity Street to the east, particularly from an overshadowing perspective. Testing indicates that most buildings will be limited to 41 metres (10 to 11 storeys) for this reason, with potential punctuations at the north-east and southwest corners reaching heights in the order of 69 metres (17 to 20 storeys). This will deliver a density of approximately 6 to 8.5:1. The height and density is an appropriate reflection of the area's prime accessibility to public transport.

Street wall height

A minimum street wall height of 12 metres (3 storeys) is proposed to ensure that the public realm is well framed. A maximum street wall height of 17 metres (4 storeys) is proposed to maintain a reasonable level of openness and solar access in the public realm in accordance with Strategy BF2: Podiums.

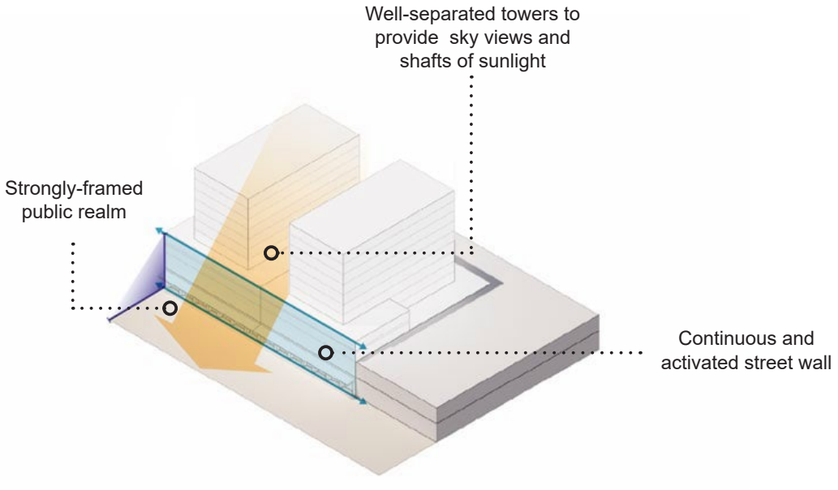


Figure 6.4: Built form outcomes for podium-towers.

Building setbacks

The following minimum setbacks are proposed:

Podium

- A zero street setback to frame the public realm and support public realm activation, in accordance with Strategies BF2:Podiums and BF7: Engaging facades, except along Clayton Road, a front setback is proposed to achieve a consistent footpath width
- A zero side and rear setbacks where there is no primary outlook
- A 4.5-metre side and rear setback where there is a primary outlook. Wherever applicable, side and rear setbacks should be measured from the centreline of an adjoining laneway.

Tower

- Front setbacks above the podium of:
  - 5 metres up to a height of 66 metres (17 to 20 storeys)
  - 7.5 metres above a height of 66 metres.
- Front tower setbacks are designed to distinguish towers from the street wall, maintain a sense of openness and manage wind effects, in accordance with Strategies BF2: Podiums and BF3: Weather protection. This may be relaxed on the intersection of two major streets to express the urban structure, provided wind effects are managed
- Side and rear setbacks of:
  - 4.5 metres for towers up to a height of 27 metres
  - 6 metres for towers up to a height of 41 metres
  - 7.5 metres for towers up to a height of 66 metres
  - 10 metres for towers up to a height of 100 metres
  - 12.5 metres for towers higher than 100 metres.
- Side and rear setbacks are designed to maintain a sense of openness and sky views, allow solar access to the public realm, ensure reasonable amenity for tower occupants and to maintain equitable development opportunities for neighbouring properties, in accordance with Strategies BF1:Tower separation and BF2: Podiums
- For all floor levels above the height of the street wall where the building exceeds a height of 41m, a maximum tower floorplate of 900 square metres for residential uses and 1,350 square metres for office uses.

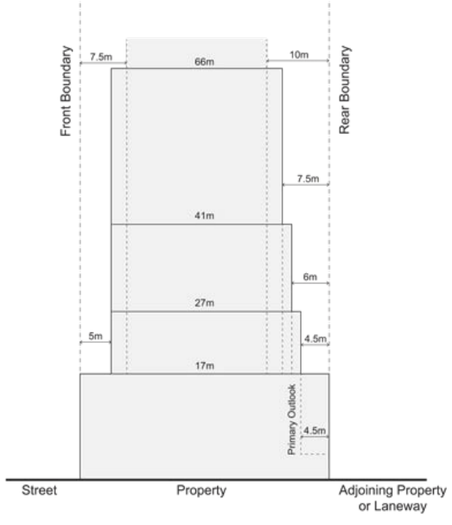


Figure 6.5: Built form outcomes section - front to rear

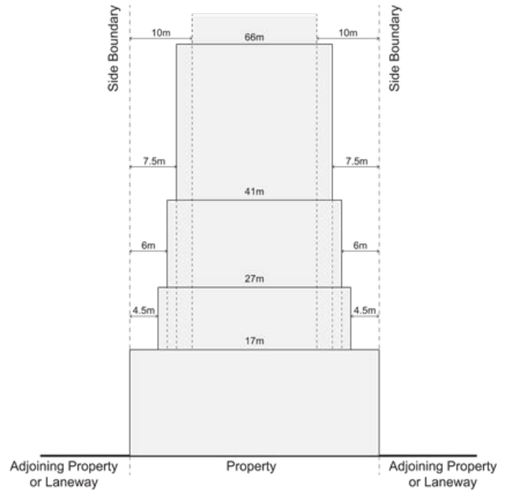


Figure 6.6: Built form outcomes section - side to side

Building separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for towers up to a height of 27 metres
- 12 metres for towers up to a height of 41 metres
- 15 metres for towers up to a height of 66 metres
- 20 metres for towers up to a height of 100 metres

Overshadowing

The new public space at SRL Station lies to the south of the SRL station building, so it will be partly shadowed at the September equinox and almost fully shadowed in mid-winter. The same is true of the 'offset' open space immediately south of the existing Clayton Station. Therefore, no solar access standard is recommended for these spaces.

However, Remembrance Gardens could also provide the function of a civic space and have the opportunity for winter sunlight. As a centrally located urban public space for the Clayton Structure Plan Area, this open space warrants the highest level of solar access protection, in accordance with Strategy BF5: Sunlight to public realm. However, protecting solar access to Remembrance Gardens competes with the high-rise urban form aspirations for the Central Core. Therefore, a solar access standard of 50 per cent of the open space for a minimum of 3 hours at the winter solstice is recommended. No solar access standard is recommended for the community space below viaduct as it is already partially overshadowed by the elevated rail line.

Activity Streets are intended to support the highest level of street life. However, they are also where development is most intense, in response to the accessibility created by the SRL station. A balance needs to be struck between ensuring solar access and providing for growth. In response, it is proposed that development should maintain solar access to 50 per cent of the southern, eastern or western footpaths of Activity Streets for a minimum of 3 hours at the spring equinox.

Summary of built form outcomes

The built form outcomes for the podium-tower development type are summarised below.

Building height and density	
Maximum height	41 metres (10 to 11 storeys)
Landmark maximum height	69 metres (17 to 20 storeys)
Maximum density	6 to 8.5:1
Street Wall	
Minimum Height	12 metres (3 storeys)
Maximum Height	17 metres (4 storeys)
Activation	High
Building setbacks	
Minimum Street	0 metres
Minimum street - Clayton Road	Widening to achieve a consistent footpath width
Minimum above podium facade	• 5 metres from podium facade up to a height of 66 metres • 7.5 metres from podium facade above a height of 66 metres
Minimum side and rear - podium (non-primary outlook)	0 metres
Minimum side and rear - podium (primary outlook)	4.5 metres
Side and rear - tower	• 4.5 metres for towers up to a height of 27 metres • 6 metres for towers up to a height of 41 metres • 7.5 metres for towers up to a height of 66 metres • 10 metres for towers higher than 66 metres
Maximum tower floorplate area	
All floor levels above the height of the street wall where the building exceeds a height of 41m	• 900 square metres for residential uses • 1350 square metres for office uses
Building Separation	
Minimum building separation	• 9 metres for towers up to a height of 27 metres • 12 metres for towers up to a height of 41 metres • 15 metres for towers up to a height of 66 metres • 20 metres for towers up to a height of 100 metres

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Central Core. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

SRL Rail and Infrastructure

Key public realm delivered by the SRL Rail and Infrastructure project.

- Open space (new) - SRL Rail and Infrastructure project
- Critical key link (new) - fixed
- Important key link (new) - fixed
- Important key link (new) - flexible
- Local key link (new) - fixed
- Extension of Clayton Road Activity Street
- Enhancement of Madeleine Road - Green Street
- Pedestrian crossings (new or upgraded) - SRL Rail and Infrastructure project

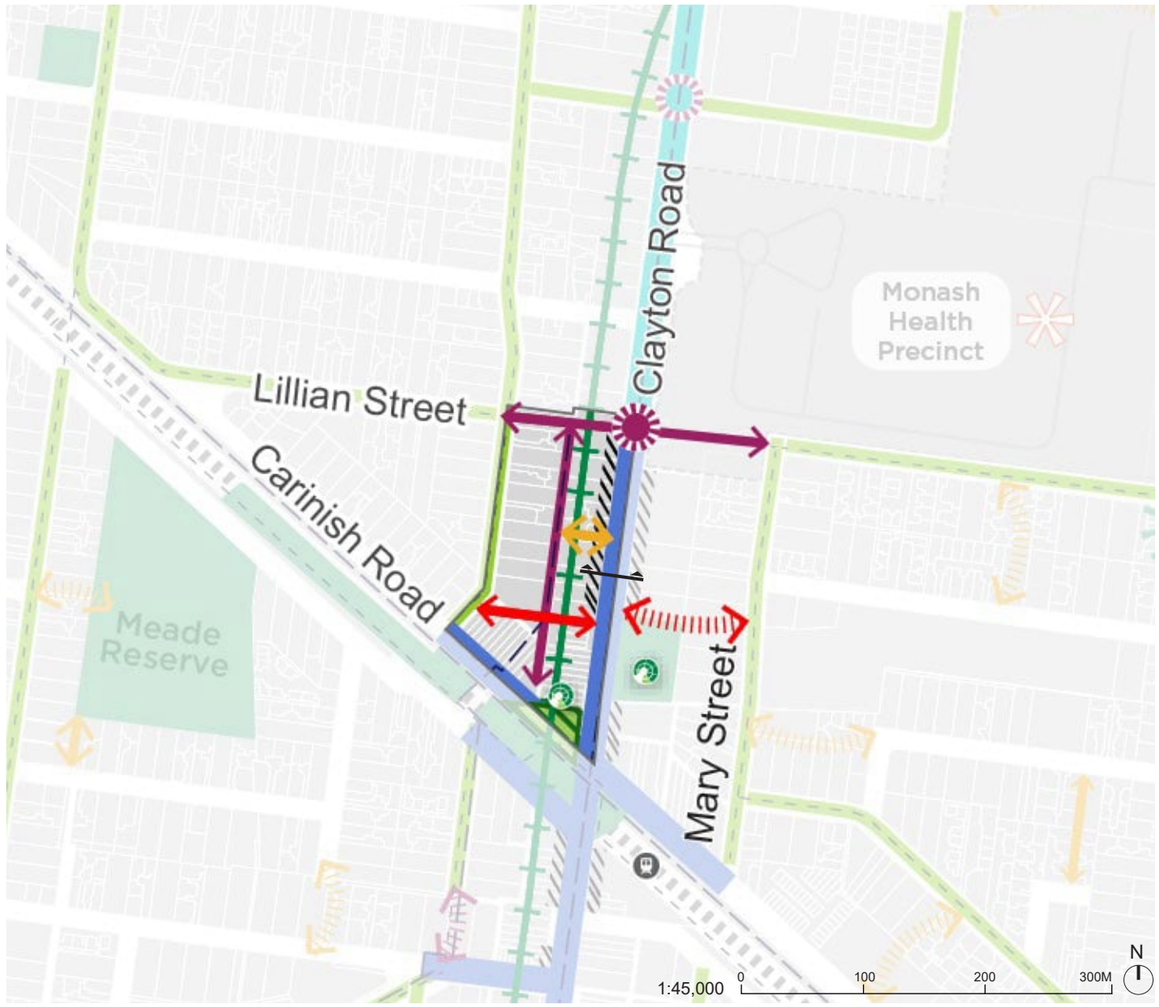


Figure 6.7: Central Core public realm outcomes

Legend

- SRL station
- Existing Clayton Station
- Urban form area boundary
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Existing Open Space
- Widening to achieve a consistent footpath width

Special case - cross-section A:

Clayton Road is a 21 metre wide street and is assigned to receive Activity Street treatment. In this location, footpaths are an inconsistent width, however they are generally less than 2 metres wide. This is considered insufficient given the development density and public transport accessibility of this area. Therefore, buildings on the west side are proposed to be set back to widen the footpath to a consistent width, and to align with the SRL station buildings.

Figure 6.8: Potential section - Activity Street

6.3 Central Flanks

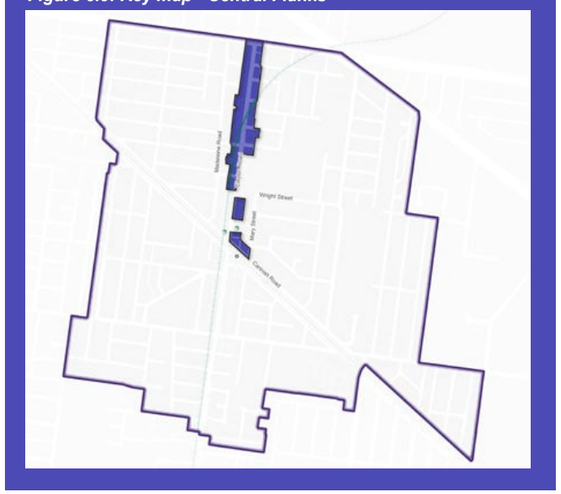
The remainder of the central areas beyond the Core

The urban form area identified as belonging to this place type is:

- B - Clayton Road North
- C - Cooke Street car park

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.9: Key map - Central Flanks



Future role and function

Substantial change of built form providing space for jobs growth, local services and housing surrounding the core

This urban form area will provide a high level of accessibility to jobs and services within the Central Core, and the next highest level of accessibility to jobs from the SRL catchment after the Central Core. They should provide for substantial growth of jobs and dwellings. However, they also lie adjacent to areas of lower intensity, and therefore should have a more moderated level of intensification than the Central Core.

Future drivers

High level of activation to the street

There will be a high level of pedestrian activity in this urban form area as a result of its intensity of development and people accessing public transport, jobs and services in the Central Core. This includes activity in the evening and weekends. It is critical that a high level of activation is provided to ensure safety, consistent with SRL urban design objectives Activation and Safer design.

Maintain sunlight amenity to the public realm

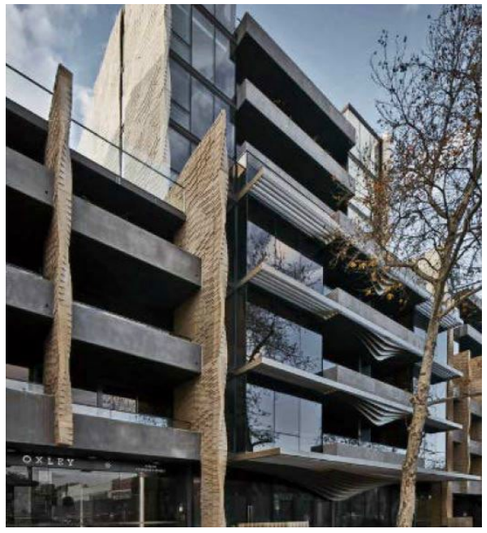
A reduced focus on intensification compared with the Central Core allows for a greater focus on ensuring sunlight for the majority of the public realm, consistent with the SRL Urban Design Objective of *Amenity*.

Future urban form

Clayton Road will serve as a vital, tree-lined thoroughfare, facilitating public transportation while incorporating some footpath widening and strategically placed pedestrian amenities that enhance the overall functionality of the street. Streetscape treatments that encourage activation of street frontages will create a highly urbanised street that supports public life and provides an attractive and comfortable pedestrian experience. The new SRL station entry at the Remembrance Gardens will generate substantial pedestrian activity on the east side of Clayton Road North, with a series of new links that will improve accessibility to the Monash Health Precinct.

The Central Flanks will provide high density employment and housing in the form of mid-rise buildings. These buildings will respond to the emerging mid-rise urban development character, and maintain an activated and continuous street wall. Upper level built form will be set back from the street wall to protect sunlight access to the public realm and neighbouring properties. A zero street setback at podium level will frame the public realm and will support its activation, except in narrow streets, where buildings are proposed to be set back to create a wider footpath.

Figure 6.10: Examples of the form of development envisaged for Central Flanks.



Built form outcomes

The development type recommended in the Central Flanks is the mid-rise podium-tower. This delivers high density while maintaining good solar provision to the public realm. This type typically requires a large lot or lot amalgamation.

The zero front setback and lack of side setbacks at the base of the building ensure a highly-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground and potentially upper levels to provide the desired vibrancy and activation. Best practice design provides for car parking in a basement or 'sleeved' behind other uses.

Behind the street wall, the base of the building is set back from the side and rear boundary to provide space for tree planting. This typology provides 5 to 10 per cent deep soil area at the sides and rear of the lot.

Above the street wall, the upper levels are set back from all sides to maintain sunlight, sky views and a sense of openness in the public realm. These setbacks also maintain good internal amenity and equitable development opportunities on neighbouring properties.

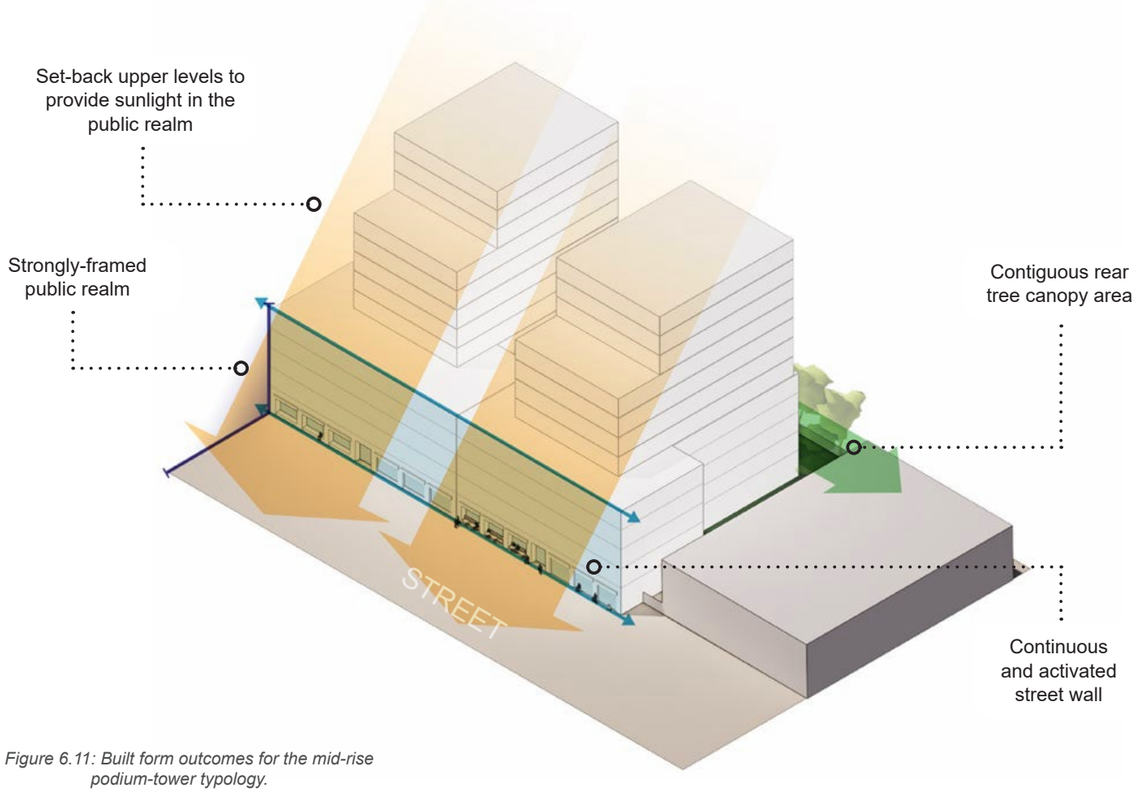


Figure 6.11: Built form outcomes for the mid-rise podium-tower typology.

Building height and density

Building heights are determined by the application of a September equinox solar plane to protect sunlight access to the footpath on the opposite side of the street, in accordance with Strategy BF5: Sunlight to public realm.

Based on testing of typical property sizes within this place type, it is envisaged that heights of 39 metres (10 to 12 storeys) and a density of approximately 5.5 to 6.5:1 can be achieved. Testing of mid-rise podium-tower development in typical Central Flanks lots is illustrated in the SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

'Landmark' sites may depart from this maximum height to mark key points in the urban structure.

Street wall height

A minimum street wall height of 13 metres (3 storeys) is proposed to ensure that the public realm is well framed, in accordance with Strategy BF2: Podiums. The maximum street wall height of 17 metres (4 storeys) is proposed to balance spatial definition and a sense of openness, and to maintain solar access in the streets.

Building setbacks

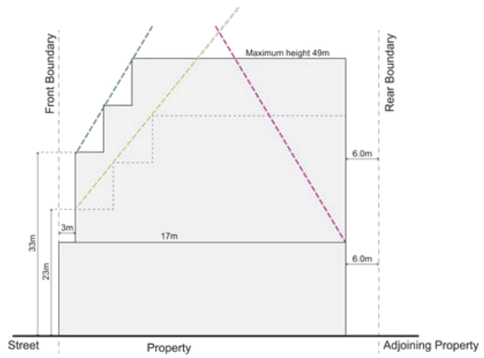
The following minimum setbacks are proposed:

Podium

- A zero street setback to frame the public realm and support public realm activation, in accordance with Strategies BF7: Engaging facades, except along Clayton Road (between Carinish Road and Rose Street, a front setback is proposed to achieve a consistent 5 metres minimum footpath.
- A zero side setbacks where there is no primary outlook
- A 4.5-metre side setbacks where there is a primary outlook. Wherever applicable, side setbacks should be measured from the centreline of an adjoining laneway.
- A rear setback of 6 metres to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping. It is envisaged that these rear setbacks will combine to create a green spine along the rear of all lots in this place type, establishing valuable habitat and potentially communal amenity.

Tower

- A 3-metre front setback from the podium facade, to distinguish towers from the street wall, maintain a sense of openness and manage wind effects, in accordance with Strategies BF2: Podiums and BF3: Weather protection
- An additional front setback of 0.6 metres per metre of height above 33 metres, except 0.8 metres per metre of height above 23 metres on the north side of east-west streets, to maintain a sense of openness and solar access to the opposite footpath
- Side setbacks of:
  - 4.5 metres for towers up to a height of 27 metres
  - 6 metres for towers up to a height of 41 metres
  - 7.5 metres for towers higher than 41 metres.
- A rear setback of 6 metres, aligned with podium rear setback
- Where adjacent to the rear boundary of land in a Key Movement Corridor or Urban Neighbourhood, a rear setback of 6 metres plus 0.6 metres per metre of height above 17 metres.



Adjacent Key Movement, Urban Neighbourhood and Residential Neighbourhoods set back additional 0.6 metres per metre per height above 17 metres

Set back additional 0.6 metres per metre of height

On north side of east / west street set back additional 0.8per metre of height

Figure 6.12: Built form outcomes section - front to rear

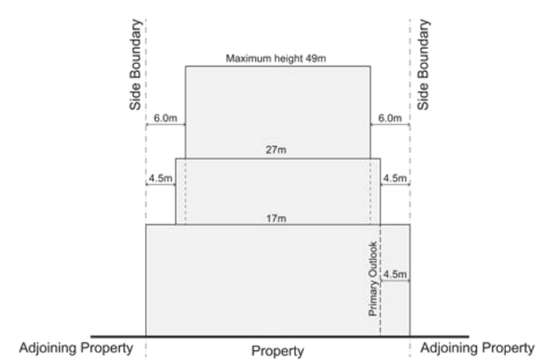


Figure 6.13: Built form outcomes section - side to side

Building separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for towers up to a height of 27 metres
- 12 metres for towers up to a height of 41 metres
- 15 metres for towers up to a height of 66 metres

Overshadowing

Activity Streets are intended to support the highest level of street life. However, they are also where development is most intense, in response to the accessibility created by the SRL station. A balance needs to be struck between ensuring solar access and providing for growth. In response, it is proposed that development should maintain solar access to 50 per cent of the southern, eastern or western footpaths of Activity Streets for a minimum of 3 hours at the spring equinox.

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of the other streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing recommended at the edges of the new Cooke Street car park open space will maintain sunlight to the majority of the space at mid-winter and more than 75 per cent of the space for a minimum of 3 hours at spring equinox.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

Summary of built form outcomes

The built form outcomes for the mid-rise podium-tower development type are summarised below.

Building height and density	
Maximum height	39 metres (10 to 12 storeys)
Maximum height - Carinish Road	49 metres (15 storeys)
Maximum density	5.5 to 6.5:1
Activation	High
Street Wall	
Minimum height	13 metres (3 storeys)
Maximum height	17 metres (4 storeys)
Building setbacks	
Minimum street	0 metres
Minimum street - Clayton Road (between Carinish Road and Rose Street)	Widening to achieve a consistent 5m minimum footpath
Minimum above podium facade	3 metres plus 0.6 metres per metre of height above 33 metres, except 0.8 metres per metre of height above 23 metres on the north side of east-west streets.
Minimum side and rear - podium (non-primary outlook)	0 metres
Minimum side and rear - podium (primary outlook*)	4.5 metres
Minimum side – tower	• 4.5 metres for towers up to a height of 27 metres • 6 metres for towers up to a height of 41 metres • 7.5 metres for towers higher than 41 metres
Minimum rear - podium and tower	6 metres, landscaped
Minimum rear - interface with Urban Neighbourhood	6 metres plus 0.6 metres per metre of height above 17 metres
Building separation	
Minimum building separation	• 9 metres for towers up to a height of 27 metres • 12 metres for towers up to a height of 41 metres • 15 metres for towers up to a height of 66 metres

** 4.5 metres applies to the parts of the building that provide a primary outlook (to the rear and side boundaries). If interfacing with side / rear service lanes, the 4.5 metres setback is measured from the centre of the laneway*

Figure 6.14: Indicative streetscape typical only

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Central Flanks. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features critical to creating an accessible and permeable Central Flanks, as part of Design Direction 2: Promote active transport access.

- Critical key link (new) - fixed
- Important key link (new) - fixed
- Important key link (new) - flexible
- Local key link (new) - flexible

Key public realm projects

Key public realm interventions in Central Flanks to achieve Design Direction 1: Ensure streets are inviting places that support community life.

- Clayton Road (part) upgrades - Avenue
- Clayton Road (part) upgrades - Activity Street
- New Pedestrian Crossing - Clayton Road
- Pedestrian crossings (new or upgraded) - SRL Rail and Infrastructure project

Public realm enhancements

Streets to be considered for enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Improvements to Green Streets

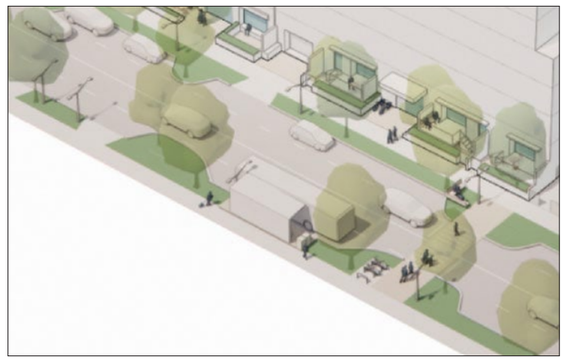


Figure 6.15: Indicative illustration showing an Avenue within Central Flanks

Figure 6.16: Central Flanks public realm outcomes

Typical building and public realm profile

This cross-section shows a mid-rise podium-tower building interfacing with an Activity Street to provide an illustration of the future potential built form and public realm outcomes for this area.

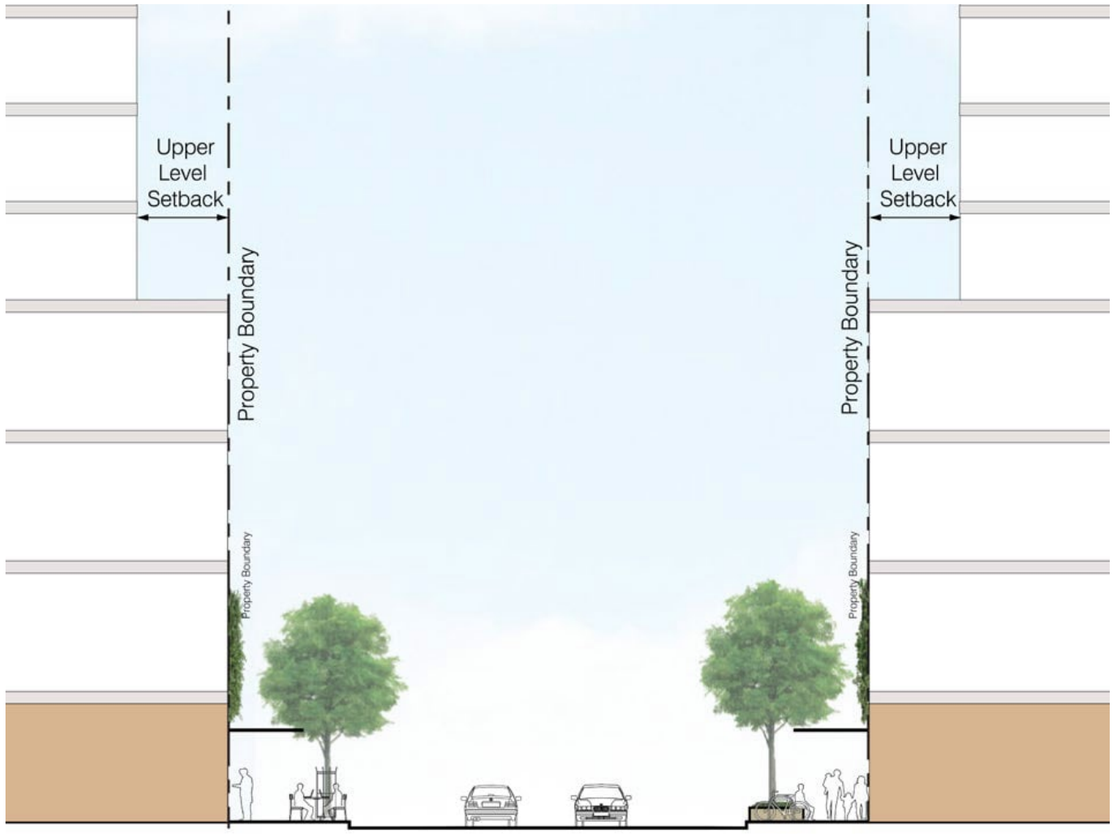


Figure 6.17: Potential section - Clayton Road - Activity Street

Special case - cross-section B

Clayton Road is a 21 metre wide street and is assigned to receive Activity Street treatment. In this location, footpaths are an inconsistent width, however they are generally less than 2 metres wide. This is considered insufficient given the development density and public transport accessibility of this area. Therefore, buildings on the west side are proposed to be set back to widen the footpath to a consistent width, and to align with the SRL station buildings. Buildings on the east side are proposed to be set back to widen the footpath to a consistent 5m width.

Figure 6.18: Special case - cross section B: Clayton Road- Cross-section B

6.4 Main Streets

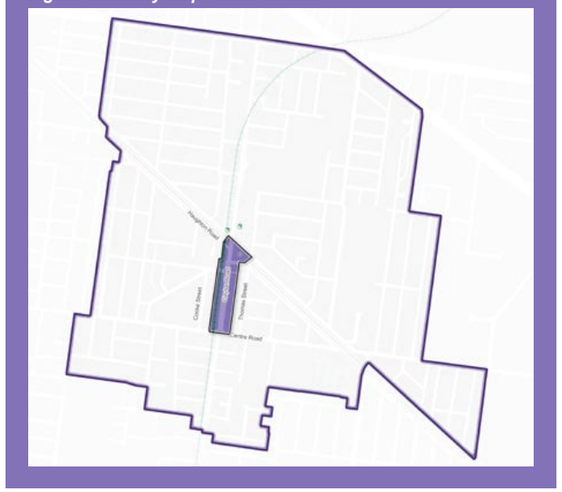
Existing main street shopping strips

The urban form area identified as belonging to this place type is:

- D - Clayton Road South Activity Centre

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.19: Key map - Main Streets



Future role and function

Moderate intensification of built form providing space for more housing

This urban form area has a highly valued, low-rise character and a high level of pedestrian activity, requiring a high level of public realm amenity. Together with fragmented ownership, these factors limit its development potential despite lying within the heart of the activity centre. While there may be sporadic opportunities for more substantial redevelopment through amalgamation of many lots, the likelihood that this would not occur uniformly within the urban form area means that allowing such development would result in an incohesive built form character. It would also likely adversely affect the fine-grain character.

Therefore, only a moderate level of intensification is envisaged.

Future drivers

Respect the low-rise and fine-grain character of the shopping strip

This urban form area is characterised by narrow lots, resulting in a distinct character of small, low-rise shops. Future development should complement this character through its massing and façade articulation and design.

Maintain sunlight amenity to the public realm

There is a high level of pedestrian activity in this urban form area as a result of its retail uses, including outdoor dining. Therefore, it is important that sunlight is maintained to southern, eastern and western footpaths, consistent with SRL urban design objectives *Amenity* and *Places for people*.

Future urban form

Clayton Road will be a high-quality Activity Street that supports public life and provides an attractive and comfortable pedestrian experience, with some footpath widening and high-quality streetscape treatments that encourage activation of street frontages and provide durable, high quality materials. A new pedestrian link to the west will provide a pedestrian connection from Clayton Road to Cooke Street and the adjacent community facilities.

The area will be developed into mixed-use buildings which maintain a sense of openness and solar access to the public realm. New buildings will complement the existing low-rise character, providing a low-scale street wall which will frame the public realm. The built form will be set back above the street wall to distinguish upper forms and maintain visual prominence of the street wall. Rear setbacks will minimise shadow and visual bulk impacts on neighbouring properties.

Figure 6.20: Examples of the form of development envisaged for Main Streets.

Built form outcomes

The development type recommended in the Main Streets is shoptop infill. This provides for employment and housing growth and increased vibrancy, particularly outside retail hours, while complementing the existing character and providing a high level of pedestrian amenity.

It relies on the amalgamation of up to three typical lots, to create a feasible site width (see Best Practice Urban Development Typologies in SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

The proposed type incorporates a 2 to 3 storey, zero setback, boundary-to-boundary street wall that will complement the existing vibrant and memorable character created by low-rise, continuous, active streetscapes.

The street wall is articulated to reflect the existing fine-grain character and activated by commercial ground floor uses.

Above the street wall, upper levels are set back to ensure an appropriate balance between openness and enclosure in the street, along with good solar access.

The proposed use-mix varies with the role and function of the urban form area.

The urban form outcomes for the shoptop infill development type are summarised below.

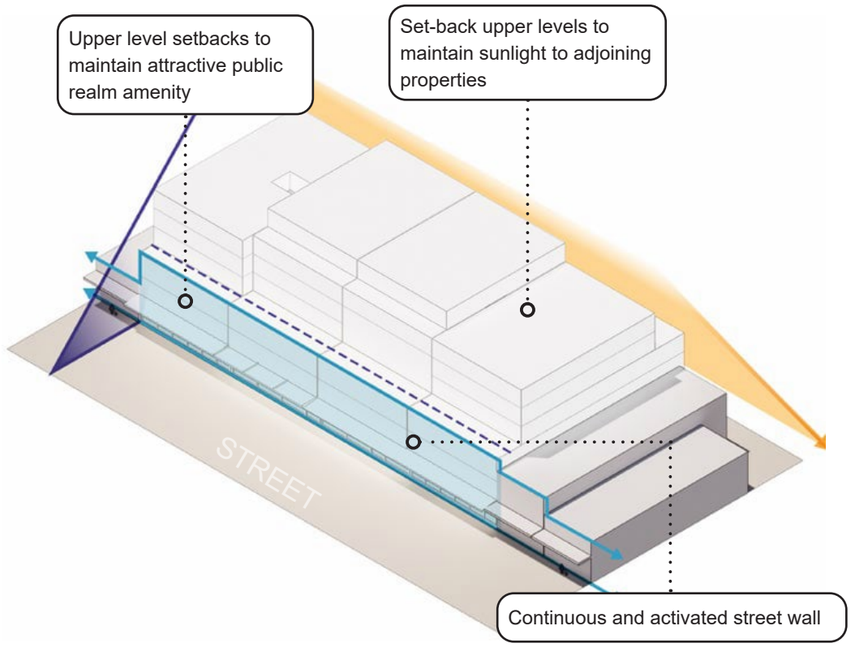


Figure 6.21: Urban form outcomes for the shoptop infill typology.

Building height and density

Main Streets are characterised by narrow, 1 to 2-storey buildings. The narrow width of the lots and their fragmented ownership means that it is likely that not all lots will be redeveloped. Therefore, maximum building heights are influenced by the need to complement the scale of existing buildings, in accordance with Strategy UF8: Main Streets and existing small retail strips..

Building heights are also influenced by the street width. In order to maintain a sense of openness and solar access to the opposite footpath, building form is proposed to be limited by a 45° plane from the opposite street boundary, in accordance with Strategy UF5: Public realm amenity.

Based on testing of typical property sizes in each urban form area within this place type, it is envisaged that heights of 24 metres (6 to 7 storeys) can be achieved, resulting in a density of approximately 4:1. Testing of shoptop infill development on typical Main Street lots is illustrated in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

'Landmark' sites may have increased height and density to mark key points in the urban structure, subject to high quality design.

Street wall height

A minimum street wall height of 8 metres (2 storeys) is proposed to ensure the public realm is well framed, in accordance with Strategy UF5: Public realm amenity. The maximum street wall height is proposed to be 12 metres (3 storeys) to complement the existing low-rise character, in accordance with Strategy UF3:4 Main Streets. This may be increased to 14 metres (4 storeys) at intersections to contribute to a visually diverse streetscape and recognise the characteristic feature of bigger buildings on street corners.

Building setbacks

The following minimum setbacks are proposed:

- A zero street setback at podium level, to frame the public realm and support public realm activation, in accordance with Strategies UF5: Public realm amenity and UF7: Public realm animation, except along both sides of Clayton Road between Carinish Road and Dunstan Street, a front setback widening is proposed to achieve a consistent 5 metres footpath.
- Above the podium, a 3-metre set back from the podium façade up to a height of 21 metres and an additional setback of 1 metres per metre of height above that, to distinguish upper forms from and maintain the visual prominence of the street wall in accordance with Strategy UF3:4 Main Streets, and to maintain a sense of openness in accordance with Strategy UF5: Public realm amenity
- Rear, upper level setbacks of 4.5 metres above ground floor level to avoid unreasonable visual bulk.

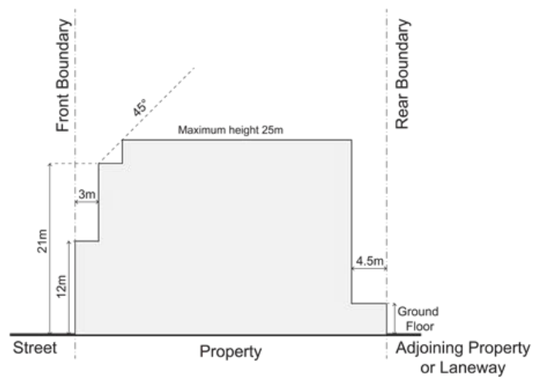


Figure 6.22: Built form outcomes section - Upper level setback

Building separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for buildings up to a height of 27 metres

Overshadowing

Development should maintain solar access to the opposite footpath between 11am and 2pm at the September equinox, in accordance with Strategy UF5: Public realm amenity.

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity to Clayton Road. The proposed standard will provide solar access to 100 per cent of the footpaths for a minimum of 3 hours at the spring equinox.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

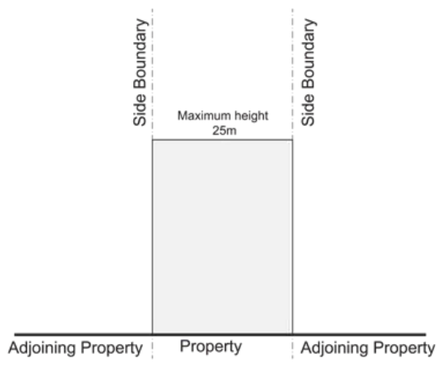


Figure 6.23: Built form outcomes section - side to side

Summary of built form outcomes

The built form outcomes for the shoptop infill development type are summarised below.

Building height and density		
Maximum height	25 metres (6 to 7 storeys)	
Maximum density	4:1	
Street Wall		
Minimum height	9 metres (2 storeys)	
Maximum height	12 metres (3 storeys)	
Maximum height at intersections	14 metres (4 storeys)	
Activation	High	
Building setbacks		
Street	0 metres	
Minimum street - Both sides of Clayton Road (between Carinish Road and Dunstan Street)	Widening to achieve a consistent 5 metres footpath	
Above podium	3 metres plus 1 metres per metre of height above 21 metres	
Side	0 metres	
Rear	4.5 metres above Ground Floor level	
Building separation		
Minimum building separation	9 metres	
Overshadowing		
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridor, Urban Neighbourhood	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Adaptability		
Minimum ground level floor-to-floor height	4 metres	

Figure 6.24: Potential section - Clayton Road - Activity Street

Typical building and public realm profile

This cross-section shows a shoptop infill building with an activity street to provide an illustration of the potential future built form and public realm outcomes for this area.

Figure 6.25: Potential section - Special case - cross-section C: Clayton Road

Special case - cross-section C: Clayton Road

Clayton Road is a 21 metre wide street and is assigned to receive Activity Street treatment. Between Haughton Road and Dunstan Street, footpaths are an inconsistent width, however they are generally less than 2 metres wide. This is considered insufficient given level of retail activity and public transport accessibility of this area. Therefore, buildings on both sides of Clayton Road are proposed to be set back to widen the footpath to a consistent 5m width.

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Main Streets. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features creating an accessible and permeable Main Streets, as part of Strategy Design Direction 2: Promote active transport access.

- Important key link (new) - flexible
- Local key link (new) - flexible

Key public realm projects

Key projects to create an accessible and permeable Main Streets, as part of Design Direction 2: Promote active transport access and Design Direction 4: Facilitate outdoor recreation.

- Pedestrian crossings (new or upgraded)
- Open space (new) - planned / proposed

Public realm enhancements

Streets to be considered for enhancements to deliver Strategy Design Direction 1: Ensure streets are inviting places that support community life.

- Clayton Road and Centre Road (part) - Activity Street

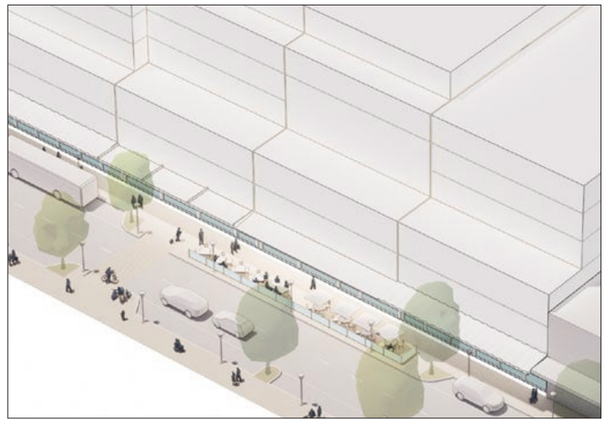


Figure 6.26: Indicative illustration showing an Activity Street within a Main Street

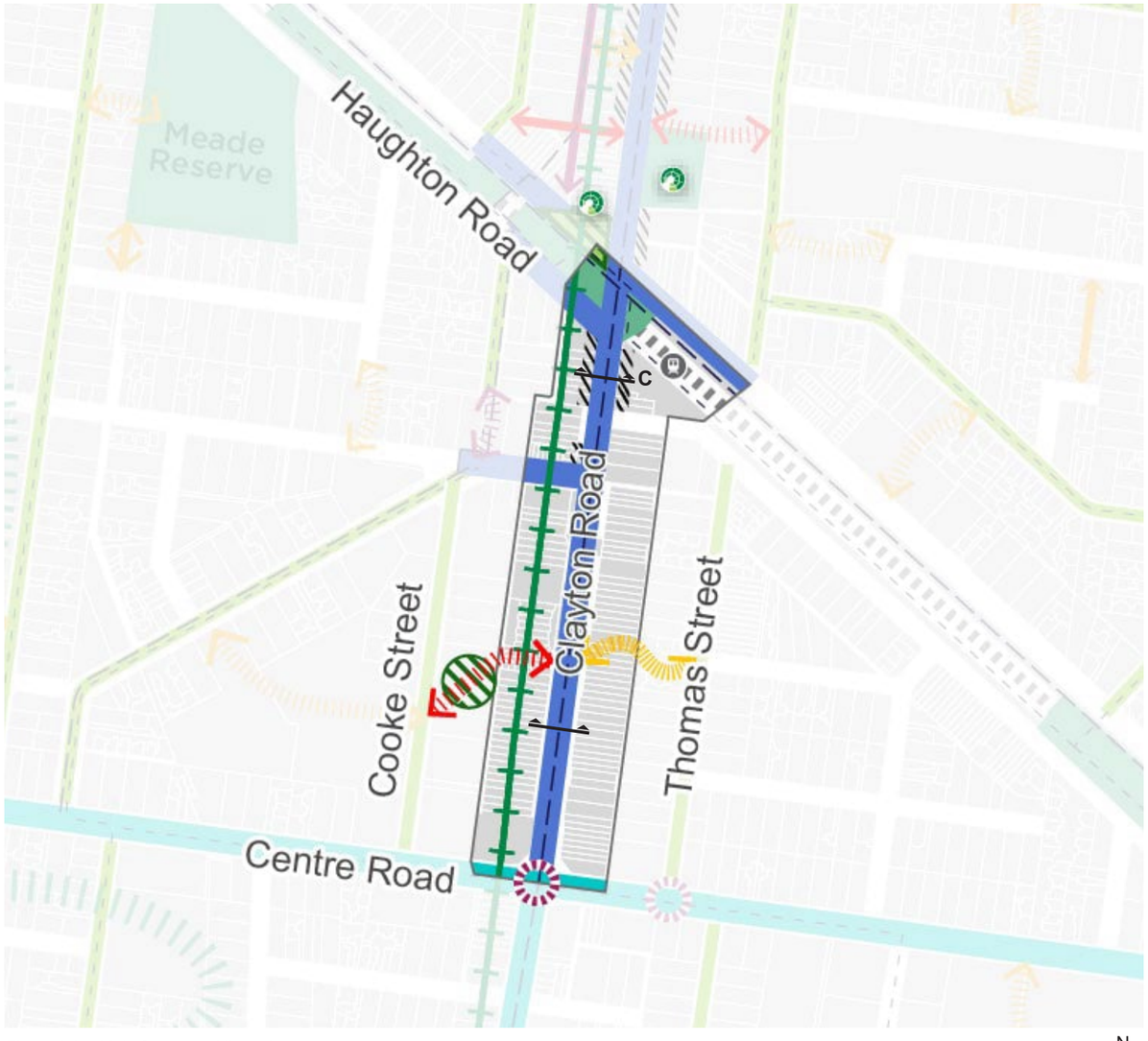


Figure 6.27: Main Streets public realm outcomes

Legend

- SRL station
- Existing Clayton Station
- Urban form area boundary
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Existing Open Space
- Widening to achieve a consistent 5m minimum footpath

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6.5 Key Movement Corridors

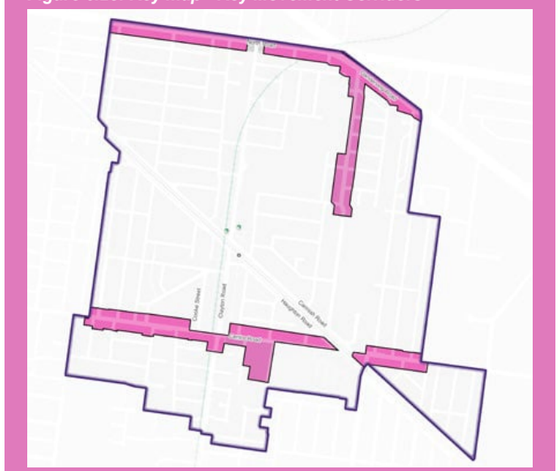
Main roads

The urban form areas identified as belonging to this place type include:

- E - Dandenong Road
- F - Centre Road Corridor Flanks
- G - Browns Road Corridor
- H - Centre Road Enterprise

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.28: Key map - Key Movement Corridors



Future role and function

Substantial change of built form providing space for jobs growth, local services and housing along Key Movement Corridors

These streets offer a high level of accessibility to jobs and services. Therefore, they are an appropriate location for a higher level of intensification and mixed-use to contribute to a new 'Boulevard' character.

Future drivers

Balance between openness and enclosure of the street

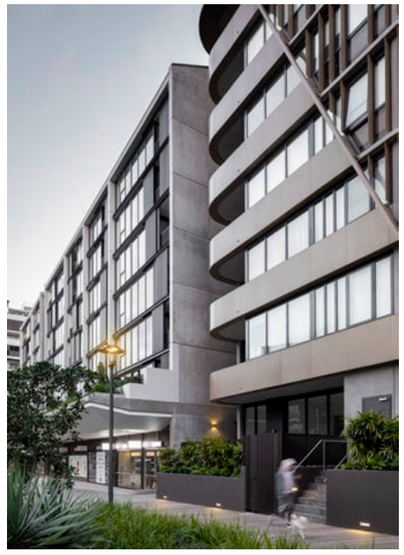
These urban form areas are outside the core of the Structure Plan Area and generally border the residential hinterland. Their development should seek to deliver moderate growth in a form that gives consideration to amenity and character

Future urban form

Dandenong Road and North Road are proposed to become tree-lined Boulevards, which will have wide, generous primary road and public transport corridor that serves multiple uses and provides strong landscape and pedestrian outcomes including canopy trees and pedestrian crossing opportunities. Centre Road will become an Avenue: a wide and tree-lined 'connector' street that accommodates active and / or public transport with nodes of pedestrian amenity to create places for people to move and dwell. The Browns Road Corridor offers a wide street that enables sustainable travel and ability to support pedestrian experience to key destinations, namely the Monash Health Precinct. This area also offers greater densification to support growth in the Monash Health Precinct. Additionally, new or upgraded pedestrian crossings, particularly on Dandenong Road, will improve north-south connectivity.

The Key Movement Corridors will be lined with mid-rise apartment buildings with pockets of mixed-use. Upper levels will be set back from the street wall to maintain solar access and a sense of openness in the public realm, while rear setbacks will minimise shadow and visual bulk impacts on neighbouring properties. A modest street setback will maintain definition and activation of the public realm, and provide privacy for ground floor dwellings.

Figure 6.29: Examples of the form of development envisaged for Key Movement Corridors.



Built form outcomes

The development type recommended in the Key Movement Corridors is the urban infill. This is a traditional form of development that delivers highly adaptable buildings able to accommodate commercial and/or residential uses.

This development type delivers moderately high density along main roads, in accordance with Strategy UF6: Boulevards and Avenues, without the potentially adverse impacts of taller buildings. Importantly, it can be developed on the vast majority of the lots found in these places without the need for lot amalgamation (see Best Practice Urban Development Typologies report in SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

This development type provides a vibrant and memorable urban character, good private amenity and protection of neighbouring amenity to the rear, adaptability for mixed and changing uses, and reasonable space for tree canopy cover. The minimal front setback and lack of side setbacks ensure a well-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground or upper levels where desired.

The primary orientation of accommodation to the street and middle of the block enables differing uses to comfortably exist side-by-side where relevant. Generous rear setbacks ensure good amenity for accommodation facing towards the middle of the block, including adjacent properties to the rear, and space for tree planting.

As the Key Movement Corridors evolve through new urban infill development, they will experience a substantial change in character. As noted in Design Direction 5, this is considered to be an inevitable outcome of the vision for transformational change. This kind of transition in character is consistent with other transforming areas such as Brunswick Activity Centre, Cremorne and Box Hill between Whitehorse Road and the hospital. Low-rise dwellings will no longer represent the preferred character, and will increasingly become anomalies.

The sheer on-boundary side walls of urban infill development will change the amenity of any neighbouring low-rise dwellings to the side However, the lack of side setbacks is necessary to enable viable development of appropriate density on single lots and avoid constraining development on neighbouring properties to the side, in accordance with Strategy BF11: Building orientation. The introduction of side setbacks to protect the existing amenity and character would mean that lot amalgamation is required to achieve a viable floorplate, and greater height is needed to maintain the density envisaged by Strategies UF5: Mixed-use neighbourhoods and UF6: Boulevards and Avenues.

The majority of lots in this place type are occupied by detached dwellings whose primary orientation is towards the street and a rear garden, rather than towards side boundaries. Therefore, the impact of sheer on-boundary side walls will be generally limited to the secondary rooms that face side boundaries.

Urban Infill development is proposed to have a generous rear setback, which will limit its impact on the amenity and equitable development of neighbouring rear gardens. The rear setbacks of existing and future development will ultimately combine to form a large green space in the middle of the block.

The building height and upper level street setbacks vary based on street width to ensure an appropriate balance between openness and enclosure in the street, along with reasonable solar access. In the Key Movement Corridors, urban infill provides a taller street wall, with upper levels maintaining a 1:1 ratio with the street. In the Urban Neighbourhoods a building height of 24 metres with a 4-storey street wall and upper level setback is proposed to maintain an open character.

This development type includes a landscaped front setback as well as a generous rear setback, resulting in a combined 10 to 15 per cent deep soil area across the front and rear of the lot.

The proposed use-mix varies with the role and function of the urban form area.

Building height and density

Building heights are proposed to be determined by the street width and lot depth, up to a maximum of 8 storeys. In order to balance spatial definition and a sense of openness, building form is proposed to be limited by two variables:

- A 45° plane from the opposite street boundary, in accordance with Strategy BF6: Street scale.
- An angled plane at the rear to or limit visual bulk impacts to neighbouring properties, while enabling taller buildings on deeper lots, and to avoid unreasonable shadow impacts on neighbouring properties in accordance with Strategy BF12: Rear amenity plane.

Based on testing of typical property sizes in each urban form area within this place ype, it is envisaged that heights of 27 metres (7 to 8 storeys) can be achieved, resulting in a density of approximately 3:1. Testing of urban infill development in typical Key Movement Corridors is illustrated in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

In sensitive areas, a maximum building height of 21 metres (5 to 6 stroreys) is proposed. Sensitive areas are shown in Figure 6.1.

Street wall height

A minimum street wall height of 14 metres (3 to 4 storeys) is proposed to ensure the public realm is well framed, in accordance with Strategy BF6: Street Scale. The maximum street wall height of 21 metres (5 to 6 storeys) to balance spatial definition and a sense of openness, and to maintain solar access in the streets.

Adaptability

A minimum floor-to-floor dimension of 4 metres is proposed at ground floor level to ensure that it is able to be used for commercial purposes.

Building setbacks

The following minimum setbacks are proposed:

- A 3-metre street set back to balance spatial definition and public realm engagement with the privacy of ground floor dwellings in accordance with Strategies BF8: Active frontage and BF9: Residential frontage.
- In the existing small retail strips the street setback should match the prevailing building line in accordance with Strategy BF8: Active frontages. These include:
    - Centre Road / Knight Street small retail strip (Centre Road Shopping Centre between Knight Street and Frank Avenue)
    - Centre Road / Clayton Road small retail strip (Centre Road / Clayton Road Shopping Centre)
    - Centre Road/ Moriah Street small retail strip
- An additional 4-metre set back above 21 metres to maintain a sense of openness and solar access
- Side setbacks of zero where there is no primary outlook, to enable the development of single lots with buildings that face the street and the rear of the lot - this will also maintain equitable development opportunities for neighbouring properties, in accordance with Strategy BF11: Building orientation
- Side setbacks of 4.5 metres where there is a primary outlook to an adjacent private property. Wherever applicable, side setbacks should be measured from the centreline of an adjoining laneway
- Side setback of 3m where abutting public open space
- A rear setback of 6 metres to provide for deep soil planting, in accordance with Strategy BF14: On-site landscaping - it is envisaged that these rear setbacks will combine to create a green spine along the rear of all lots in this place type, establishing valuable habitat and potentially communal amenity
- Additional rear setbacks of 0.7 metres per metre of additional height above 11 metres, or above 14 metres where abutting public open space, to manage visual bulk impacts.

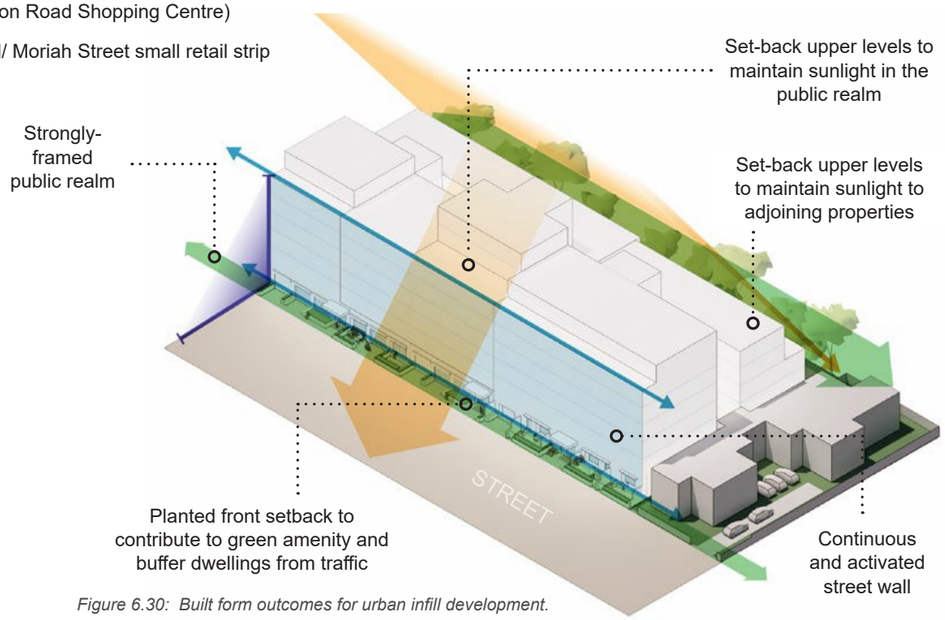


Figure 6.30: Built form outcomes for urban infill development.

Building separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for buildings up to a height of 27 metres

Overshadowing

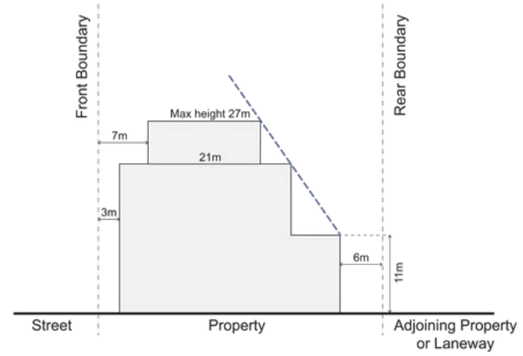
The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods..

Summary of built form outcomes

The built form outcomes for the urban infill development type are summarised below.

Building height and density		
Maximum height	27 metres (7 to 8 storeys)	
Maximum height - Sensitive areas	21 metres (5 to 6 storeys)	
Indicative density	3.5:1	
Street Wall		
Minimum height	14 metres (3 to 4 storeys)	
Maximum height	21 metres (5 to 6 storeys)	
Activation	Moderate	
Building setbacks		
Street - General	3 metres landscaped, 7 metres above 21 metres	
Street - Existing small retail strips	Match the prevailing building line plus 4 metres above a height of 21 metres	
Rear - General	6 metres landscaped plus 0.7 metres per metre of height above 11 metres, or above 14m where abutting public open space	
Rear - Existing small retail strips	6 metres above ground floor + 0.7 metres per metre of height above 11 metres	
Side - Non-primary outlook	0 metres	
Side - Primary outlook	4.5 metres	
Side - Abutting public open space	3 metres	
Building separation		
Minimum building separation	9 metres	
Overshadowing		
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridor, Urban Neighbourhood	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residential Neighbourhood	4 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Adaptability		
Minimum ground level floor-to-floor height	4 metres	



Set back additional 0.7 metres per metre of height above 11 metres

Figure 6.31: Built form outcomes section - front to rear

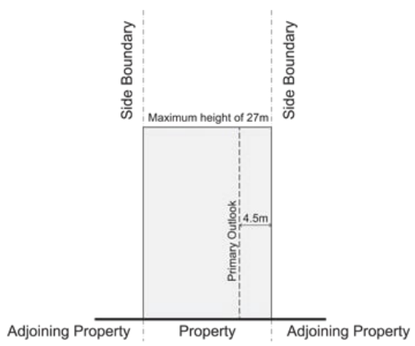


Figure 6.32: Built form outcomes section - side to side

Figure 6.33: Indicative streetscape typical only

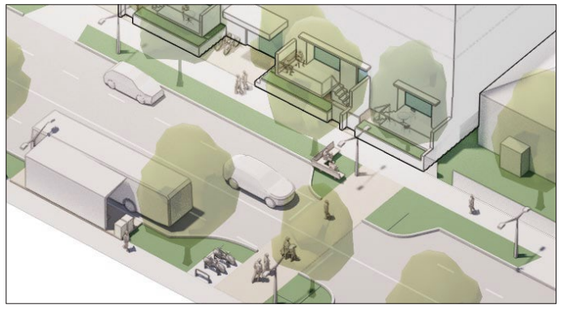


Figure 6.34: Indicative illustration showing an Avenue within a Key Movement Corridor

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Key Movement Corridors. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features creating an accessible and permeable Key Movement Corridors, as part of Design Direction 2: Promote active transport access.

- Important key link (new) - flexible
- Local key link (new) – flexible

Catalyst public realm projects

Major public realm interventions with the potential to have a substantial and positive influence on the transformation of the broader area.

- Transformation of Dandenong Road, Wellington Road and North Road upgrades - Boulevard
- Pedestrian crossings (new or upgraded)

Key public realm projects

Key projects to create an accessible and permeable Key Movement Corridors, as part of Strategy Design Direction 1: Ensure streets are inviting places that support community life.

- Centre Road - Avenue

Public realm enhancements

Streets to be considered for enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Improvements to Green Streets

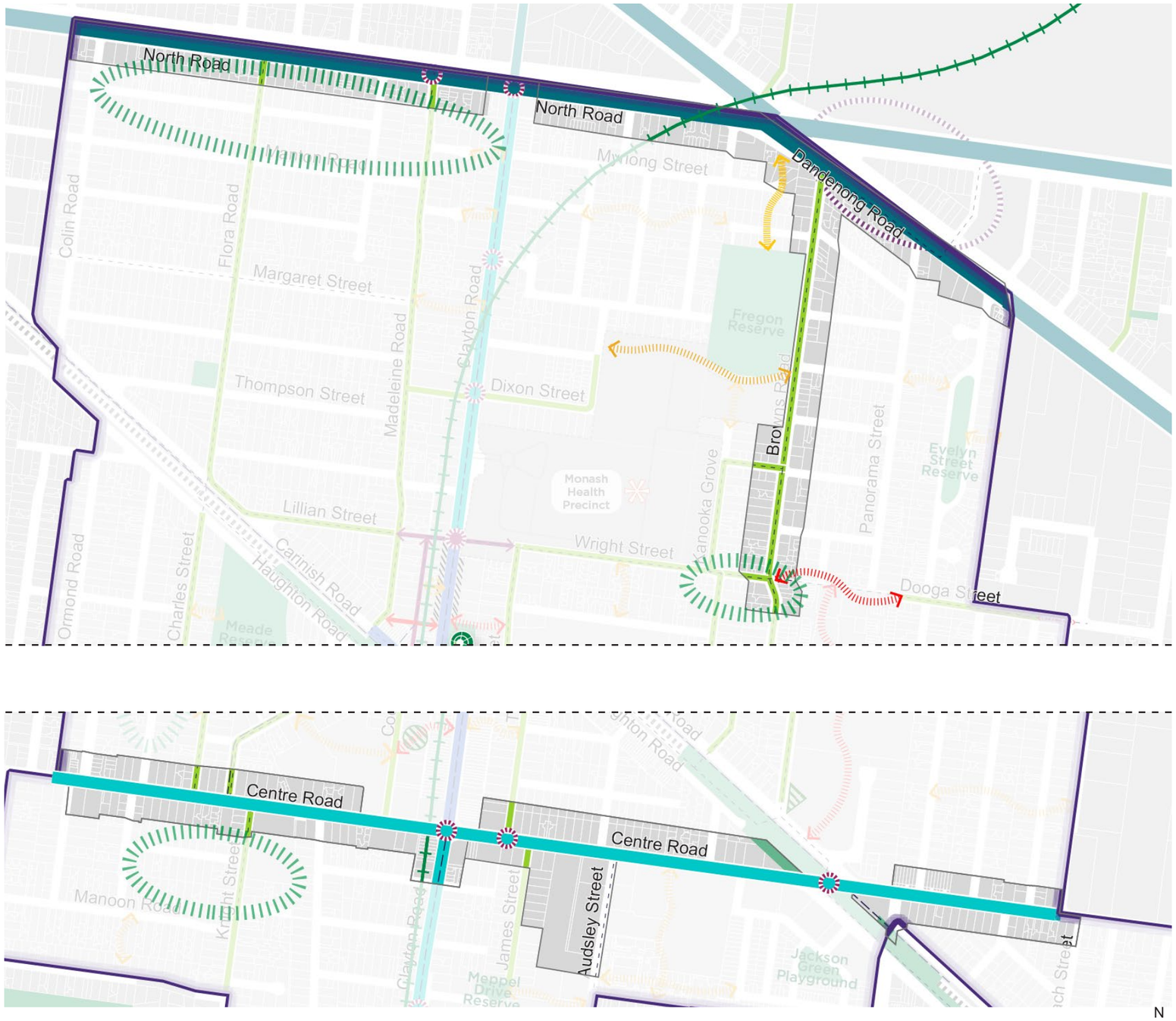


Figure 6.35: Key Movement Corridors public realm outcomes

Legend

- SRL station
- Existing Clayton Station
- Urban form area boundary
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Existing Open Space

Typical building and public realm profile

This cross-section shows an urban infill building with an avenue to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.36: Potential section - Avenue

6.6 Urban Neighbourhoods

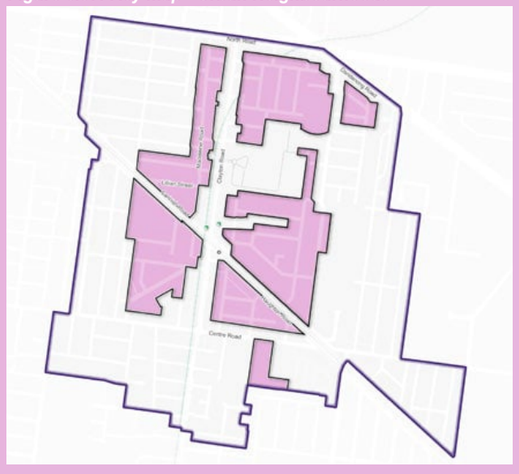
Well-served residential areas

The urban form areas identified as belonging to this place type include:

- I1 - Clayton Inner
- I2 - Clayton Inner East
- J - 1400 Centre Road

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.37: Key map - Urban Neighbourhoods



Future role and function

Substantial change of built form providing space for jobs growth, local services and housing surrounding the core

These urban form areas lie immediately adjacent to and are well integrated with an activity centre. They offer a high level of accessibility to jobs and services. Therefore, they are an appropriate location for a higher level of intensification and mixed-use. In particular, the area east of Clayton Road and north of the Cranbourne / Pakenham rail line presents a key opportunity for uses associated with the Monash Health Precinct and key worker housing.

Future drivers

Balance between openness and enclosure of the street

These urban form areas are outside the core of the Structure Plan Area and border the residential hinterland. Therefore, their level of intensification should be balanced with amenity and character considerations.

Enhance landscape character and amenity within the street

In urban form areas where ground floor commercial activity is not sought, development should contribute to the amenity of the street through a landscaped front setback.

Retain garden setting

This delivers high quality amenity and tree canopy cover, and manages the impact of dwellings on neighbouring amenity. New development in these urban form areas should retain the garden setting attribute to maintain these outcomes.

Future urban form

The Urban Neighbourhoods will have a permeable street network with a number of Green Streets contributing urban biodiversity and provide inviting pedestrian routes to key destinations, such as the Monash Health Precinct, retail destinations along Clayton Road, and open spaces such as Fregon Reserve and Meade Reserve. Additionally, a series of new links will improve accessibility to the reserves and improve walking and cycling permeability where there are long blocks.

The Urban Neighbourhoods will be developed into mid-rise apartment and mixed-use buildings which maintain solar access and a sense of openness in the public realm. A continuous street wall will frame the public realm, while a modest street setback will maintain spatial definition and public realm engagement, and provide privacy to ground floor dwellings. Built form will be setback from the rear to minimise shadow and visual bulk impacts on neighbouring properties.

Figure 6.38: Examples of the form of development envisaged for the Urban Neighbourhoods.

Built form outcomes

The development type recommended in the Urban Neighbourhoods is the urban infill. This is a traditional form of development that delivers highly adaptable buildings able to accommodate commercial and/or residential uses.

This development type delivers moderately high density along main roads, in accordance with Strategy UF6: Boulevards and Avenues, without the potentially adverse impacts of taller buildings. Importantly, it can be developed on the vast majority of the lots found in these places without the need for lot amalgamation (see Best Practice Urban Development Typologies report in SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

This development type provides a vibrant and memorable urban character, good private amenity and protection of neighbouring amenity to the rear, adaptability for mixed and changing uses, and reasonable space for tree canopy cover. The minimal front setback and lack of side setbacks ensure a well-activated and strongly-framed public realm. The strong relationship with the street also supports commercial uses at ground or upper levels where desired.

The primary orientation of accommodation to the street and middle of the block enables differing uses to comfortably exist side-by-side where relevant. Generous rear setbacks ensure good amenity for accommodation facing towards the middle of the block, including adjacent properties to the rear, and space for tree planting.

As the Urban Neighbourhoods evolve through new urban infill development, they will experience a substantial change in character. As noted in Design Direction 5, this is considered to be an inevitable outcome of the vision for transformational change. This kind of transition in character is consistent with other transforming areas such as Brunswick Activity Centre, Cremorne and Box Hill between Whitehorse Road and the hospital. Low-rise dwellings will no longer represent the preferred character, and will increasingly become anomalies.

The sheer on-boundary side walls of urban infill development will change the amenity of any neighbouring low-rise dwellings to the side However, the lack of side setbacks is necessary to enable viable development of appropriate density on single lots and avoid constraining development on neighbouring properties to the side, in accordance with Strategy BF11: Building orientation. The introduction of side setbacks to protect the existing amenity and character would mean that lot amalgamation is required to achieve a viable floorplate, and greater height is needed to maintain the density envisaged by Strategies UF5: Mixed-use neighbourhoods and UF6: Boulevards and Avenues.

The majority of lots in this place type are occupied by detached dwellings whose primary orientation is towards the street and a rear garden, rather than towards side boundaries. Therefore, the impact of sheer on-boundary side walls will be generally limited to the secondary rooms that face side boundaries.

Urban Infill development is proposed to have a generous rear setback, which will limit its impact on the amenity and equitable development of neighbouring rear gardens. The rear setbacks of existing and future development will ultimately combine to form a large green space in the middle of the block.

The building height and upper level street setbacks vary based on street width to ensure an appropriate balance between openness and enclosure in the street, along with reasonable solar access. In the Key Movement Corridors, urban infill provides a taller street wall, with upper levels maintaining a 1:1 ratio with the street. In the Urban Neighbourhoods a building height of 24 metres with a 4-storey street wall and upper level setback is proposed to maintain an open character.

This development type includes a landscaped front setback as well as a generous rear setback, resulting in a combined 10 to 15 per cent deep soil area across the front and rear of the lot.

The proposed use-mix varies with the role and function of the urban form area.

Building height and density

Building heights are proposed to be determined by the street width and lot depth. In order to balance spatial definition and a sense of openness, building form is proposed to be limited by two variables:

- A 45° plane from the opposite street boundary, in accordance with Strategy UF5: Public realm amenity
- A September equinox solar plane from the top of a typical rear boundary fence to avoid unreasonable impacts on neighbouring residential properties, in accordance with Strategy UF6: Residential amenity. This will limit visual bulk impacts to neighbouring properties at the rear, while enabling taller buildings on deeper lots.

Based on testing of typical property sizes in each urban form areas within this place type, it is envisaged that heights of 24 metres (6 to 7 storeys) can be achieved, resulting in a density of approximately 3:1. Testing of urban infill development in typical Urban Neighbourhoods is illustrated in SRL East Structure Plan - Urban Design Supporting Research - Attachment A.

In sensitive areas, a maximum building height of 21 metres (5 to 6 stroreys) is proposed. Sensitive areas are shown in Figure 6.1.

Street wall height

A minimum street wall height of 11 metres (3 storeys) is proposed to ensure that the public realm is well framed, in accordance with Strategy BF6: Street scale. The maximum street wall height is proposed to be 14 metres (4 storeys), to complement the existing lower-rise buildings in these areas. Maximum street wall height on 1380-1388 Centre Road of 21 metres (5 to 6 storeys) to be consistent with street wall height of the surrounding Key Movement Corridor along Centre Road.

Adaptability

A minimum floor-to-floor dimension of 4 metres is proposed at ground floor level to ensure it can be used for commercial as well as residential purposes.

Building setbacks

The following minimum setbacks are proposed:

- A 3-metre street set back to balance spatial definition and public realm engagement with the privacy of ground floor dwellings in accordance with Strategies BF8: Active frontages and BF9: Residential frontages
- An additional street setback above 14 metres of 2 metres or that required to remain below a 45° plane from the opposite street boundary, whichever is greater, to maintain a sense of openness and solar access.
- Side setbacks of zero where there is no primary outlook to enable the development of single lots with buildings that face the street and the rear of the lot, and to maintain equitable development opportunities for neighbouring properties, in accordance with Strategy BF11: Building orientation

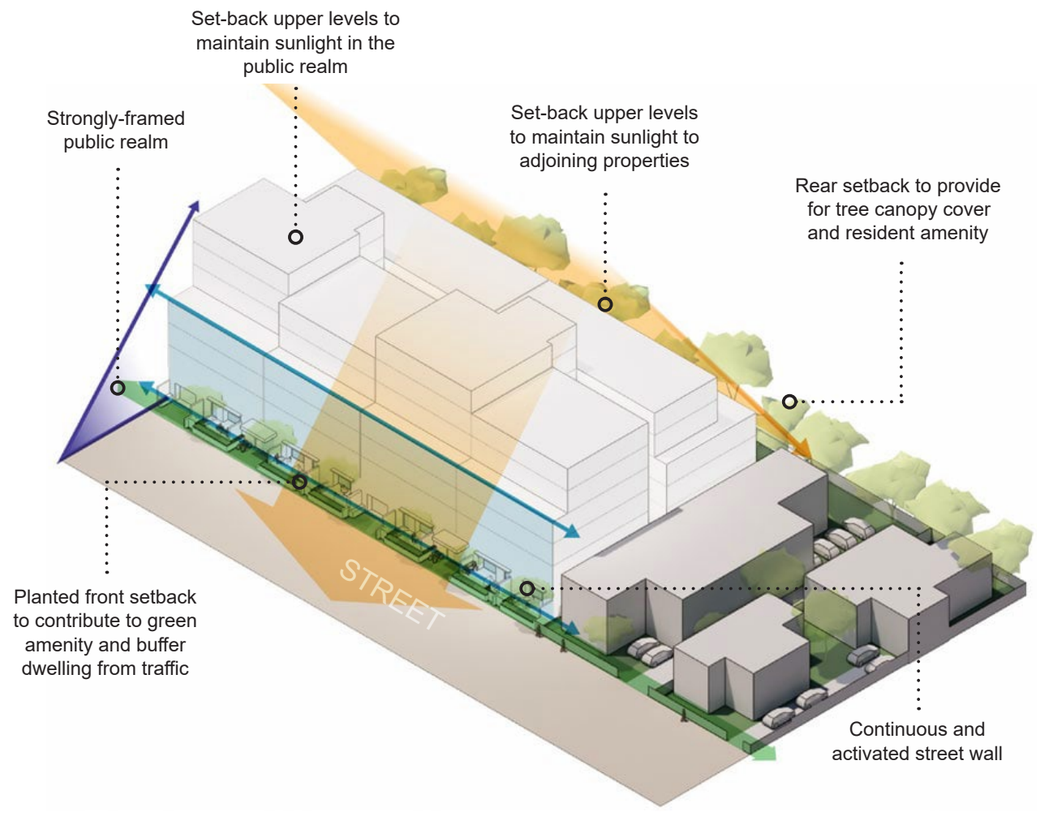


Figure 6.39: Built form outcomes for the urban infill typology.

- Side setbacks of 4.5 metres where there is a primary outlook to an adjacent private property. Wherever applicable, side setbacks should be measured from the centreline of an adjoining laneway
- Side setback of 3m where abutting public open space
- A rear setback of 6 metres to provide for deep soil planting, in accordance with Strategy BF14: On-site landscaping - it is envisaged that these rear setbacks will combine to create a green spine along the rear of all lots in this place type, establishing valuable habitat and potentially communal amenity
- Additional rear setbacks of 0.7 metres per metre of additional height above 11 metres, or above 14 metres where abutting public open space, to manage visual bulk impact.

Building Separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for buildings up to a height of 27 metres

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing recommended at the edges of Fregon Reserve and Meade Reserve will maintain 70 per cent solar access to these spaces for a minimum of 3 hours at mid-winter.

No solar access standard is recommended for Clayton Urban Park as it is already partially overshadowed by the elevated rail line. However, the building scale and massing recommended at the edges of this park will not create any additional overshadowing.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

Summary of built form outcomes

The built form outcomes for the urban infill development type are summarised below.

Building height and density	
Maximum height	24 metres (6 to 7 storeys)
Maximum height - Mary Street, Wright Street, 1400 Centre Road.	27 metres (7 to 8 storeys)
Maximum height - Sensitive areas	21 metres (5 to 6 storeys)
Maximum density	3 to 4:1
Street Wall	
Minimum height	11 metres (3 storeys)
Maximum height	14 metres (4 storeys)
Maximum height - 1380-1388 Centre Road	21 metres (5 to 6 storeys)
Activation	Moderate
Building setbacks	
Street	3 metres landscaped, additional setback above 14 metres of 2 metres or that required to remain below a 45° plane from opposite street boundary, whichever is greater
Rear	6 metres landscaped plus 0.7 metres per metre of height above 11 metres, or above 14m where abutting public open space
Side - Non-primary outlook	0 metres
Side - Primary outlook	4.5 metres
Side - Abutting public open space	3 metres
Building Separation	
Minimum building separation	9 metres

Overshadowing		
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridor, Urban Neighbourhood	3 hours	40 square metRes or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residential Neighbourhood	4 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Adaptability		
Minimum ground level floor-to-floor height	4 metres	

Figure 6.40: Indicative streetscape typical only

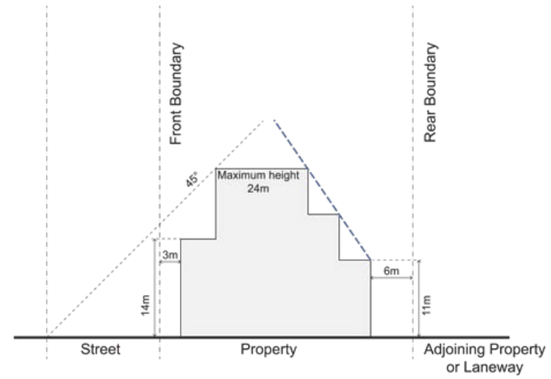


Figure 6.41: Built form outcomes section - front to rear

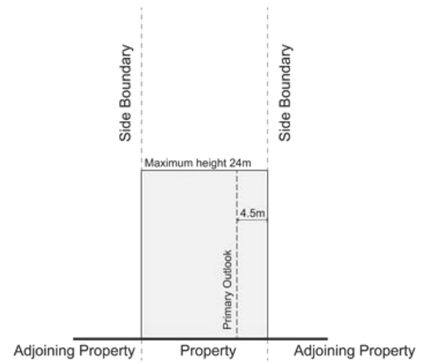


Figure 6.42: Built form outcomes section - side to side

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Urban Neighbourhoods. Realising this aspiration relies on development and public realm projects that vary in scale and importance as outlined below.

Development

Development features creating an accessible and permeable Urban Neighbourhoods, as part of Strategy Design Direction 1: Ensure streets are inviting places that support community life and Strategy Design Direction 2: Promote active transport access.

- Critical key link (new) - flexible
- Important key link (new) - flexible
- Local key link (new) - flexible
- Active frontages to open space - See section on the next page

Public realm enhancements

Streets to be considered for enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Improvements to Green Streets
- Open space (new) - Investigation area

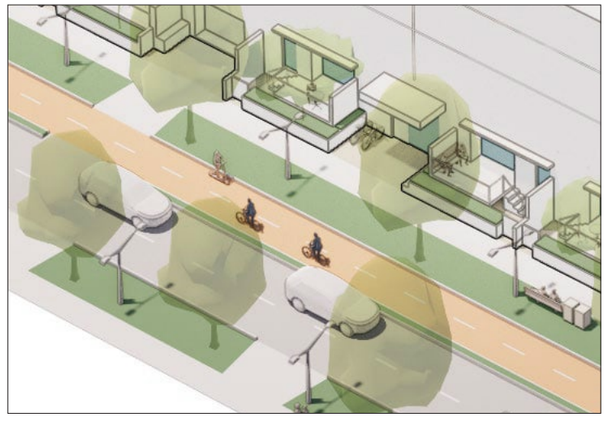


Figure 6.43: Indicative illustration showing a Green Street within an Urban Neighbourhood

Legend

- SRL station
- Existing Clayton Station
- Urban form area Boundary
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Existing Open Space

Figure 6.44: Urban Neighbourhoods public realm outcomes

Typical building and public realm profile

This cross-section shows an urban infill building with a local street to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.45: Potential section - local street

6.7 Residential Neighbourhoods

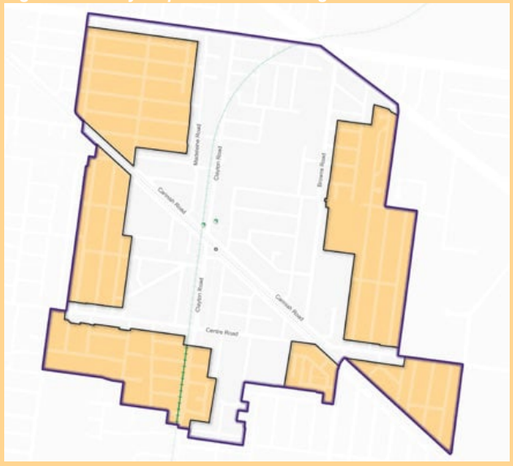
Low-rise neighbourhoods

The urban form areas identified as belonging to this place type include:

- K - Clayton Road South
- L - Jackson Green
- M - Clayton Residential

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.46: Key map - Residential Neighbourhoods



Future role and function

Moderate intensification of built form providing space for more housing

These urban form areas lie further from the Core, so have the least accessibility to jobs and services within the Clayton Structure Plan Area. They have a low-rise residential character, and are adjacent to lower-rise residential hinterland. Therefore, only a moderate level of intensification is sought to balance aspirations for growth with responsiveness to existing character, consistent with the SRL objective Responsiveness.

Future drivers

Maintain sense of openness in the street

Future development should maintain a sense of openness in the street to mediate the transition in character.

Retain garden setting (urban form areas K)

This delivers high quality amenity and tree canopy cover, and manages the impact of dwellings on neighbouring amenity. New development in these urban form areas should retain the garden setting attribute to maintain these outcomes.

Capitalise on amenity provided by open space (urban form area I)

The amenity provided by these open spaces should be capitalised upon by optimising the orientation of development to it and providing improved access for the broader urban form areas.

Future urban form

The Residential Neighbourhoods will have a permeable street network with a number of Green Streets to enhance urban biodiversity and provide inviting pedestrian routes to key destinations including open spaces. A number of local new pedestrian links are proposed to enhance pedestrian permeability where there are long blocks.

The Residential Neighbourhoods will be developed into a mix of mid-rise apartment buildings and low-rise townhouses within a garden setting. Generous building setbacks and landscaping will manage the change in scale from the existing built form. The built form will be set back from the street to provide for canopy trees, while the upper levels will be set back to lessen their visual impact on the public realm. Rear setbacks and side setbacks of apartment buildings will provide for canopy trees and lessen the visual and shadow impact of the upper levels on neighbouring properties.

Figure 6.47: Examples of the form of development envisaged for Residential Neighbourhoods.

Built form outcomes

The development types recommended in the Residential Neighbourhoods are the garden apartments on amalgamated lots and townhouses on single lots.

Garden apartments provide for the same type of development on amalgamated lots as proposed in phase 2 of the Future Homes program, or, going back further, the art deco apartment boom of the 1920s and 30s, but with a slightly increased density, which is considered appropriate because these areas are within walking distance of a higher-order (SRL) station. However, the density is limited to mediate the transition in character and provide a different housing choice than that offered in other urban form areas. In particular, approximately 20 per cent of the apartments will have generous ground level gardens, making them suitable for families.

The development of 4 to 6-storey garden apartments rely on the amalgamation of two typical lots, which is necessary to deliver higher density while providing good-quality internal amenity, and providing a well-landscaped perimeter (see Urban Development Typologies in SRL East Structure Plan - Urban Design Supporting Research - Attachment A).

Importantly, lot amalgamation enables generous side and rear setbacks which will provide for high-quality on-site amenity and significant contribution to tree canopy cover. This typology provides a 35 per cent deep soil area across the front, sides and rear of the lot.

The substantial provision for canopy trees in front, side and rear setbacks will retain and strengthen the leafy character that predominates in these areas. These trees will significantly mitigate the visual presence of taller buildings on the existing streetscape and backyard of these areas.

The landscaped setbacks from all boundaries will also offset the impacts of taller built form on the amenity of neighbouring properties.

Garden apartments are proposed to be limited to 4 storeys in sensitive areas, in accordance with Strategy UF1: Substantial change.

The development of 3-storey townhouses with lesser side setbacks are appropriate on typical single lots.

Low front fences and front doors and windows facing the street will provide passive surveillance of the street.

Building height and density

The height of garden apartments in most parts of Residential Neighbourhoods is determined by solar planes intended to protect the amenity of neighbouring properties, resulting in an indicative maximum height of 6 storeys. Although this substantially exceeds the existing building heights, generous landscaped setbacks are proposed to manage this change in character and limit amenity impacts. The proposed maximum height and minimum setbacks delivers a density of approximately 2:1.

In sensitive areas, garden apartments are proposed to be limited to 4 storeys for the reasons outlined in Strategy UF1: Substantial change. The areas where garden apartments are proposed to be limited to 4 storeys are shown in Figure 4.6 in Section 4. Where appropriate, the boundaries between areas of 4 or 6 storeys have been adjusted to maintain coherent character areas. This delivers a density of approximately 1.5:1.

The lots facing Centre Road and Haughton Road in Area L have a prevailing built form height of 4 to 10 storeys. Therefore, the preferred maximum height of this area is proposed to be up to 10 storeys. This will deliver a density of approximately 4:1.

Lots less than 24 metres wide (most single lots) are not able to accommodate the proposed side setbacks. Therefore, lesser side setbacks are allowed on these lots. However, they are limited to a height of 3 storeys to manage the impacts of those modest side setbacks. This delivers a density of approximately 1.2:1, which is hoped to incentivise lot amalgamation to enable higher amenity and greening outcomes.

Street wall height

The maximum street wall height is proposed to be 14 metres (4 storeys) for garden apartments, except 11 metres (3 storeys) in sensitive areas and for Townhouses, to complement the existing lower-rise buildings in these areas.

Building setbacks

The following minimum setbacks are proposed:

- A 4-metre street setback, to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping. This does not apply to existing small retail strips
- An additional setback above the street wall of 0.5 metres per metre of height above the street wall to lessen the visual impact of the upper form
- A rear setback of 6 metres to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping. This does not apply at ground floor in existing small retail strips
- Additional rear setbacks of 0.7 metres per metre of additional height above 11 metres, or above 14 metres where abutting public open space, to manage visual bulk impacts.

Lots equal or greater than 24 metres in width (including where abutting public open space):

- A 4.5-metre side setback to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping
- For buildings higher than 14 metres, a further side setback of 0.8 metres per metre of height to lessen the visual and shadow impact of the upper form.

Lots less than 24 metres in width, front half of the site:

- Zero side setback for buildings up to a height of 6.9 metres
- A 2-metre side setback for buildings higher than 6.9 metres to lessen the visual and shadow impact of the upper form
- A 2-metre side setback where abutting public open space.

Lots less than 24 metres in width, rear half of the site (including where abutting public open space):

- A 2-metre side setback for buildings up to a height of 6.9 metres
- For buildings higher than 6.9 metres, a further side setback of 1m per metre of height to lessen the visual and shadow impact of the upper form.

Side street

- A 4-metre setback for lots equal or greater than 24 metres in width, to provide for canopy trees.
- A 2-metre setback for lots less than 24 metres in width, to provide for canopy trees.

Building Separation

Within a site, buildings should be separated by a minimum of:

- 9 metres for buildings up to a height of 27 metres

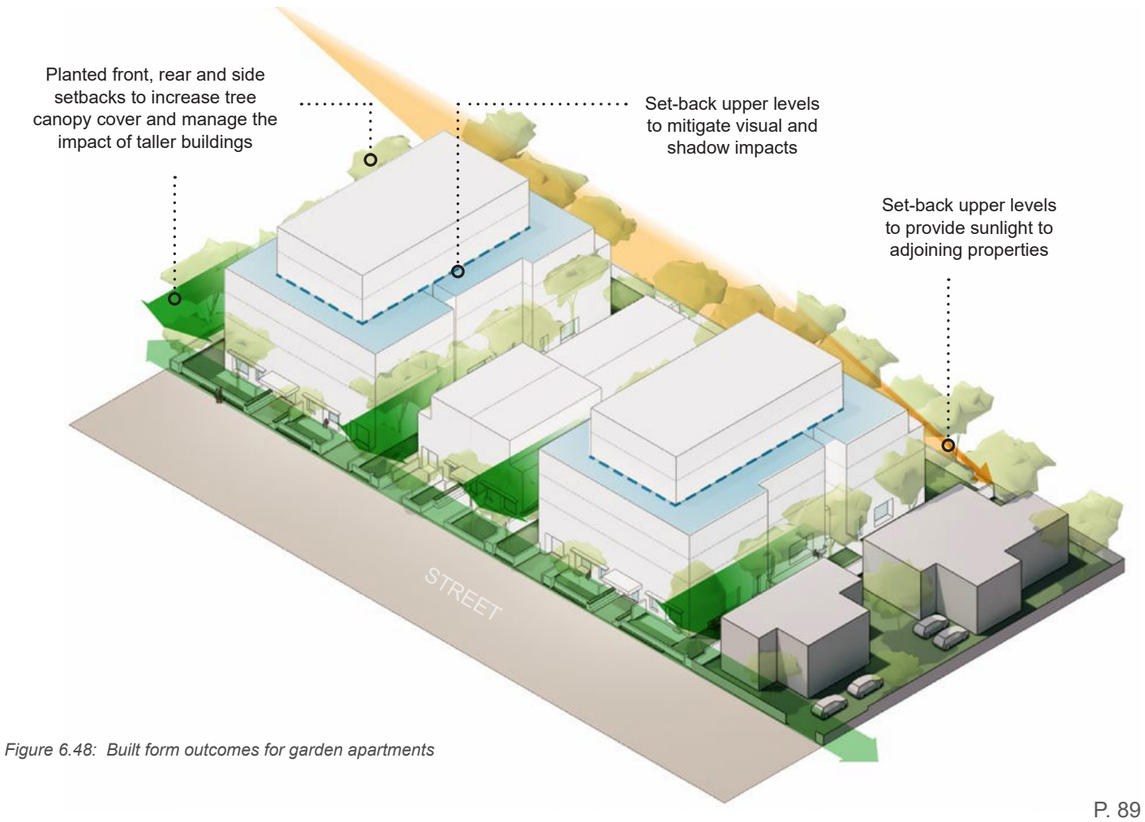


Figure 6.48: Built form outcomes for garden apartments

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing recommended at the edges of First Street Reserve, Jackson Green Playground, Evelyn Street Reserve and Flora Road Playground will maintain solar access to 50 per cent of the open space for a minimum of 3 hours at mid-winter.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

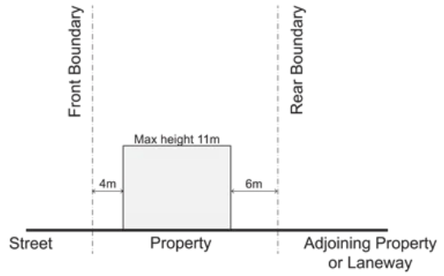
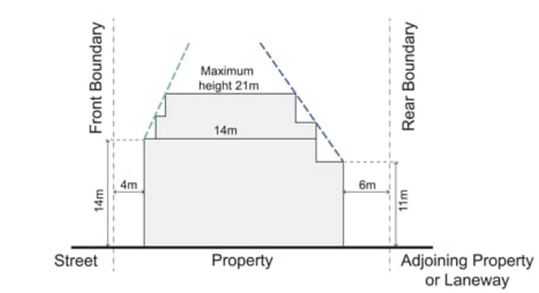


Figure 6.51: Townhouse section front and rear

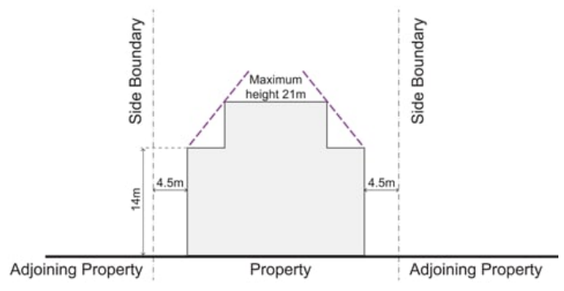


Set back additional 0.7 metres per metre of height above 11 metres

Set back additional 0.5 metres per meter of height above 14 metres

Figure 6.49: Garden apartment section front and rear

Figure 6.52: Townhouse section side interfaces in the front half of the site



Set back additional 0.8 metres per metre of height above 14 metres

Figure 6.50: Garden apartment section sides

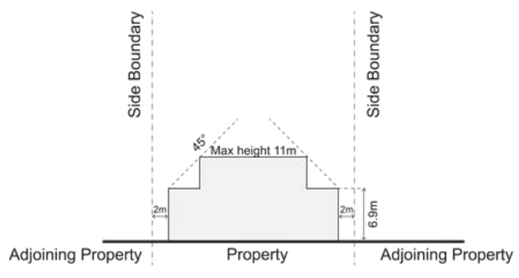


Figure 6.53: Townhouse section side interfaces in the rear half of the site

Summary of built form outcomes

The built form outcomes for are summarised below.

Lots equal to or greater than 24 metres in width (garden apartments)	
Building height and density	
• Maximum height • Maximum height - Sensitive areas • Lots fronting Centre Rd and Haughton Rd	• 21 metres (5 to 6 storeys) • 14 metres (3 to 4 storeys • 33 metres (8 to 10 storeys)
• Maximum density • Maximum density - Sensitive areas • Lots fronting Centre Rd and Haughton Rd	• 2:1 • 1.5:1 • 4:1
Street wall - street and side street	
• Maximum height • Maximum height - Sensitive areas	• 14 metres (4 storeys) • 11 metres (3 storeys)
Activation	Passive surveillance
Building setbacks	
Street - General	4 metres landscaped
Side street - General	4 metres landscaped
Above street wall	Additional 0.5 metres per metre of height above the street wall
Side - General (including where abutting public open space)	4.5 metres landscaped plus 0.8 metres per metre of height above 14 metres
Rear - General, adjacent to developable property	6 metres landscaped plus 0.7 metres per metre of height above 11 metres
Rear – General, abutting public open space	6 metres landscaped plus 0.7 metres per metre of height above 14 metres
Lots less than 24 metres in width (townhouses)	
Building height and density	
Maximum height	11 metres (3 storeys)
Maximum density	1.2:1
Street wall - street and side street	
Activation	Passive surveillance
Building setbacks	
Street - General	4 metres landscaped
Side street - General	2 metres landscaped
Side - General, front half of the site adjacent to developable property	Zero metres up to a height of 6.9 metres, 2 metres above heights of 6.9 metres
Side – General, front half of the site abutting public open space	2 metres
Side - General, rear half of the site (including where abutting public open space)	2 metres plus 1 metre per metre of height above 6.9 metres
Rear - General, adjacent to developable property	6 metres landscaped plus 0.7 metres per metre of height above 11 metres
Rear - General, abutting public open space	6 metres landscaped plus 0.7 metres per metre of height above 14 metres
All lots	
Building separation	
Minimum building separation	9 metres
Overshadowing	

Place type of neighbouring property	**No. of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridor, Urban Neighbourhood	3 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residential Neighbourhood	4 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.
Residentially-zoned properties outside the Structure Plan Area	5 hours	40 square metres or 75 per cent of any open space in a rear setback, whichever is the lesser.

Figure 6.54: The illustration is typical only

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Residential Neighbourhoods. Realising this aspiration relies on urban development interventions and public realm projects that vary in scale and importance as outlined below.

Development

Development features creating accessible and permeable Residential Neighbourhoods, as part of Design direction 2: Promote active transport access.

- Important key link (new) - flexible
- Local key link (new) - flexible
- Open space (new) - Investigation area

Catalyst public realm projects

Major public realm interventions with the potential to have a substantial and positive influence on the transformation of the broader area.

- Pedestrian crossings (new or upgraded)

Public realm enhancements

Streets to be considered for enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Green Streets
- Clayton Road (part) and Centre Road (part) upgrades - Avenue

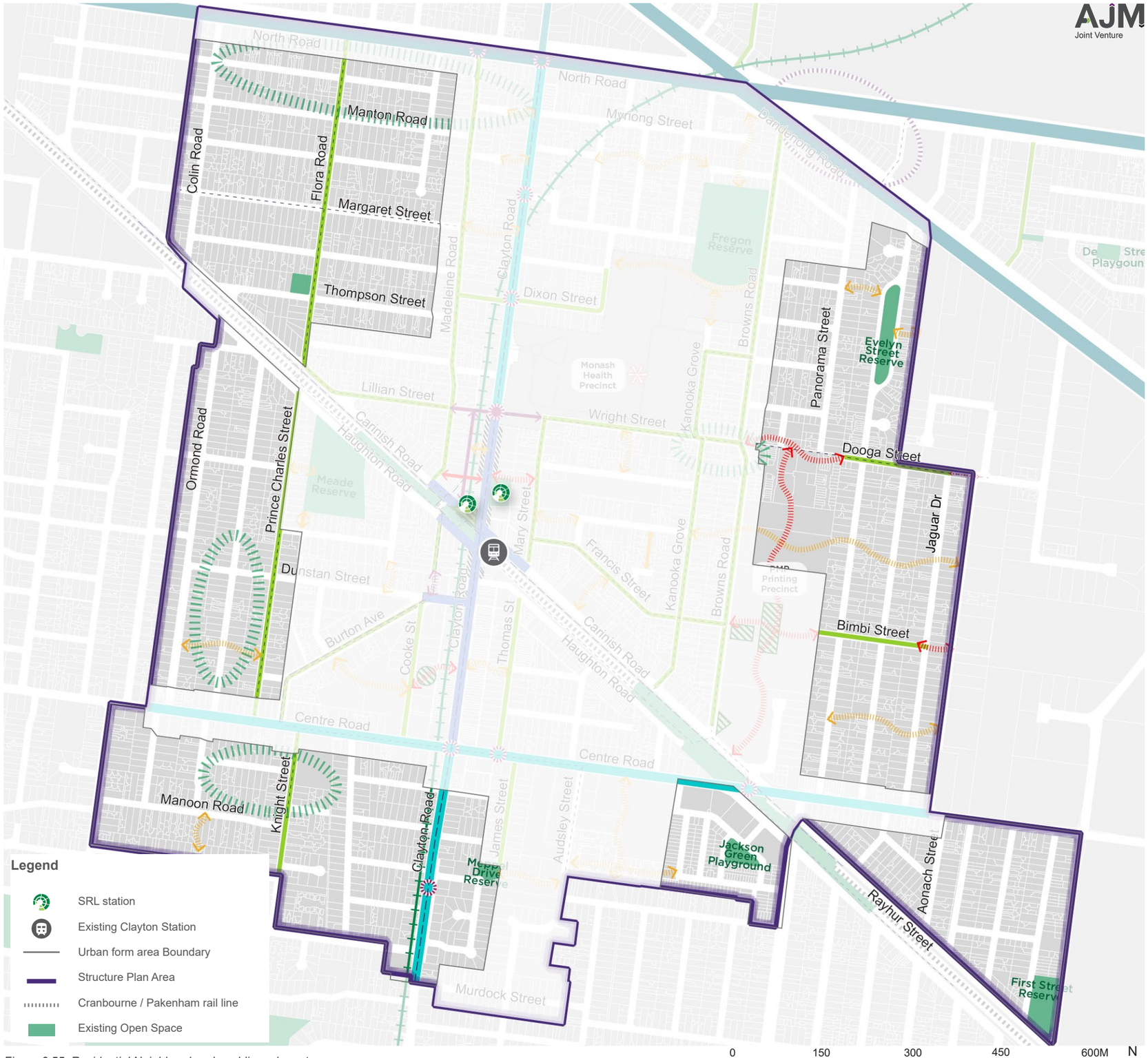


Figure 6.55: Residential Neighbourhoods public realm outcomes

Typical building and public realm profile

This cross-section shows a typical Residential building with typical street to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.56: Potential section - local street

6.8 Enterprise Neighbourhood

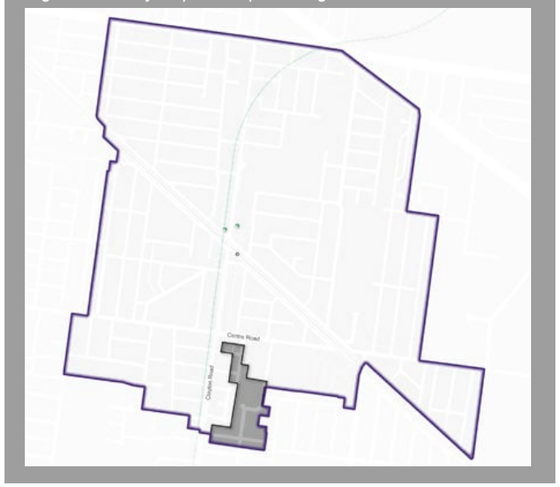
Low-rise neighbourhoods

The urban form area identified as belonging to this place type is:

- N - Clayton Industrial

Refer to Section 4.5 for a detailed description of this urban form area.

Figure 6.57: Key map - Enterprise Neighbourhood



Future role and function

Moderate intensification of built form providing space for jobs growth

This urban form area currently host predominantly light industrial uses. However, given their proximity to the SRL station at Clayton, they offer the potential for higher-order employment uses delivering a higher jobs density.

Future drivers

Enhance landscape character and amenity within the street

It is important to upgrade the appearance and amenity of the streetscape to attract higher-order businesses. Development can contribute to this through landscaped front setbacks.

Moderate level of activation to the street

It is important to upgrade the amenity of the streetscape to attract higher-order businesses. Development can contribute to this through moderately activated building frontages.

Future urban form

The Enterprise Neighbourhood is proposed to have a Green Street along James Street to provide an inviting pedestrian route to the south and contribute to urban biodiversity. A local new pedestrian link will connect Meppel Drive Reserve and James Street to Audsley Street.

The Enterprise Neighbourhood will be developed into low-rise employment use buildings which will maintain solar access to the public realm. A street setback will provide for canopy trees while ensuring activation to the public realm.

Figure 6.58: Examples of the form of development envisaged for Enterprise Neighbourhood.

Built form outcomes

The development type recommended in the Enterprise Neighbourhood is the Hybrid Employment. This development type can host a wide range of employment uses. It can take the form of a freestanding building on larger or amalgamated lots, or a boundary-to-boundary infill building on narrower lots.

Importantly, the development type positions loading and servicing activities away from the street frontage, and instead addresses the street with its most active uses and incorporates a modest landscaped setback. This will contribute to a more inviting streetscape, attracting new businesses to the area. This typology provides a 5 to 10 per cent deep soil area at the front of the lot.

Building height and density

The height of Hybrid Employment development only needs to be limited by a solar plane to protect the amenity of the opposite footpath. It is envisaged that most development will be in the order of 9 metres (2 storeys) high. However, taller buildings of 24 metres (6 storeys) should be welcomed provided they will not detract from the vibrancy of the Clayton Structure Plan Area core.

Street wall height

No street wall height provision is proposed.

Building setbacks

The following minimum setbacks are proposed:

- A minimum 4 metres street setback to provide for canopy trees, in accordance with Strategy BF14: On-site landscaping
- At least 70 per cent of the front lot width should have a minimum 4 metres and maximum 5 metres street setback to frame the public realm and support public realm activation, in accordance with Strategies BF6: Street Scale and UF7: Engaging Facades. This allows the remaining 30 per cent of the lot width to accommodate loading and parking if required
- A rear setback equal to the height above ground floor level where abutting properties where dwellings are permissible, to manage visual impacts in accordance with Strategy BF11: Building orientation.

Overshadowing

The recommended building scale and massing will achieve the recommended solar access standard to ensure good amenity in the public realm and to complement the existing character of typical streets. The solar access standard recommended will maintain sunlight to southern, eastern and western footpaths in typical streets at the September equinox. This is considered to strike an appropriate balance between solar access and providing for growth.

The building scale and massing recommended at the edges of Meppel Drive Playground will maintain solar access to 50 per cent of the open space for a minimum of 3 hours at mid-winter.

The building scale and massing will also limit additional shadow to private open space in the rear setbacks of properties in Key Movement Corridors, Urban Neighbourhoods and Residential Neighbourhoods.

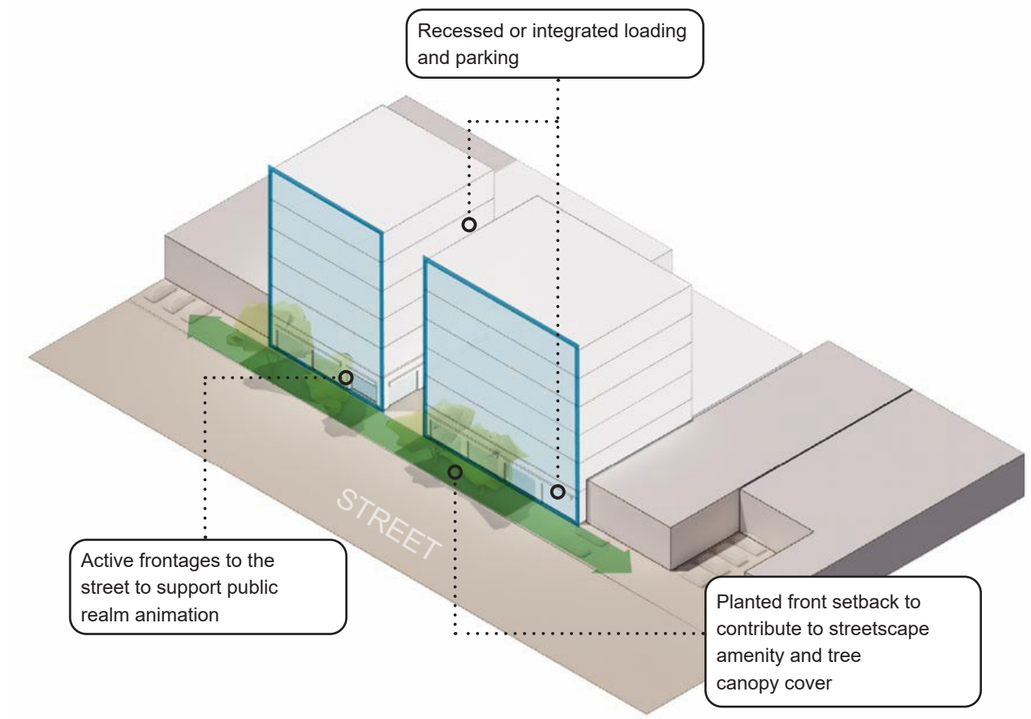
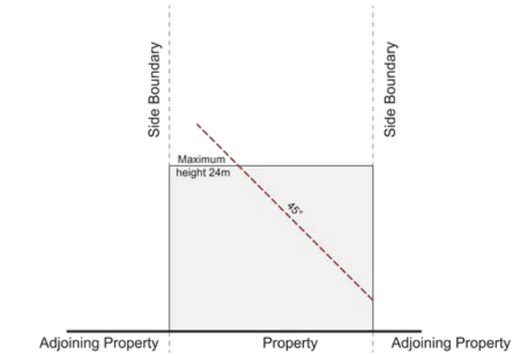


Figure 6.59: The diagram above shows the built form outcomes for the Hybrid Employment typology.



Adjacent to property where dwellings are permissible set back 1 metres per metre of height above Ground Floor

Figure 6.60: Section - Front and rear setback

Additional guidelines

The following additional provisions are proposed to contribute to an appealing public realm, in accordance with Strategy BF6: Human-Scale Streets:

- Locate vehicle access at the rear or side of the lot where possible. If this is not possible, minimise the crossover width
- Position office and / or showroom uses at the front of the building
- Provide a dedicated and legible pedestrian access direct from the street
- Locate car parking, loading areas, truck queuing and parking, and outdoor storage areas within, to the side or to the rear of the building
- Avoid front fences. Where this is not possible, ensure they are of good design quality, visually permeable, and softened by landscaping.

Summary of built form outcomes

The built form outcomes for the Hybrid Employment development type are summarised below.

Building height and density		
Maximum height	24 metres (6 storeys)	
Maximum height - sensitive areas	12 metres (3 storeys)	
Street Wall		
Activation	Moderate	
Building setbacks		
Street - minimum	4 metres	
Upper Level Side and Rear	1 metres for every metre above ground floor where abutting a property where dwellings are permissible	
Place type of neighbouring property	**Number of hours between 9am and 3pm at the September equinox during additional shadow is to be avoided**	**Minimum area of open space to which additional shadow is to be avoided**
Key Movement Corridor, Urban Neighbourhood	3 hours	40 square metres or 70 per cent of any open space in a rear setback, whichever is the lesser
Residential Neighbourhood	4 hours	40 square metres or 70 per cent of any open space in a rear setback, whichever is the lesser
Outside the Structure Plan Area	5 hours	40 square metres or 75 per cent of secluded private open space, whichever is the lesser

Typical building and public realm profile

This cross-section shows an enterprise neighbourhood building with a typical street to provide an illustration of the future built form and public realm outcomes for this area.

Figure 6.61: Potential section - local street

Public realm outcomes

The Public Realm Framework identifies the future aspiration for the public realm in the Enterprise Neighbourhood. Realising this aspiration relies on urban development interventions and public realm projects that vary in scale and importance as outlined below.

Development

Development features creating accessible and permeable Residential Neighbourhoods, as part of Design Direction 2: Promote active transport access.

- Local key link (new) – flexible
- Pedestrian crossings (new or upgraded)

Public realm enhancements

Streets to be considered for enhancements to deliver Design Direction 1: Ensure streets are inviting places that support community life.

- Green Streets

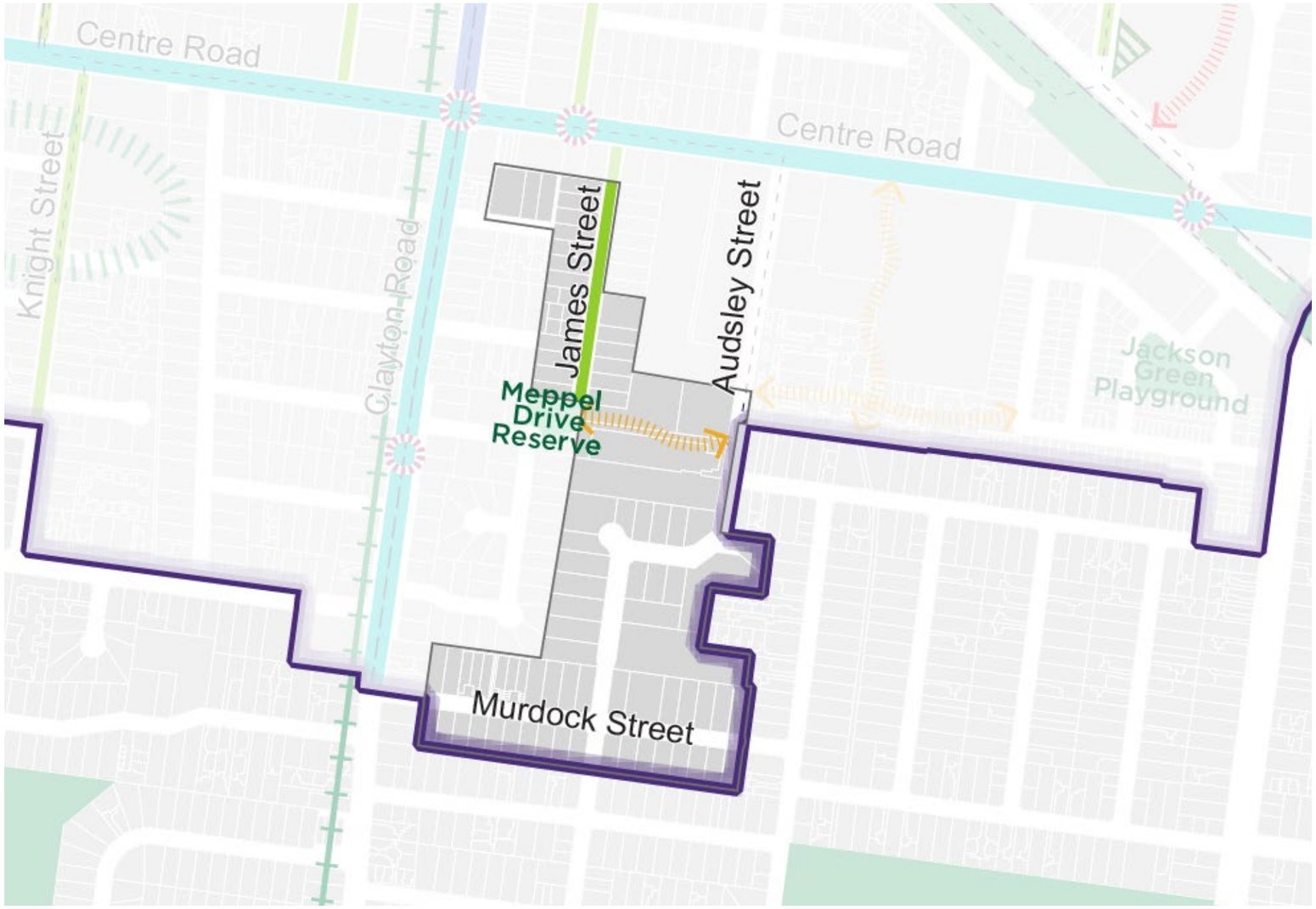


Figure 6.62: Enterprise neighbourhood public realm outcomes

Legend

- SRL station
- Existing Clayton Station
- Urban form area Boundary
- Structure Plan Area
- Cranbourne / Pakenham rail line
- Existing Open Space

1:45,000 0 100 200 300M N

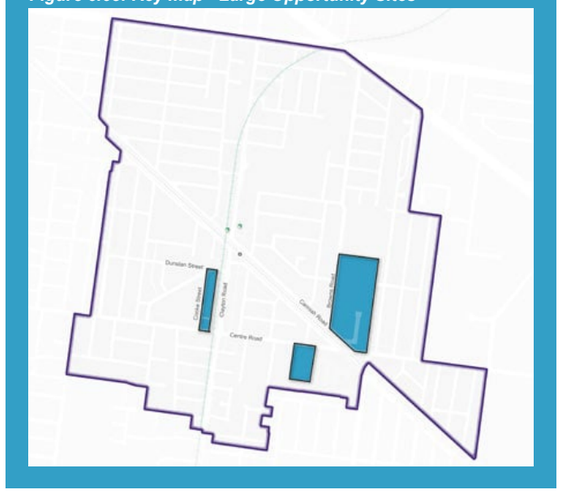
6.9 Strategic Sites

Strategic sites are those that have increased capacity for intensification and strong potential to deliver SRLA policy objectives and / or public benefit outcomes

The Strategic Sites in Clayton:

- Station development area

Figure 6.63: Key map - Large Opportunity Sites



What is a Strategic Site?

Strategic sites have increased capacity for intensification and strong potential to deliver SRLA policy objectives and / or public benefit outcomes.

A strategic site should meet at least two of the below criteria:

- Complexity of issues to resolve including land use, built form, movement that require a bespoke planning control or process to achieve desired outcomes
- Opportunity for strategic public benefit (including significant contribution towards housing or employment growth) and / or support Victorian Government policy outcomes, that would be lost if the site was not clearly identified as strategic
- Capacity and scale – ability for significant investment or benefit to be unlocked within the lifespan of the Structure Plan (for example by 2041).

Strategic Sites that meet the criteria and require the application of bespoke planning controls to provide direction on their future development and are as follows:

- Station development area

Station Development Areas

These are sites where future development is proposed on land surplus to SRL East operations in the core of the Structure Plan area. These sites will include adjacent or over SRL stations and station buildings that that leverage the high level of accessibility and services available by directing intensified built form closest to the SRL station.

These sites are shown on the future urban form Framework plan in Section 4.

6.10 Urban development typology testing

Calculating floor area ratio (FAR)

An indicative Floor Area Ratio (FAR) was calculated for each urban development type based on 3D modeling on typical lot sizes within the relevant urban form area.

The FAR was determined by calculating the total Gross Built Area (GBA) above ground divided by the lot area.

The envelope includes above ground:

- Circulation areas
- Communal areas
- External walls
- Covered balconies
- Car parking.

The envelope does not include:

- Basements
- Any uncovered communal outdoor areas.

This is consistent with the approach taken in the City of Melbourne.

As this report is focused on urban design outcomes, it seeks to understand the overall building volume that may be possible with each development type, and makes no assumptions about the degree to which this volume may be occupied by car parking.

Any calculation of useable residential or commercial floor areas would need to make appropriate adjustments to allow for car parking.

Architectural articulation efficiency

A likely building volume was modeled within the maximum permissible envelope on each site based on the proposed maximum height and minimum setbacks, and the floor-to-floor assumptions. Thereafter, 10 per cent of that FAR was deducted to allow for further architectural design flexibility and massing articulation, such as reducing the number of upper-level setbacks or adaption to specific site conditions.

Floor height assumptions

The development types were defined according to current best-practice and compatibility with Clause 58 as a minimum standard.

Building floor-to-floor height	
Residential levels	3.2 metres
Residential ground floor (raised floor or high ceilings for adaptability)	4 metres
Commercial ground floor	4.5 metres
Commercial upper floor	3.8 metres (4 metres in purely commercial buildings)

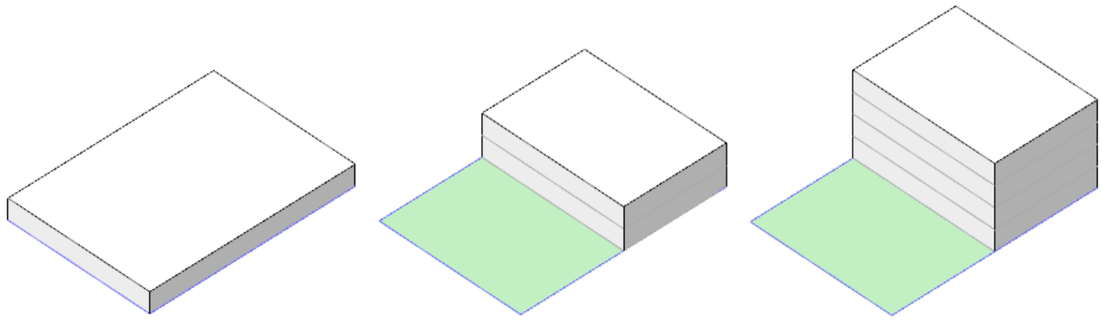
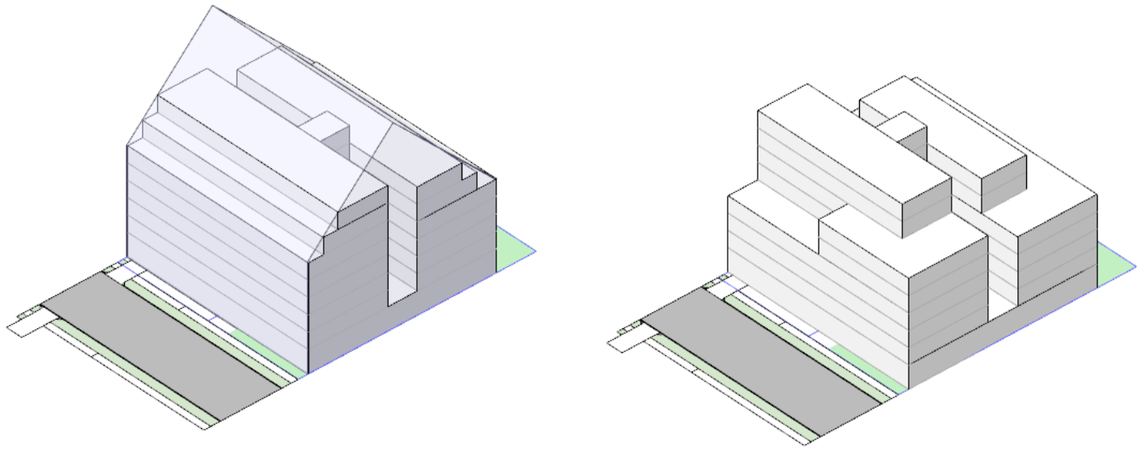


Figure 6.64: Floor area ratio (FAR) principle



Permissible building envelope

Architectural articulation reduces yield by 10 per cent

Figure 6.65: Architectural articulation principle

6.11 Place type interfaces

This section illustrates the built form interfaces between different place types through a series of sectional drawings. The plan on this page indicates the location of each section.

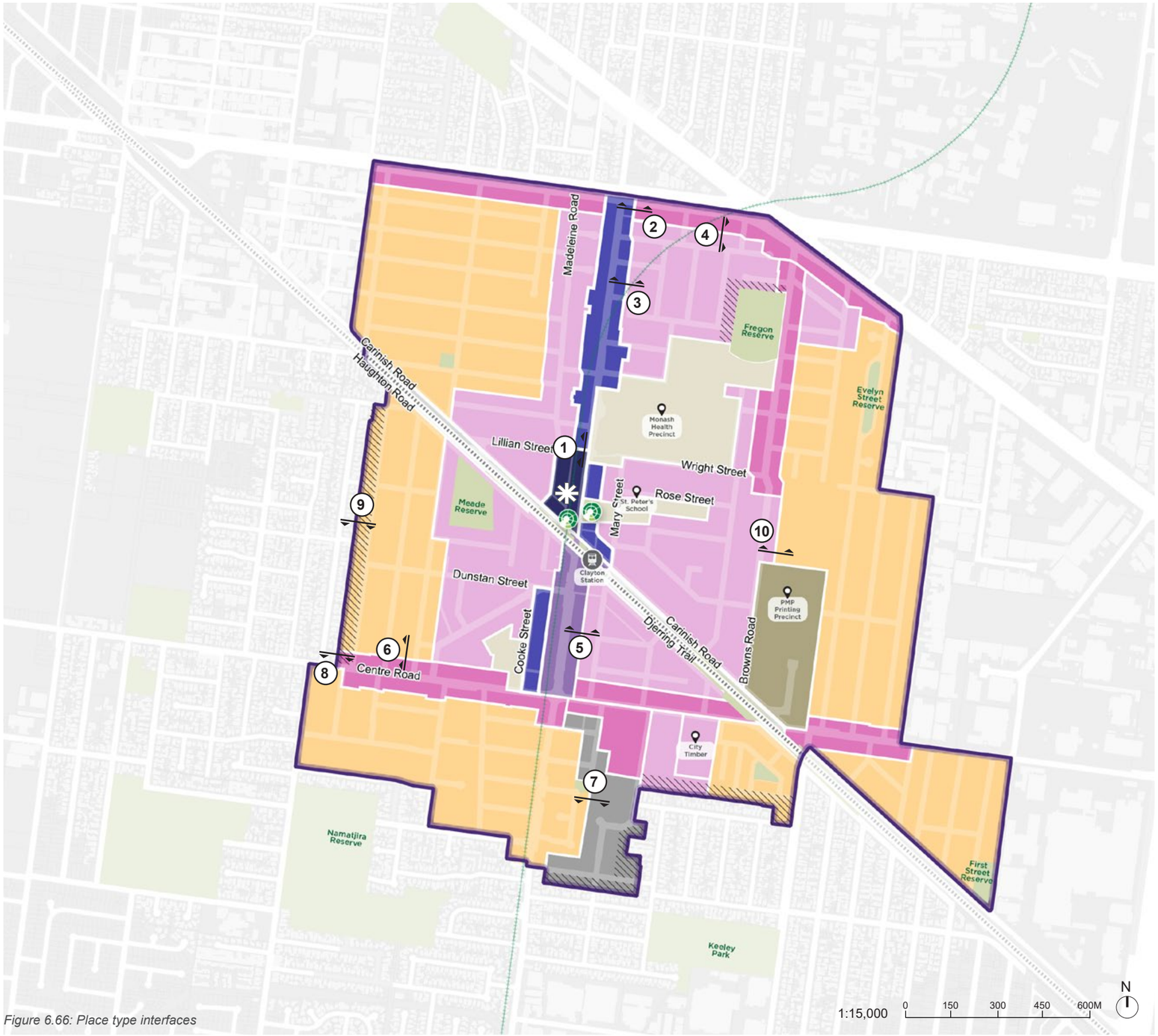


Figure 6.66: Place type interfaces

Legend

- SRL station
- Existing Clayton Station
- Structure Plan Area
- Strategic site - Station development area
- Civic Areas - State or local government or institutional land not envisaged for substantial change.
- Sensitive Areas
- Recently Approved Development Plan

Place types

- Central Core
- Central Flanks
- Main Streets
- Key Movement Corridors
- Urban Neighbourhoods
- Residential Neighbourhoods
- Enterprise Neighbourhood

1 Central Core to Central Flanks

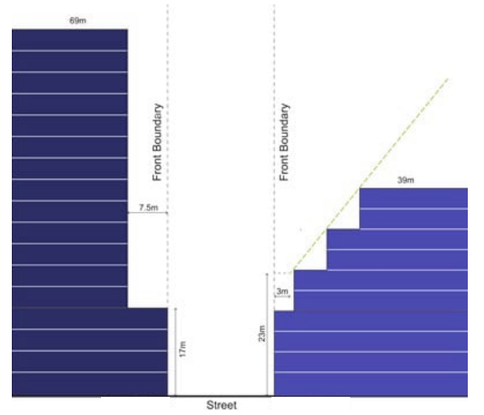


Figure 6.67: Interface section 1. Typical interface section indicative only.

2 Central Flanks to Key Movement Corridor

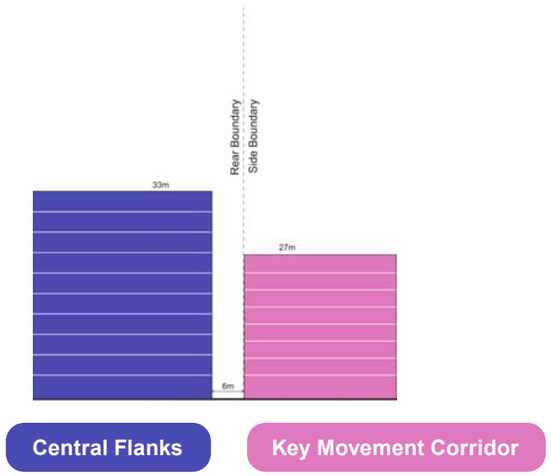


Figure 6.68: Interface section 2. Typical interface section indicative only.

Legend

Envelope controls

- On north side of east / west street set back additional 0.8 metres per metre of height above 23 metres
- Adjacent Key Movement, Urban Neighbourhood and Residential Neighbourhoods set back additional 0.6 metres per metre per height above 17 metres
- Set back additional 0.7 metres per metre of height above 11 metres

3 Central Flanks to Urban Neighbourhoods

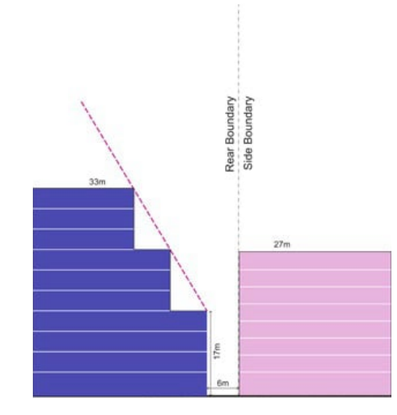


Figure 6.69: Interface section 3. Typical interface section indicative only.

4 Key Movement Corridor to Urban Neighbourhoods

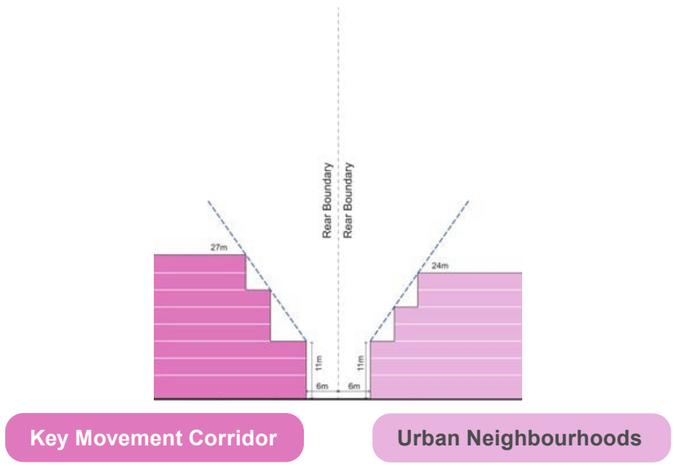


Figure 6.70: Interface section 4. Typical interface section indicative only.

5 Main street to Urban Neighbourhood

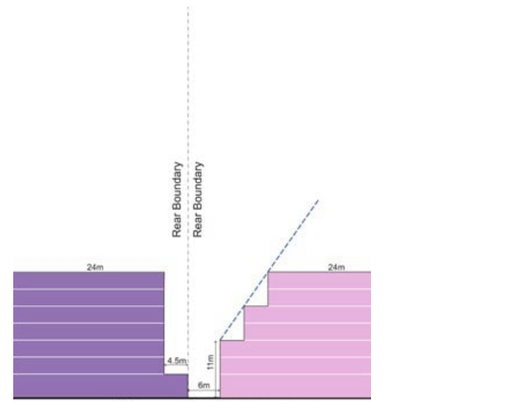


Figure 6.71: Interface section 5. Typical interface section indicative only.

6 Key Movement Corridors to Residential Neighbourhood

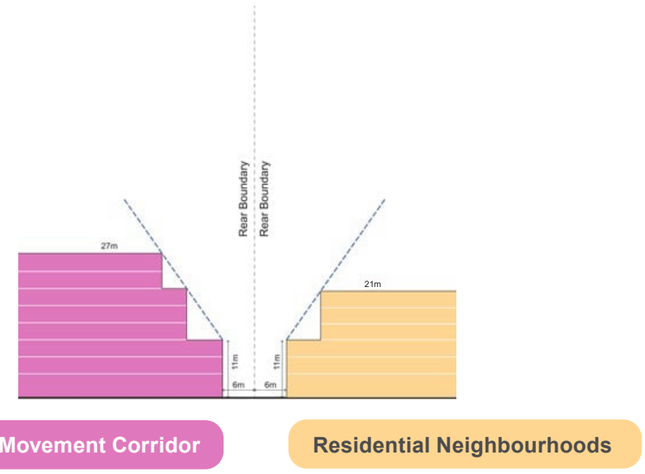


Figure 6.72: Interface section 6. Typical interface section indicative only.

Legend

Envelope controls

Set back additional 0.7 metres per metre of height above 11 metres

Adjacent to property where dwellings are permissible set back 1 metres per metre of height above ground floor

7 Enterprise Neighbourhood to Residential Neighbourhoods

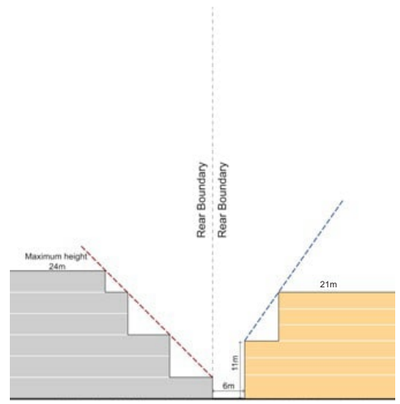


Figure 6.73: Interface section 7. Typical interface section indicative only.

8 Key Movement Corridor to Residential Neighbourhoods outside Structure Plan Area Boundary

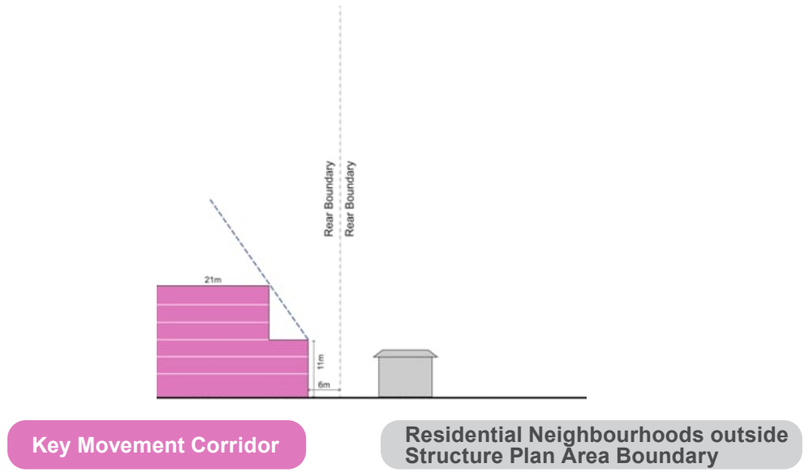


Figure 6.74: Interface section 8. Typical interface section indicative only.

9 **Residential Neighbourhoods to Residential Neighbourhoods outside Structure Plan Area Boundary**

Figure 6.75: Interface section 9. Typical interface section indicative only.

10 **Urban Neighbourhoods to Residential Neighbourhoods**

Legend

Envelope controls

Set back additional 0.7 metres per metre of height above 11 metres

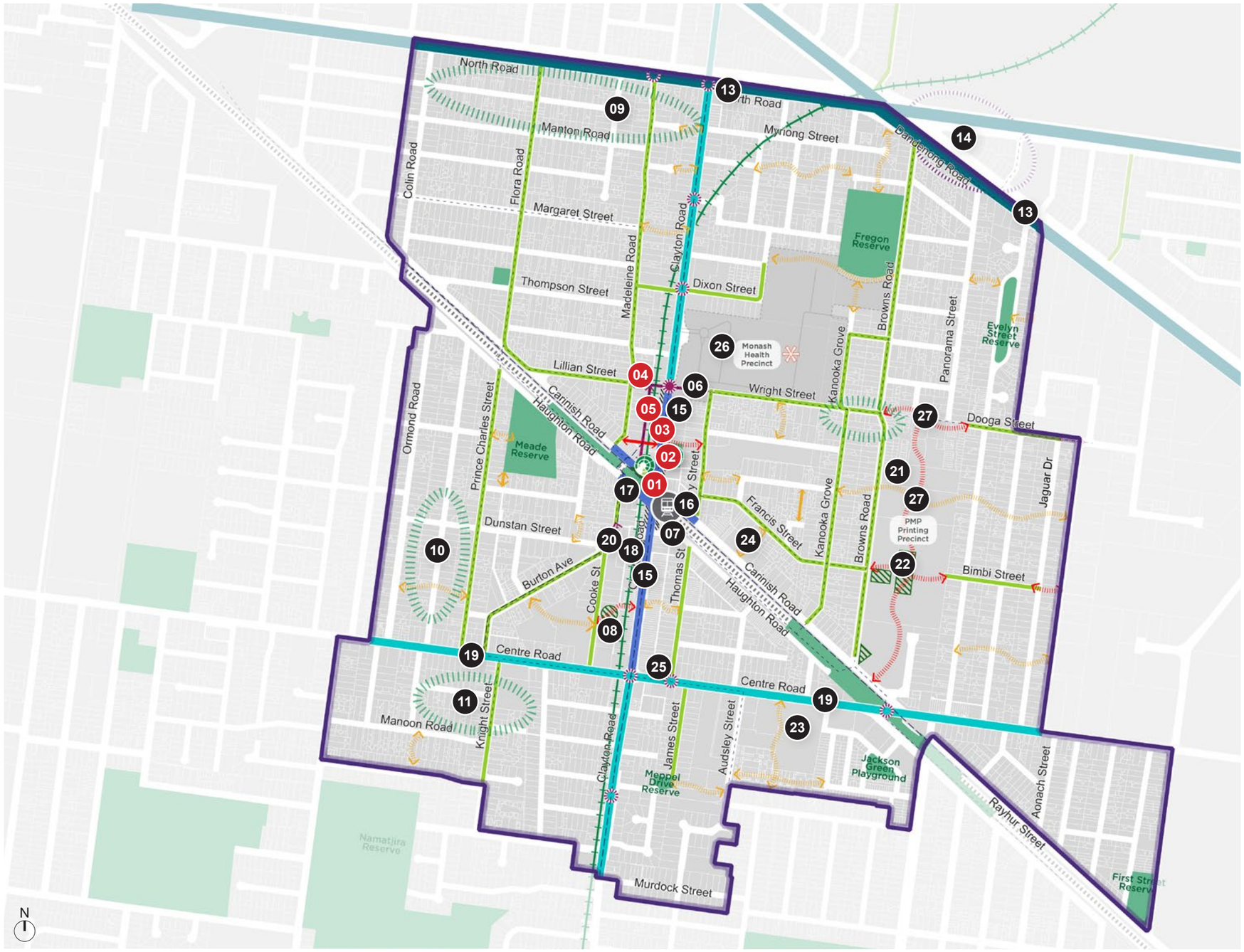
Figure 6.76: Interface section 10. Typical interface section indicative only.

7 Recommendations Summary

AJM
Joint Venture

This report recommends a range of urban design initiatives to be incorporated within the Clayton Structure Plan. These initiatives will deliver a permeable and inviting public realm that promotes walking and street life, and a series of new urban character areas that will deliver the level of growth and diversity appropriate for this highly accessible and jobs-rich location.

The urban design initiatives are summarised below.



00 SRL Rail Scope

00 Structure Planning Scope Initiative / Recommendation

SRL station

Structure Plan Area

Boulevard

Avenue

Activity Street

Green Street

Green Street - New

Work with land manager / owner to improve links and access through site

Critical new pedestrian link - Fixed

Important new pedestrian link - Flexible

Local new pedestrian link - Fixed

Local new pedestrian link - Flexible

Figure 7.1: Implementation Plan (with public realm outcomes diagram base)

Ref.	Urban Design Initiatives / Recommendations
01.	**New public space at SRL station** Deliver new open space as part of the approved SRL station development.
02.	**Enhance the Remembrance Gardens** Deliver an enhanced Remembrance Gardens with upgraded amenities and through-block connections as part of the approved SRL station development.
03.	**Clayton Road upgrades as part of SRL rail project** Deliver upgrades to Clayton Road (to the portion around the SRL station) as an enhanced street for activity with improved pedestrian and cycling as part of the approved SRL station development.
04.	**New east-west pedestrian links at SRL station linking to Clayton Road** Deliver new east-west pedestrian links as part of the SRL station development including a new east-west link (Critical Link) that connects Lillian St to Wright St
05.	**New north-south pedestrian link at SRL station** Deliver new north-south through block pedestrian link as part of the SRL station development. between the new extended Lillian St east-west pedestrian link and Carinish Rd.
06.	**New Critical Link for pedestrian between Wright Street and Clayton Road** Deliver new east-west pedestrian link (Critical Link) to connect Lillian St with Clayton Rd.
07.	**Clayton Railway Station new permanent community open spaces** Confirm as permanent the two new temporary community open space (delivered as part of the SRL station development) near Clayton Railway Station. [TBC]
08.	**Clayton Aquatic Centre public space improvements** Plan for public realm improvements including improved pedestrian legibility and connections, and a new open space around Cooke St or Burton Ave as a focal point north of Clayton Aquatic Centre and to increase open space provision in the core.
09.	**New open space(s) to 'close the gap' to north-west** Facilitate provision of a new high-quality open spaces around Flora Rd to address gaps in 400 metres open space walkable access.
10.	**New open space(s) to 'close the gap' to west** Facilitate provision of a new high-quality open space around Eva St near Centre Rd to address gaps in 400 metres open space walkable access.
11.	**New open space(s) to 'close the gap' to southwest** Facilitate provision of a new high-quality open space around Springfield Avenue and Manoon Road to address gaps in 400m open space walkable access.
12.	**New open space(s) to 'close the gap' to east** Facilitate provision of a new high-quality open space around Wright Street / Kanooka Grove to address gaps in 400m open space walkable access.
13.	**Wellington Road and Dandenong Road upgrades** Plan for Wellington Road and Dandenong Road upgrades to reinforces their roles as a public transport corridor, and to improve landscape and pedestrian outcomes.
14.	**Dandenong Road / Wellington Road pedestrian and cycling crossing** Facilitate new / improved pedestrian crossing (major active transport link) of Dandenong Rd / Wellington Rd at Panorama / Cobain Streets to improve north-south connectivity.

Ref.	Urban Design Initiatives / Recommendations
15.	**Clayton Road Activity Street upgrades** Investigate upgrades to Clayton Road between Centre Rd and Wright St to create a high-quality street that supports public life and activity and provides an attractive and comfortable pedestrian experience with multiple crossing points, more greenery and improved safety during night.
16.	**Carinish Road Activity Street upgrades** Investigate upgrades Carinish Road between Madeleine Rd to Mary St to create a high-quality street that supports public life and activity and provides an attractive and comfortable pedestrian experience with multiple crossing points, more greenery and improved safety during night.
17.	**Haughton Road Activity Street upgrades** Investigate upgrades Haughton Road between Nicholson Ct to Clayton Rd to create a high-quality street that supports public life and activity and provides an attractive and comfortable pedestrian experience with multiple crossing points, more greenery and improved safety during night.
18.	**Dunstan Road Activity Street upgrades** Investigate upgrades Dunstan Road between Cooke St to Clayton Rd to create a high-quality street that supports public life and activity and provides an attractive and comfortable pedestrian experience with multiple crossing points, more greenery and improved safety during night.
19.	**Centre Road upgrades** Plan for upgrades to Centre Road that accommodates active and / or public transport with nodes of pedestrian amenity to support the functionality of the street
20.	**New pedestrian link between Nicholson Court and Dunstan Street** Enable a new high-quality pedestrian connection (critical key link) by extending Nicholson Ct to Dunstan St to improve access between Cook St and Burton Ave to the south, and the Djerring Trail and the open space below the elevated rail to the north.
21.	**Browns Road South Car Park** Investigate public realm improvements at site at 27 Browns Rd including new through site pedestrian links.
22.	**PMP Printing Precinct** Enable public realm improvements at site at 37-49 Browns Rd including new public space and through site pedestrian links.
23.	**1400 Centre Road, Clayton South** Plan for public realm improvements at site at 1400 Centre Rd including new public space, local links through sit and improved interface with Centre Rd.
24.	**Clayton RSL** Investigate improved north-south pedestrian links (Important Link) through the site at 171 Carinish Rd to connect residential areas to the Station.
25.	**Strategic site: Centre Road Car Park** Investigate public realm improvements at the Council site at 1399 - 1401 Centre Rd, including an improved interface with Centre Rd.
26.	**Monash Medical Centre and Children's Hospital** Investigate public realm improvements at the site at 224-250 Clayton Rd including legible and inviting pedestrian links and positive interfaces with the wider area.

Ref.	Urban Design Initiatives / Recommendations
	Green Streets improvements Enable streetscape improvements to existing local streets that support pedestrian connectivity and access to recreation facilities, enhanced environmental / biodiversity outcomes, and / or the potential to accommodate cycle and bus routes as appropriate at: • Bimbi St • Browns Rd • Burton Ave • Cook St • Dixon St, Fregon Rd • Dooga St • Flora Rd • Francis St • James St • Kanooka Grove • Knight St • Lantana St (west of Browns Rd) • Lillian St • Madeleine Rd • Mary St • Nicholson Ct • Prince Charles St • Thomas St • Wright St (west of Browns Rd)
27.	**New important pedestrian links** Facilitate important new pedestrian links (important key links) to reduce gaps in walking access to key destinations.
	New local pedestrian links Investigate new local pedestrian links (local key links) within development sites to improve permeability and local walking access.
	Built form planning provisions Provide built form provisions to achieve future character, public realm amenity and off-site amenity outcomes.
	Public realm amenity planning provisions Provide design provisions to achieve public realm amenity outcomes.