

Casey Central Town Centre

Precinct Structure Plan



May 2016

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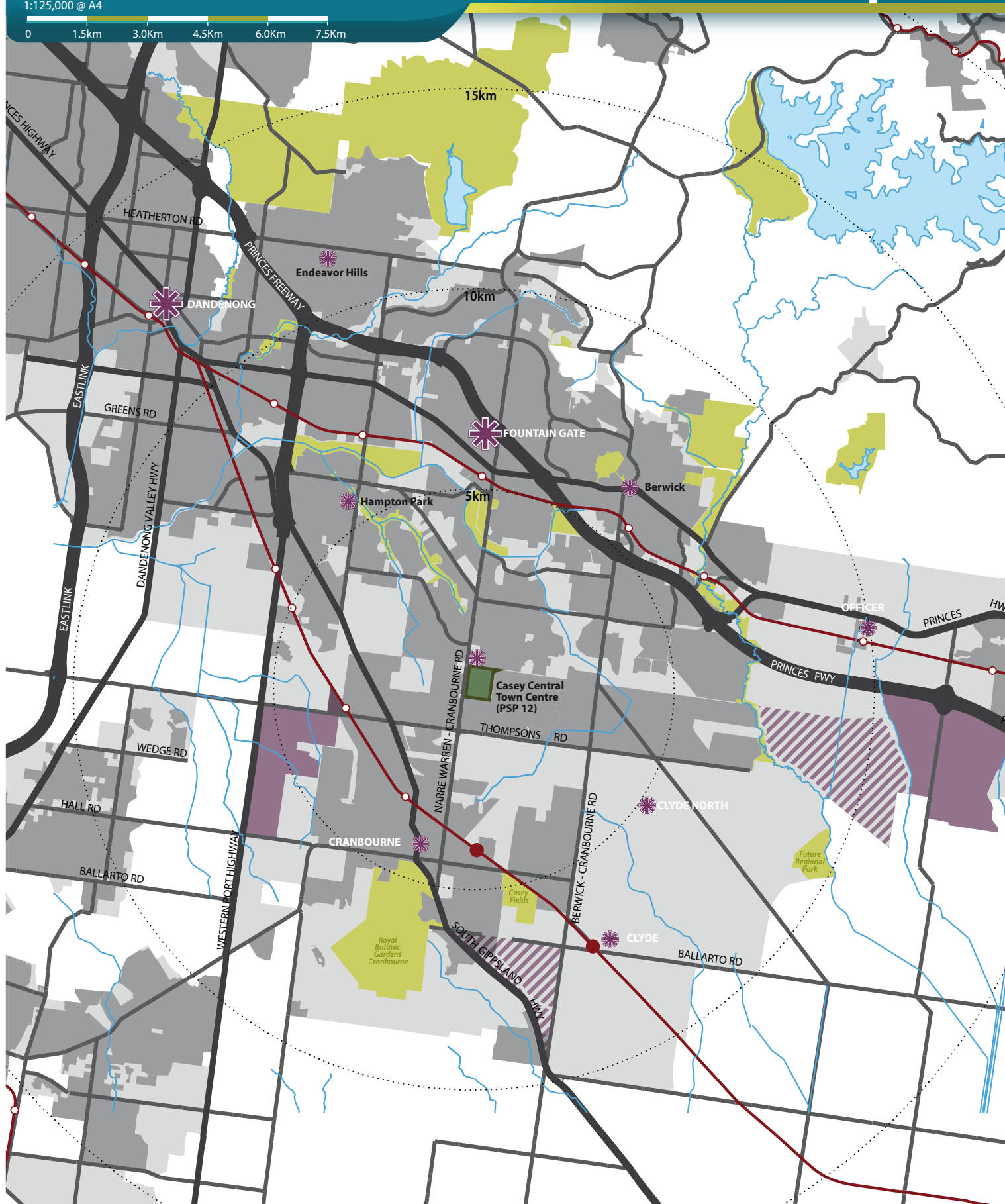
Note: Any reference to the Metropolitan Planning Authority (MPA) in this document is a reference to the Growth Areas Authority (GAA) as defined under the Planning & Environment Act 1987.

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- | | | | | | |
|--|-------------------------|--|------------------------------|--|-----------------------|
| | precinct area | | metropolitan activity centre | | rail line & station |
| | future urban area | | activity centre | | future station |
| | employment areas | | public parkland | | freeways |
| | future employment areas | | waterways | | arterial road network |

1.0 INTRODUCTION

The Casey Central Town Centre Precinct Structure Plan (PSP) has been prepared by the Metropolitan Planning Authority (MPA) with the assistance of the City of Casey, Government agencies, service authorities and major stakeholders.

The PSP is a long-term plan for urban development. It describes how the land is expected to be developed, and how and where services are planned to support development.

The PSP:

- Sets out plans to guide the delivery of quality urban environments in accordance with Victorian Government guidelines;
- Enables the transition of non-urban land to urban land;
- Sets out the vision for how the land should be developed and the outcomes to be achieved;
- Outlines the projects required to ensure the future workers, residents and visitors within the area can be provided with timely access to services and transport necessary to support a quality and affordable lifestyle;
- Sets out objectives, requirements and guidelines for land use development and subdivision;
- Provides Government agencies, the Council, developers, investors and local communities with certainty about future development; and
- Addresses the requirements of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act 1999) in accordance with an endorsed program under Part 10 of the EPBC Act.

The PSP is informed by:

- The State Planning Policy Framework set out in the Casey Planning Scheme;
- The Growth Corridor Plans: Managing Melbourne's Growth (Growth Areas Authority, June 2012);
- The Local Planning Policy Framework of the Casey Planning Scheme;
- The Precinct Structure Planning Guidelines (Growth Areas Authority, 2009); and
- The Biodiversity Conservation Strategy and Sub Regional Species Strategies for Melbourne's Growth Areas (Department of Environment and Primary Industries, June 2013)*.

Operation of Commonwealth Environmental Laws

* On 8 July 2010 an approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was issued by the Commonwealth Minister for Environment Protection, Heritage and the Arts. The approval applies to all actions associated with urban development within the 28 precincts identified in page 17 (Map 7) in Delivering Melbourne's Newest Sustainable Communities Program Report (Victorian Government, December 2009). The Commonwealth approval has effect until 31 December 2060. The approval is subject to conditions specified at Annexure 2 of the approval. The Commonwealth Minister has confirmed that for specified precincts, including this precinct, compliance with the Biodiversity Conservation Strategy for Melbourne's Growth Corridors (Department of Environment and Primary Industries, 2013) will satisfy the requirements of the conditions specified at Annexure 2.

Provided the conditions of the EPBC Act approval are satisfied individual assessment and approval under the EPBC Act is not required.

The following planning documents have informed the PSP and the future planning and development of the precinct:

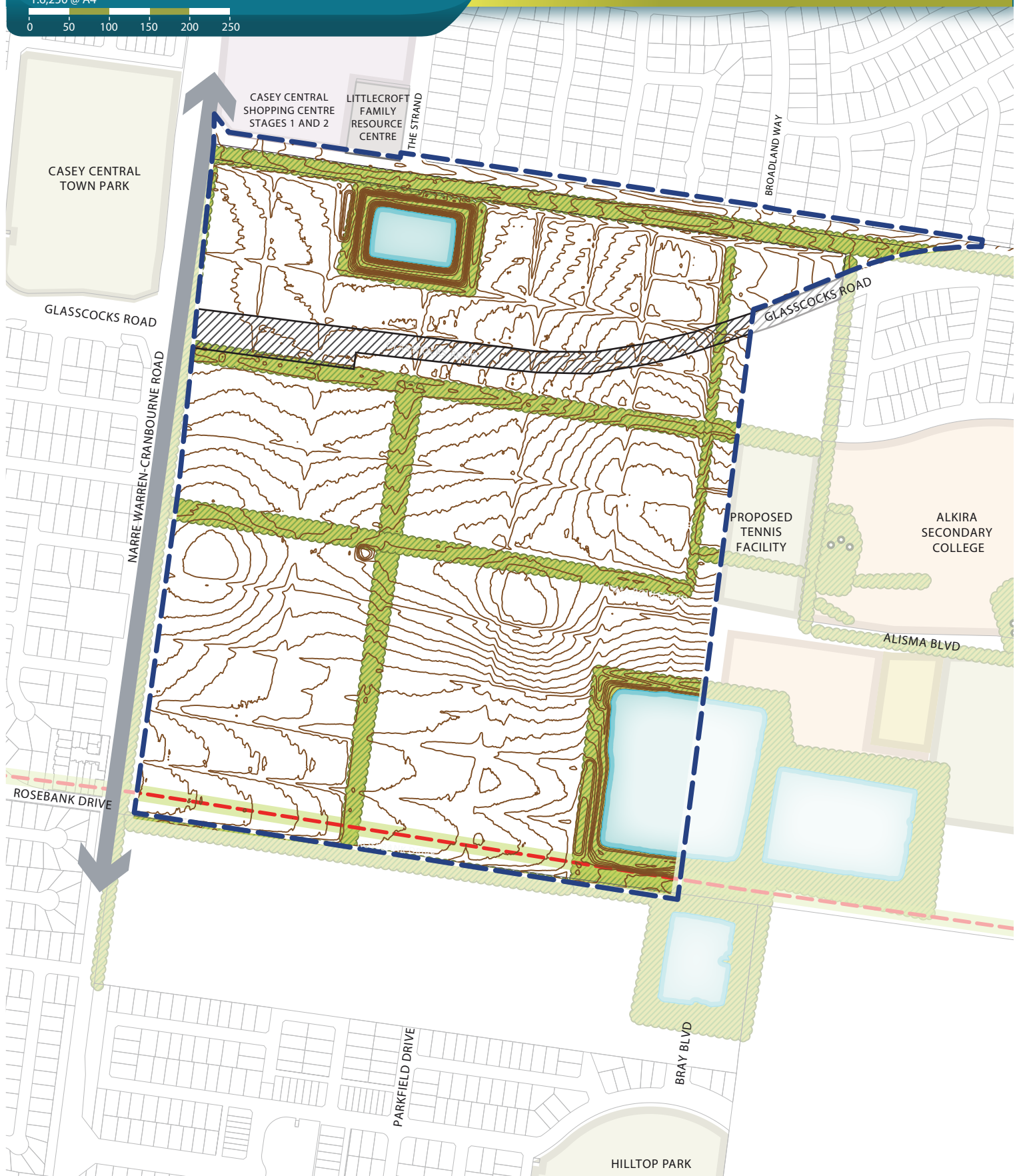
- Cranbourne North Stage 1 Development Plan (City of Casey, amended August 2014) and Cranbourne North Stage 2 Precinct Structure Plan (Growth Areas Authority, June 2011).
- Casey Central Town Centre Development Plan (Casey Central Precinct) (City of Casey, amended February 2014)
- The Cranbourne North Precinct Structure Plan Development Contributions Plan (Growth Areas Authority, June 2011) (DCP) requires development proponents to make a contribution towards infrastructure required to support the development of the precinct.
- The Casey Central Town Centre Precinct Structure Plan Discussion Paper (Metropolitan Planning Authority, September 2014) (Background Report).

Plan 2 - Precinct Features

Casey Central Town Centre Precinct Structure Plan
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- | | |
|----------------------------------|--|
| precinct area | potential government school (outside PSP boundary) |
| contours (0.5m) | community facility (outside PSP boundary) |
| existing vegetation | gas easement and gas pipeline |
| existing dams | arterial road |
| PAO (public acquisition overlay) | |

1.1 How to read this document

This structure plan guides land use and development where a planning permit is required under the Urban Growth Zone or any other provision of the Casey Planning Scheme that references this structure plan.

A planning application and a planning permit must implement the outcomes of the precinct structure plan. The outcomes are expressed as the vision and objectives.

Each element of the precinct structure plan contains requirements and guidelines as relevant.

Requirements must be adhered to in developing the land. Where they are not demonstrated in a permit application, requirements will usually be included as a condition on a planning permit whether or not they take the same wording as in this structure plan. A requirement may reference a plan, table or figure in the structure plan.

Guidelines express how discretion will be exercised by the Responsible Authority in certain matters that require a planning permit. If the Responsible Authority is satisfied that an application for an alternative to a guideline implements the outcomes the Responsible Authority may consider the alternative. A guideline may include or reference a plan, table or figure in the structure plan.

Meeting these requirements and guidelines will implement the outcomes of the PSP.

Development must also comply with other Acts and approvals where relevant including the *Environment Protection and Biodiversity Conservation Act 1999* in the case of biodiversity and the *Aboriginal Heritage Act 2006* in the case of cultural heritage, amongst others.

Not every aspect of the land's use, development and/or subdivision is addressed in this structure plan. The Responsible Authority may manage development and issue permits as relevant under its general discretion.

1.2 Land to which this PSP applies

Casey Central Town Centre (PSP 12) occupies an area of approximately 60 hectares within the City of Casey. The precinct is located to the east of Narre Warren-Cranbourne Road, south of the former Glasscocks Road alignment, and north of the future Rosebank Drive extension in Cranbourne North. The existing municipal tree reserve located along the former Glasscocks Road alignment is included within the precinct boundary.

Urban residential communities exist to the north-east, north and west with land awaiting urban development to the south and the south-east. The land has good access to significant urban infrastructure such as Casey Central Town Park, the Casey Central Shopping Centre, Alkira Secondary College, the Littlecroft Family Learning Centre, Narre Warren - Cranbourne Road and Thompsons Road and the Cranbourne and Pakenham rail lines.

Plan 2 identifies the existing features of the precinct including a gentle undulating topography with two high points at the centre of the PSP area, a number of windrows and two turkey nest dams. A gas easement in favour of APA GasNet also runs east-west through the PSP area adjacent to the southern boundary.

The planned extension of Glasscocks Road to Narre Warren-Cranbourne Road traverses the northern part of the precinct, while numerous existing and planned local roads end at the northern and eastern precinct boundaries.

1.3 Development Contributions Plan

Development proponents within the Casey Central Town Centre Precinct will be bound by the Cranbourne North Precinct Structure Plan Development Contributions Plan (June 2011) (the DCP). The DCP sets out requirements for infrastructure funding across the wider Cranbourne North area.

The DCP was incorporated in the Casey Planning Scheme in June 2011.

1.4 Background Information

Detailed background information on the precinct is available within the Casey Central Town Centre PSP 12 Discussion Paper. This report has informed the preparation of the PSP and includes further information on the local and metropolitan context, history, biodiversity, landform, topography, open space and community facilities.

Plan 3 - Future Urban Structure

Casey Central Town Centre Precinct Structure Plan
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- | | | |
|--------------------------------------|-------------------------------|-------------------------------------|
| precinct boundary | urban plaza | secondary arterial road |
| lifestyle retail | civic facilities (see plan 5) | boulevard connector |
| transitional retail | local park | The Strand high street |
| mixed use | linear park | key local access street |
| corporate centre (office/commercial) | retarding basin | accessway / laneway |
| high density residential | gas easement / linear park | pedestrian connection |
| medium density residential | existing urban | landscape buffer - shared path link |

2.0 OUTCOMES

2.1 Vision

Casey Central Town Centre will be a compact urban activity centre, focused on intimate pedestrian spaces that will service the existing and future community. The activity centre will deliver a commercial core of office, retail, entertainment, civic and residential uses that will provide a broad range of services and facilities within a walkable street network.

At full development the activity centre will provide over 4,100 jobs through multi-storey office and commercial developments that will maximise exposure to Narre Warren – Cranbourne Road and Glasscocks Road.

Casey Central Town Centre will become home to approximately 4,200 residents who will reside in high quality, multi-storey, mixed use developments. The town centre will contain a Central Park and civic hub that will build on the existing infrastructure established along Alisma Boulevard connecting directly to Cranbourne North.

2.1.1 Northern Sector - land north of Glasscocks Road

The Strand will be extended south to connect to Glasscocks Road. To be lined with active land uses The Strand high street will connect the retail areas of the activity centre, from the existing Casey Central Shopping Centre via the Transitional Retail area, and through to the Lifestyle Retail area in the Southern Sector. The Strand high street will be an attractive public street on which to shop, meet, greet, dine, do business and socialise. Supported by multi-storey medium and high density homes to the east, the retail activities along The Strand high street will anchor and service the surrounding commercial and residential development.

The Transitional Retail area along Narre Warren-Cranbourne Road is expected to attract uses that require larger floor plates in the short term, evolving into a more compact, fine grain and mixed use environment in the future.

The anticipated targets within the Northern Sector are outlined below:

MEASURE	TARGET
Jobs	310 jobs (see note below)
Dwellings	280 dwellings
Population	680 residents
Floor space (retail)	13,600 square metres of net leasable area

Note: The anticipated job numbers are derived from standard floor space ratios applied to the expected net leasable area (NLA) within the precinct.

2.1.2 Southern Sector - land south of Glasscocks Road

Expected to be developed over the next 25 years this sector will complete The Strand high street and consolidate the retail offer south of Glasscocks Road. Focused on multi-storey developments this Lifestyle Retail area will support a greater range of uses such as cafes, restaurants, lifestyle, leisure, office, commercial, civic, mixed use, food and beverage, medical, entertainment and high density housing.

The Corporate Centre will maximise arterial road exposure through the development of multi-storey offices and associated mixed use along Narre Warren-Cranbourne Road. Building on a quality retail experience along The Strand high street and broader transport connections via the east-west freight route on Thompsons Road, this activity centre will form an attractive corporate offer.

A civic hub and Central Park will terminate The Strand high street extension and deliver an attractive and active public space for office, high density residential and mixed use developments to overlook.

The anticipated targets within the Southern Sector are outlined below:

TYPE	TARGET
Jobs	3,800 jobs (see note below)
Dwellings	1,570 dwellings
Population	3,500 residents
Floor space (retail)	4,500 square metres of NLA
Floor space (commercial)	70,000 square metres of NLA

Note: The anticipated job numbers are derived from standard floor space ratios applied to the expected NLA within the precinct.

2.2 Objectives

OBJECTIVES	
IMAGE AND CHARACTER	
01	Develop a high quality, street-based urban environment that is pedestrian-oriented, and supports intensive development over an extended period of time.
02	Provide a high level of amenity through street design, including boulevard tree planting, wide footpaths and appropriate built form.
03	Provide a range of housing types and lot sizes to meet the needs of a diverse population.
04	Provide a significant amount of high density housing across the centre.
05	Achieve an average density of a minimum of 62 dwellings per net developable hectare within residential land (NDHa-R).
06	Create a safe and lively precinct after hours by encouraging upper level apartments within the Lifestyle Retail area.
07	Provide an environment conducive to the integration of housing with the corporate and retail land uses.
08	Provide a well-designed interface between existing and proposed residential areas and areas of high activity (such as commercial, office and retail uses).
09	Ensure a high quality public realm and human scale built form is provided throughout the precinct.
010	Ensure built form terminates significant views along The Strand high street, Alisma Boulevard, and the Central Park.
011	Achieve a diversity of streetscape and open space outcomes to enhance local character and amenity.
012	Provide a landscape setting of continuous canopies along the streets, parks and waterways to contribute to the local character.
013	Achieve strong architectural responses on Gateway strategic sites.
014	Create a vibrant, safe and attractive activity centre anchored on The Strand high street which provides a distinct 'sense of place'.
RETAIL AND COMMERCE	
015	Deliver a minimum of 4,100 new jobs within the PSP area and increase opportunities for professional employment within the region.
016	Create a high density activity centre that services the existing local and future communities in the region.
017	Create a high quality, high amenity mixed use precinct which offers a range of office, commercial, retail, entertainment, civic, lifestyle, leisure and recreation options.
018	Ensure the activity centre is conducive to a range of commercial enterprises including small home-based businesses and large global entities.

COMMUNITY FACILITIES	
019	Provide a range of higher order community facilities designed to serve the needs of the regional community of Casey and the local community.
020	Plan for community facilities to be accessible by public transport, walking and cycling.
OPEN SPACE AND NATURAL SYSTEMS	
021	Deliver a network of public spaces (including urban plazas, local parks, linear open spaces and a major central park) that provide high quality landscape outcomes as well as connections to surrounding communities.
022	Provide a Central Park which supports a range of passive activities at the centre or 'heart' of the activity centre.
023	Create a series of linear links and pocket parks which connect the Central Park to the broader open space network and create attractive environments for all users.
024	Enhance the biodiversity of the Casey Central Town Centre through the creation of appropriate habitats within the open space network.
025	Integrate Water Sensitive Urban Design to mitigate impacts of pollutants on waterways, improve landscape character and reduce consumption of potable water.
TRANSPORT AND MOVEMENT	
026	Establish an integrated transport network which reduces the dependency on the use of private vehicles, maximises access to public transport and encourages walking and cycling within and to Casey Central Town Centre.
027	Prioritise public transport, pedestrian and cycling movements, along with amenity benefits on public streets and public spaces.
028	Provide high quality walking and cycling networks of well-connected footpaths, bike paths and off-road shared trails between key destinations within the activity centre and adjacent areas.
029	Develop a slow-speed and permeable street network.
UTILITIES AND ENERGY	
030	Deliver an integrated water management system that reduces reliance on reticulated potable water, increases the re-use of alternative water, minimises flood risk, ensures waterway health, and contributes to a liveable, sustainable and green urban environment.
031	Maximise the landscape amenity and useability of any retarding basins or waterways within the precinct.
032	Ensure development appropriately responds to and avoids detrimental impact to the existing high pressure gas pipeline.
033	Built form will incorporate key passive design principles to mitigate energy consumption and improve amenity.
034	Deliver best practice Ecologically Sustainable Design as determined by knowledge and technology available at each stage of development.
PRECINCT INFRASTRUCTURE PLAN AND STAGING	
035	Ensure that development staging is co-ordinated with the delivery of key local and state infrastructure.

Plan 4 - Land Use Budget

Casey Central Town Centre Precinct Structure Plan
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precinct boundary

lifestyle retail

transitional retail

mixed use

office/commercial

civic facilities (see plan 5)

residential

local park

linear park

landscape buffer - shared path link

gas easement / linear park

retarding basin

public acquisition overlay (PAO)

property boundary & number

2.3 Summary Land Budget

The Net Developable Area (NDA) is established by deducting the land requirements for major roads, drainage, servicing, community facilities and open space from the overall precinct area. The estimated NDA is approximately 47 hectares or 78% of the PSP area. The estimated NDA for residential purposes (NDAR) is 32Ha or 53% of the PSP area.

The precinct is expected to yield approximately 4,100 new jobs across office/commercial, retail, entertainment, leisure services, and civic sectors.

The precinct is expected to deliver over 1,850 dwellings across a mix of medium- and high-density developments, equating to a long-term average density of approximately 62 dwellings/NDAR. Based on an average household size of between 2.5 and 2.2 persons for medium-density and high-density dwellings respectively, the future population of the PSP is estimated at approximately 4,200 residents.

The Summary Land Use Budget sets out the land area for various uses in the future urban structure (see Table 1 below).

Table 1 Summary Land Use Budget

DESCRIPTION	PSP 12 Casey Central Town Centre		
	HECTARES	% OF TOTAL	% OF NDA
TOTAL PRECINCT AREA (ha)	60.40	100.0%	
TRANSPORT			
4 Lane Arterial Road / Widening / Flaring	0.45	0.75%	0.97%
6 Lane Arterial Road / Widening / Flaring	0.01	0.02%	0.02%
Existing Road Reserve PAO	2.31	3.83%	4.93%
SUB-TOTAL TRANSPORT	2.78	4.6%	5.91%
COMMUNITY FACILITIES			
Integrated Community Facility	2.00	3.31%	4.26%
Indoor Sports Facility	2.00	3.31%	4.26%
SUB-TOTAL COMMUNITY	4.00	6.6%	8.52%
ENCUMBERED LAND AVAILABLE FOR RECREATION			
Gas easement (includes 1.12 ha linear park)	1.40	2.32%	2.98%
Waterway corridor / Drainage Line / Wetland / Retarding Basin	2.22	3.68%	4.73%
SUB-TOTAL	3.62	5.99%	7.71%
UNENCUMBERED LOCAL OPEN SPACE			
Local Parks	2.90	4.8%	6.18%
Linear Park	0.16	0.3%	0.34%
SUB-TOTAL	3.06	5.1%	6.51%
SUB-TOTAL ALL UNENCUMBERED OPEN SPACE	3.06	5.1%	6.51%
TOTAL NET DEVELOPABLE AREA - (NDA) HA	46.95	77.72%	
NET DEVELOPABLE AREA - RESIDENTIAL (NDAR) HA	32.08	53.11%	
NET DEVELOPABLE AREA - EMPLOYMENT (NDAE) HA	14.87	24.61%	
NET DEVELOPABLE AREA - TOWN CENTRE CORE	7.31	12.10%	
NET DEVELOPABLE AREA - COMMERCIAL	7.56	12.52%	
NET DEVELOPABLE AREA - MIXED USE	3.96	6.56%	



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Transitional Retail

- Larger floor plates expected in short term
- 2 - 3 storeys
- Approx. 240 jobs
- Retail, commercial, entertainment, serviced accommodation expected over long term (20 years)
- Vehicular & pedestrian connections to/from Casey Central Shopping Centre
- Urban plaza

Lifestyle Retail

- High amenity pedestrian 'high street'
- Leisure, lifestyle, retail, commercial, health and wellbeing, personal services, entertainment uses, food and beverage
- Integrated with multi-storey commercial and residential developments
- Approx. 150 jobs

Medium Density Residential

- Town houses 2 - 3 storeys
- Aged Care 2 - 3 storeys
- Pocket park and open space connections to surrounding residential
- Landscape buffer to existing housing (10m linear park)
- Approx. 150 dwellings
- Approx. 90 jobs (home office)

Northern Sector

Southern Sector

Mixed Use

- Ground level active uses
- Upper level residential and / or commercial uses
- Approx. 60 jobs

Medium Density Residential

- Town houses - 2-3 storeys
- Minimum lot sizes 300m²
- Linear park
- Connections to adjacent residential
- Approx. 45 dwellings

Corporate Centre

- Multi-storey office, medical and commercial developments
- Maximise Narre Warren-Cranbourne Road exposure
- Outlook to Central Park
- Proximity to high street and public transport
- 4-6 storeys
- Approx. 3,500 jobs

High Density Residential

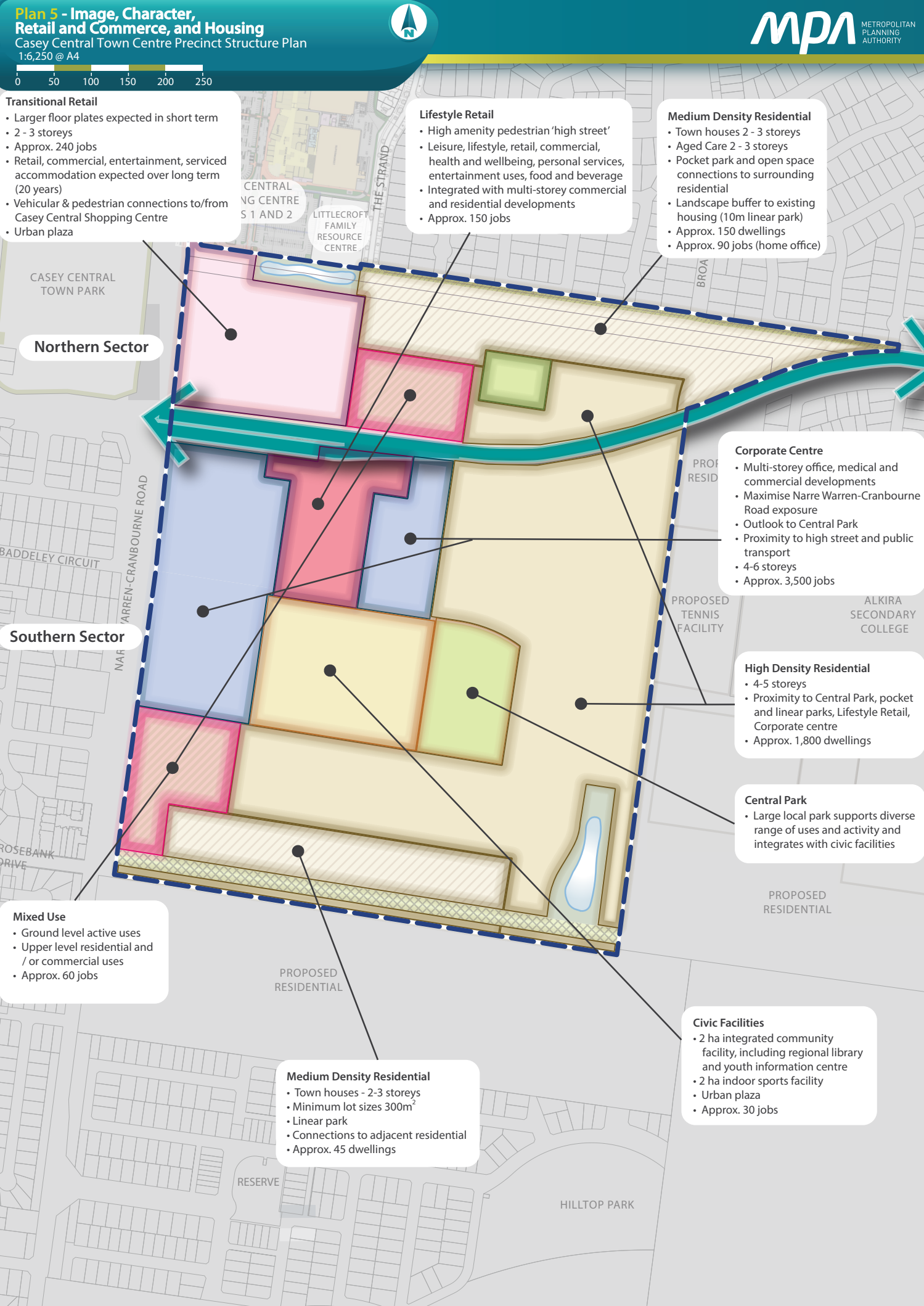
- 4-5 storeys
- Proximity to Central Park, pocket and linear parks, Lifestyle Retail, Corporate centre
- Approx. 1,800 dwellings

Central Park

- Large local park supports diverse range of uses and activity and integrates with civic facilities

Civic Facilities

- 2 ha integrated community facility, including regional library and youth information centre
- 2 ha indoor sports facility
- Urban plaza
- Approx. 30 jobs



3.0 IMPLEMENTATION

3.1 Image and Character

3.1.1 Image and Character

REQUIREMENTS									
R1	<p>Street trees must be provided on both sides of all roads and streets (excluding laneways) at regular intervals appropriate to tree size at maturity and not exceeding the average intervals below unless otherwise approved by the Responsible Authority:</p> <table> <tr> <th>AVERAGE INTERVAL</th><th>TREE SIZE</th></tr> <tr> <td>8-10 metres</td><td>Small trees (less than 10 metre canopy)</td></tr> <tr> <td>10-12 metres</td><td>Medium trees (10-15 metre canopy)</td></tr> <tr> <td>12-15 metres</td><td>Large trees (canopy larger than 15 metres)</td></tr> </table>	AVERAGE INTERVAL	TREE SIZE	8-10 metres	Small trees (less than 10 metre canopy)	10-12 metres	Medium trees (10-15 metre canopy)	12-15 metres	Large trees (canopy larger than 15 metres)
AVERAGE INTERVAL	TREE SIZE								
8-10 metres	Small trees (less than 10 metre canopy)								
10-12 metres	Medium trees (10-15 metre canopy)								
12-15 metres	Large trees (canopy larger than 15 metres)								
R2	<p>Trees (native, indigenous and exotic) in public spaces and streets must be:</p> <ul style="list-style-type: none"> • Larger species wherever space allows (to facilitate continuous canopy cover) • Suitable for local conditions • Planted in modified and improved soil as required to support tree longevity. 								
R3	Street tree planting must use locally appropriate species and must be consistent with any guidance provided by the City of Casey's adopted Tree Manual (as amended) and the relevant cross section within this Precinct Structure Plan, unless otherwise approved by the Responsible Authority.								
R4	Tree planting along existing/future arterials roads must have regard to VicRoads' Tree Planting Policy (as amended).								
R5	A consistent suite of public lighting and furniture must be used across individual subdivisions and the wider precinct, appropriate to the type and role of street or public place.								
GUIDELINES									
G1	Street networks within subdivisions should be designed to maximise the number of connections and direct views to the Central Park, linear parks, and key public spaces.								
G2	Street trees should be used consistently across land use sub-precincts to create streetscape character and support a pleasurable pedestrian experience.								
G3	A consistent landscape theme should be developed along streets within each of the sub-precincts of the activity centre. Variations in street tree species should be used to create visual cues in appropriate locations such as forecourts to building entries, pedestrian spaces, the termination of view lines, and key intersections.								

3.2 Retail and Commerce

Table 2 Anticipated Employment Creation

LAND USE	MEASURE	JOBS	QTY IN PSP	EST. JOBS
Office/commercial	sqm/job	20	70,086 sqm	3,494
Transitional Retail	sqm/job	50	12,053 sqm	241
Lifestyle Retail	sqm/job	30	4,485 sqm	150
Mixed Use	sqm/job	30	1,750 sqm	62
Integrated Community Facility (inc. regional library and youth information centre)	Job/Centre	20	1	20
Indoor Sports Facility	Job/Centre	10	1	10
Home Office	Job/dwelling	0.05	1,853	92
Total estimated				4,069

The Requirements and Guidelines contained within this section apply to land within the Corporate Centre, Transitional Retail, Lifestyle Retail, and Mixed Use areas, as shown on Plan 3, unless otherwise specified.

3.2.1 Land Use

REQUIREMENTS	
R6	<p>Development and use of land within the Transitional Retail area for purposes other than restricted retail may be considered where a masterplan has been prepared for the entire area and approved by the Responsible Authority.</p> <p>The Masterplan will set out clear and specific strategies, actions and guidelines that will form the primary assessment tool for the development of the Transitional Retail area. The Masterplan must address the following:</p> <ul style="list-style-type: none"> • A response to the Casey Central Activity Centre Concept Plan, Organising Elements Plan and The Strand Interface Concept Plan in Appendix 4.3; • The role and function of the area as a whole and how it integrates with the surrounding land within the precinct and beyond; • A land use plan that identifies the location for all anticipated land uses and considers the relationship between these uses; • A finer grain subdivision with a variety of lot sizes that can accommodate multi-storey developments and a mix of land uses; • Conversion of the internal Accessway to a laneway that is framed by fine grain retail and commercial activities and prioritises pedestrian movement, generally in accordance with Cross Section 1 - Laneway Transitional Retail Area (14 m) Ultimate; • Considers the design of the interface to the adjacent arterial roads, The Strand high street, urban plaza, and retarding basin. • A landscape concept plan that provides detail on the siting, design, and integration of any public spaces and landscaped areas within the Transitional Retail area; and • The Requirements and Guidelines that apply to the Lifestyle Retail, Corporate Centre, Mixed Use, and High Density Housing areas, as relevant.
GUIDELINES	
G4	Subdivision and development should be generally in accordance with the Activity Centre Concept Plan (see Appendix 4.3.1) unless otherwise approved by the Responsible Authority.
G5	Employment developments should reflect the employment types specified in Plan 5 Image, Character, Retail and Commerce, and Housing.
G6	All subdivision and development should demonstrate flexibility and adaptability to allow for staging and long term intensification and redevelopment.
G7	Pedestrian activities including outdoor dining is encouraged along The Strand high street.
G8	Residential dwellings located above shop and office uses are encouraged within the Lifestyle Retail, Transitional Retail, and Mixed Use areas.
G9	Active uses, which generate high levels of pedestrian traffic, should be accommodated along The Strand high street and Glasscocks Road to facilitate a critical mass of retailing and activity along these key pedestrian thoroughfares.
G10	Side streets should be activated by locating cafes, restaurants and other uses that generate pedestrian movement on street corners to encourage the spill of activity down side streets.

3.2.2 Building Design

REQUIREMENTS	
R7	Building heights within the Corporate Centre must be a minimum of 4 storeys, unless otherwise approved by the Responsible Authority.
R8	Building heights within the Mixed Use areas must be a minimum of 4 storeys unless otherwise approved by the Responsible Authority.
R9	The built form within the Lifestyle Retail area must be a minimum of 3 storeys.
R10	The built form within the Transitional Retail area must be a minimum of 2 storeys.
R11	Ground level floor-to-ceiling heights within the Lifestyle Retail, Mixed Use, Transitional Retail and Corporate Centre areas must be a minimum of 4 metres.
R12	Subdivision and development of land adjacent to Narre Warren-Cranbourne Road must provide for and include the construction of a minimum 1.5 metre wide pedestrian path that continues for the entire length of the precinct. The pedestrian path widens to the property boundary to facilitate 0m setback, generally in accordance with the Narre Warren-Cranbourne Road Pedestrian Path Concept Plan (see Appendix 4.3.7) and corresponding cross sections in Appendix 4.4.
R13	All buildings must be built to the property boundary (0m setback), except where useable public spaces or pedestrian paths are provided, to maintain a continuous street frontage.
R14	Buildings facing Narre Warren-Cranbourne Road (excluding buildings within the Mixed Use area) or Glasscocks Road must be built to the property boundary and incorporate minimal setbacks only to provide articulation or to facilitate pedestrian entries to buildings in the form of forecourts, foyers and the like or the pedestrian path required by R12 that ensure a clear and defined street address for each building.
R15	Building facades (excluding shop fronts) with continuous walls must not exceed 30m without a 3 metre change to its alignment or include articulation, fenestration, material change or breaks in built form, so the building facades provide relief and visual interest.
R16	Sites in key locations such as on corners or in locations which terminate key view lines and vistas, must be of significant scale and demonstrate a high quality built form to act as 'landmarks' or 'arrival points', and facilitate a legible street network.
R17	Buildings along Narre Warren-Cranbourne Road and Glasscocks Road must ensure a clear street address, maintain a high degree of visual and physical access at street level, and facilitate pedestrian connections through the Corporate Centre.
R18	Buildings along The Strand high street (except Medium Density Residential area) must: <ul style="list-style-type: none"> ■ Provide primary pedestrian access to tenancies from The Strand high street; ■ Be built to the property boundary adjoining the street frontage; ■ Provide active street frontages; and ■ Locate car parking and service infrastructure to the rear of primary pedestrian access points.
R19	Ground level facades along The Strand high street must be broken into sections no greater than 8 metres wide, in order to establish a fine grain built form and maintain a vertical rhythm of the street.
R20	Canopies, verandahs, awnings and street trees must be delivered along the entire length of The Strand high street.
R21	Buildings along The Strand high street, arterial roads, or adjacent to open/urban spaces must have multiple entries and transparent glazing.
R22	All ground level shop fronts facing a street or public space must be detailed with high quality materials and finishes, and use clear glazing to allow views into the shop from the street, with a minimum of 70% of the shop front unobstructed by advertising, obtrusive internal shelving, false walls offset from the glazing, or white washed glazing.
R23	All buildings must incorporate features of interest into the built form and landscape, such as: <ul style="list-style-type: none"> ■ Parapets, awnings, shade structures or roof elements; ■ Sculptured facades of recesses and projections to provide variation and segmentation; ■ Strong vertical elements that represent 'fine grain' floor plates; ■ Balconies and verandahs that define building floors or storeys; ■ Facade articulation; ■ Feature materials and colours.

R24	<p>All buildings within the Transitional Retail area must achieve all of the following building design requirements:</p> <ul style="list-style-type: none"> ■ Present an articulated and visually interesting façade along Narre Warren – Cranbourne Road and Glasscocks Road with at least 40% of the facade to be windows; ■ Present an appropriate street address to Narre Warren-Cranbourne Road and Glasscocks Road; ■ Must facilitate safe and direct through pedestrian and vehicular movement between the precinct and the Casey Central Shopping Centre to the north; ■ Locates parking behind or within the building; and ■ Loading bays are screened from the street and public car parking areas.
R25	Buildings located adjacent to open space or urban plaza must provide an active frontage to its edge and include full height glass windows to provide surveillance and an outlook to the plaza and open space.
R26	Water tanks and service infrastructure must be located behind the building line, or appropriately screened using durable and attractive materials and incorporating appropriate landscaping treatments.

GUIDELINES

G11	The Corporate Centre should be developed with high quality architecture of significant height and scale.
G12	Buildings should demonstrate visual interest and appropriate scale and form through architectural detailing, fenestration, articulated building façades (contrasting recessive and projecting elements), variation of colours and building materials, and segmenting the building's mass into both horizontal (floors) and vertical (street rhythm) elements.
G13	Building frontages at upper floors along Narre Warren-Cranbourne Road within the Transitional Retail area should provide an appropriate design solution that facilitates views to and from the Casey Central Town Park and/or enables natural light to penetrate the building.
G14	Building facades within the Mixed Use area along Narre Warren-Cranbourne Road may incorporate a landscaped setback and grade change as a transition from the public footpath to private residential units that have direct pedestrian access and/or shared entrances with commercial uses.
G15	The street wall of buildings within the Lifestyle Retail area and along Glasscocks Road should be designed to create a comfortable pedestrian environment through a rhythm of multiple retail/commercial frontages, articulation, numerous entrances, and display windows.
G16	Buildings on corner sites should be designed to address both street frontages, through the use of fenestration and architectural articulation, awnings and pedestrian entries.
G17	Building facades should engage with the street and open spaces by providing ground floor entries, fenestration, awnings and entries directly adjacent to the street and/or open space.
G18	Shopfronts fronting public spaces and streets should be attractive and secure when closed. Roller shutters should not be used.
G19	Buildings greater than four storeys (excluding buildings along Narre Warren-Cranbourne Road) should incorporate a setback of a minimum of 3 metres at the fifth level and above (in the form of balconies etc.) to reduce visual bulk, minimise overshadowing of public spaces and mitigate wind effects at street level.
G20	<p>Canopies, verandahs and awnings:</p> <ul style="list-style-type: none"> ■ Should be incorporated into building frontages to provide for weather protection. ■ Should be integrated into the building design, with signage. ■ May be partly transparent to allow light penetration to the footpath and views of the building façade. ■ May project over the property boundary along key pedestrian thoroughfares if they do not impede the safe and efficient movement of service vehicles and are generally in accordance with any relevant road encroachment guideline. ■ Should be designed to allow tree canopies to develop.
G21	Windows should be included in all frontages above ground level facing any street or public space.
G22	Consideration should be given to the design and appearance of building roofs to mitigate the view of plant, intake/exhaust vents, and associated technical equipment from elevated and long distance views.
G23	<p>The use of roofs for the following is encouraged:</p> <ul style="list-style-type: none"> ■ Solar and wind power generation; ■ Solar water heating; ■ Rain water collection; and ■ Roof top gardens, decks and terraces.

3.2.3 Transport & Access

REQUIREMENTS	
R27	Dedicated pedestrian and cycle links must be provided through car parking areas to connect to the surrounding street network and footpaths. These links must include a dedicated footpath and appropriate landscape features.
R28	Vehicular access to properties facing Narre Warren – Cranbourne Road and Glasscocks Road must be from The Strand, Alisma Boulevard, or access streets internal to the precinct, as shown on Plan 9 Road Network.
R29	Any left-in/left-out vehicle access provided to the Transitional Retail area from Narre Warren-Cranbourne Road as shown on Plan 9 must be designed for service vehicles only and prevent access by non-service vehicles, to the satisfaction of VicRoads and the Responsible Authority.
R30	A Road Safety Audit (RSA) must be prepared for any left-in/left-out intersection proposed along Narre Warren-Cranbourne Road to the satisfaction of VicRoads. The RSA must review the detailed engineering plans for the intersection and be prepared by an independent VicRoads pre-qualified road safety auditor in accordance with AustRoads Guide to Road Safety Part 6: Road Safety Audit (2009). Any issues raised in the RSA must be addressed to the satisfaction of VicRoads.
R31	Unless otherwise agreed by VicRoads and the Responsible Authority, a signalised developer-funded pedestrian crossing on Narre Warren-Cranbourne Road, generally located mid-distance between Glasscocks Road and Rosebank Drive, must be provided as part of the delivery of the intersection at Alisma Boulevard and Narre Warren-Cranbourne Road as identified in Plan 8. The signalised pedestrian crossing shall be provided to the satisfaction of VicRoads and the Responsible Authority.
R32	Car parking areas must be grouped and located behind the built form framing The Strand high street, Glasscocks Road and Narre Warren-Cranbourne Road.
R33	All car parks must include a minimum 30% tree canopy coverage of car park spaces, unless within a building footprint.
R34	Car parking areas, loading facilities and service entries must be located to the rear of all buildings, or as otherwise agreed by the Responsible Authority.
R35	Goods and materials storage areas and refuse areas must not be visible from public areas.
GUIDELINES	
G24	Through-block pedestrian connections should be located toward the centre of the street block, no more than 60m from the next intersection or pedestrian connection.
G25	Secondary access to large format retail uses from car parking areas should be considered only when it facilitates safe pedestrian access and does not diminish the role of the primary access point from the street and/or public space.
G26	Car parking areas should be designed to consider passive surveillance and public safety through adequate positioning and lighting.
G27	Connections between commercial/office buildings, their car parking areas and street activity should be safe, direct and encourage pedestrian movement.
G28	Car parks should be shared between land uses.
G29	Multi-level car parks should be setback at ground level, inside the building footprint, with occupiable premises at street frontages.
G30	On-site car parking should be integrated with the design of the built form and screened provided adequate passive surveillance is achieved.
G31	Access points to car parks should be carefully located and clearly identifiable to reduce potential conflict with pedestrians.

3.3 Housing

The Requirements and Guidelines contained within this section apply to land within both the Medium and High Density Residential Areas, as shown on Plan 3 Future Urban Structure, unless otherwise specified.

REQUIREMENTS	
R36	Building heights within the Medium Density Residential areas as shown on Plan 3 must be either 2 or 3 storeys in height.
R37	Building heights within the High Density Residential areas as shown on Plan 3 must be a minimum of 4 storeys.
R38	Buildings greater than four storeys must be spaced to equitably distribute access to sunlight, maintain residential privacy, maximise opportunities to a view or outlook between buildings, ensure adequate sun penetration at street level, and allow for tree planting (where required).
R39	Residential subdivisions must deliver a range of lot sizes capable of delivering medium- and high-density housing types described in Table 3 Lot Size and Housing Type Guide.
R40	Residential subdivisions within 55 metres of the gas easement on land identified as Medium Density Housing on Plan 3 Future Urban Structure: <ul style="list-style-type: none"> ■ Must have a minimum lot size of 300 sqm, or as otherwise agreed in writing with the Responsible Authority in consultation with the gas pipeline owner/operator. ■ Must not exceed 3 storeys in height, or as otherwise agreed in writing with the Responsible Authority in consultation with the gas pipeline owner/operator.
R41	Subdivision and development within Medium Density Residential areas must deliver between 20 and 25 dwellings per NDHa-R (residential land excluding Mixed Use area).
R42	Subdivision within the Medium Density Residential area adjacent to the existing housing to the north of the precinct as shown on Plan 3 must ensure that new lots/housing provides adequate surveillance of the 10m wide linear park specified in Table 4 (see indicative subdivision layout – Appendix 4.3.5 Interface Housing Concept Plan & Cross Sections).
R43	All residential lots, including multi dwelling sites (excluding opposite facing apartments) must front (in order of priority where a lot fronts multiple elements): <ul style="list-style-type: none"> ■ Waterways, drainage assets, and public space; ■ Local Access streets; ■ Connector roads; and ■ Arterial roads.
R44	Built form must be used to terminate view lines associated with The Strand high street, Alisma Boulevard, the Central Park, and along Glasscocks Road.
R45	Car parking and loading facilities must be located to the rear of all buildings, or as otherwise agreed in writing by the Responsible Authority.

GUIDELINES

G32	Subdivision and development should be generally in accordance with the Activity Centre Concept Plan (see Appendix 4.3.1) unless otherwise approved by the Responsible Authority.
G33	Specialised housing forms such as retirement living and/or aged care should be: <ul style="list-style-type: none"> ■ A minimum of three storeys in height; ■ Achieve positive and activated interfaces with adjacent developments and the public realm; ■ Located in close proximity to the Lifestyle Retail area, Central Park, or northern park; and ■ Accessible by public transport.
G34	The use of roofs for the following will be encouraged: <ul style="list-style-type: none"> ■ Solar and wind power generation; ■ Solar water heating; ■ Rain water collection; and ■ Roof top gardens, decks and terraces.
G35	Residential and other sensitive uses directly adjacent or above non-residential uses should incorporate design measures that attenuate against noise associated with the operation of business activities within the activity centre.
G36	Medium density residential buildings should have a minimum front setback of 3 metres. Verandahs, balconies, entrance structures and elements of visual interest may project forward of the front building line.
G37	Access points to car parks should be carefully located and clearly identifiable to reduce potential conflict with pedestrians.
G38	Goods and materials storage areas and refuse areas must not be visible from public areas.
G39	Mechanical or service facilities should be concealed and not visible from street level.

Table 3 Lot Size and Housing Type Guide

The following table provides an example of the typical housing types that might be provided on a range of lot sizes that support the housing diversity objectives.

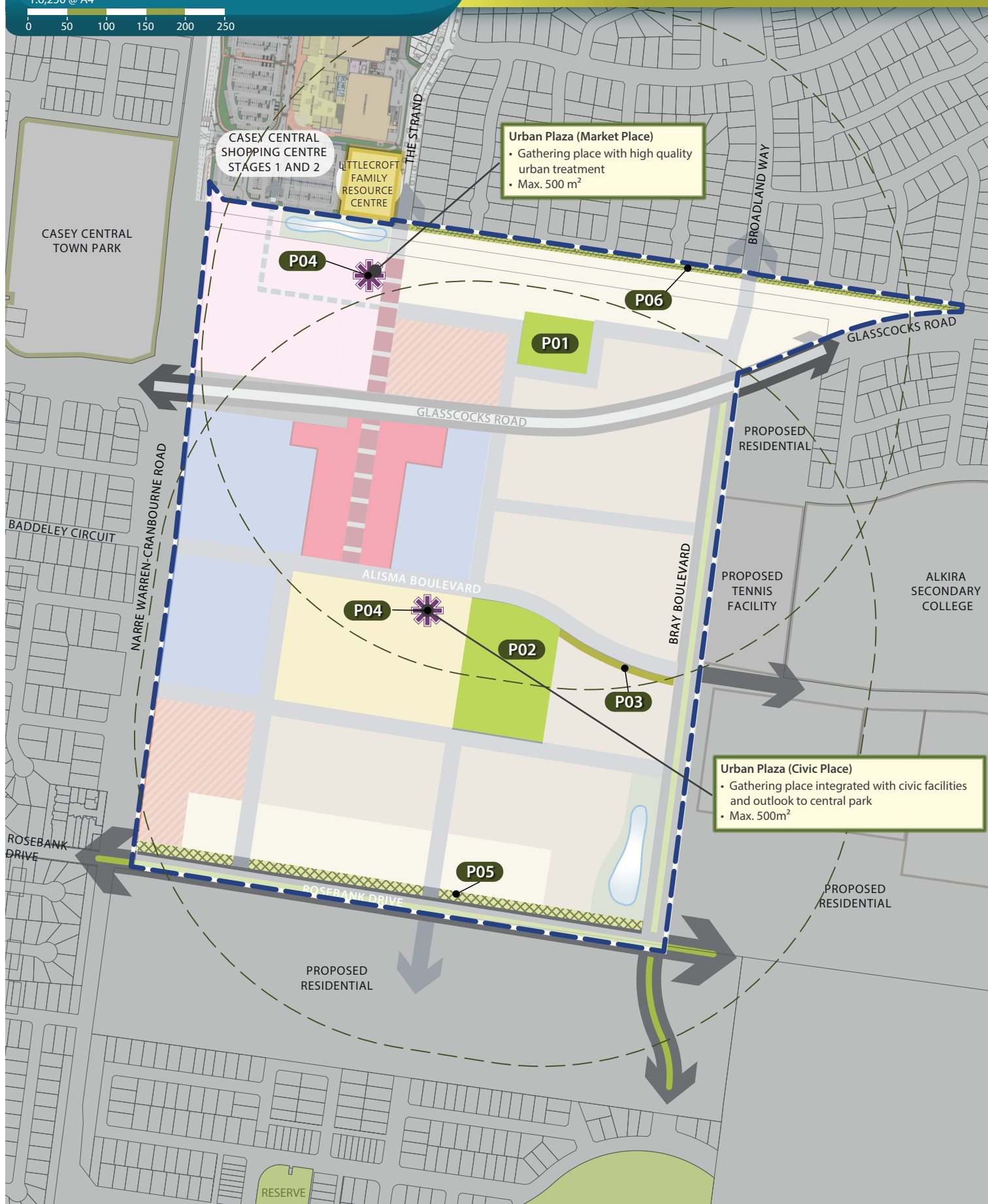
HOUSING TYPES THAT MAY BE SUPPORTED	LOT SIZE CATEGORY (M ²)
Small lot housing including townhouses and attached, semi-detached and detached houses	Less than 300m ²
Multi-unit housing sites including terraces, row houses and villas	301m ² to 600m ²
Stacked housing including apartments, shop-top living and walk up flats	More than 600m ²

Plan 6 - Open Space and Community Facilities



Casey Central Town Centre Precinct Structure Plan
1:6,250 @ A4

0 50 100 150 200 250



precinct boundary

civic facilities

community facility (outside precinct)

local park

linear park

gas easement / linear park

landscape buffer - shared path link

retarding basin

P03 park ID - refer table 4

local park catchment (400m)

3.4 Open Space, Natural Systems and Native Vegetation

Table 4 Open Space Delivery Guide

PARK ID	AREA (HA)	PARK TYPE	LOCATION & OTHER ATTRIBUTES	RESPONSIBILITY	CREDITED UNDER CLAUSE 52.01 (Y/N)
P01	0.8	Passive Open Space	Northern Park located centrally within the Northern Sector which provides amenity to residents of adjacent medium- and high density housing with connections to the residential community to the north of the precinct.	CCC	Y
P02	2.0	Passive Open Space	Central Park located at the centre of the Southern Sector that terminates the Community Spine from Cranbourne North and integrates with the Civic Centre. The Central Park will be attractively landscaped and act as the major meeting place for workers, residents and visitors.	CCC	Y
P03	0.16	Linear Park	Linear Park located adjacent to Central Park along Alisma Boulevard provides an intimate scaled green link between community infrastructure within Cranbourne North and the activity centre.	CCC	Y
P04	0.05	Urban Plaza	Urban plaza (market place) located at the interface with the northern retarding basin and adjacent Littlecroft Community Centre, it provides an attractive and flexible gathering place at the northern edge of The Strand high street. The area of the urban plaza must not exceed 500sqm.	CCC	Y
P04	0.05	Urban Plaza	Urban plaza (civic place) located at the heart of the activity centre connecting the 'Community Spine' and Central Park with the civic facilities and The Strand high street. The area of the urban plaza must not exceed 500sqm.	CCC	Y
P05	1.12	Linear park (gas easement)	Linear park that utilises the gas easement at the south of the precinct and provides a shared path to connect adjacent communities, and designed to protect the integrity of the existing high pressure gas asset.	CCC	N
P06	0.73	Linear Park (includes existing tree reserve)	Linear park that incorporates the existing tree reserve along the northern boundary of the precinct, and provides a tree-lined shared path to connect adjacent communities as well as separation between existing and future dwellings.	CCC	N

CCC = City of Casey

REQUIREMENTS

R46	All parks must be located, designed and developed generally in accordance with the relevant description in Table 5 unless approved otherwise by the Responsible Authority. The area of the park may vary so long as it remains within the area range for its size category. Where a park is smaller than that outlined in the table, the land must be added to another park. Where a proposed park is larger than outlined in the table it may be accepted so long as it does not result in the removal of another park allocation.
R47	<p>Further to the public open space contribution required by Clause 52.01 of the Casey Planning Scheme, this provision sets out the amount of land to be contributed by each property in the precinct and consequently where a cash contribution is required in lieu of land.</p> <p>For the purposes of Clause 52.01 a local park or urban plaza specified in Table 4 Open Space Delivery Guide is public open space (unless otherwise specified in Table 4). A contribution must be made as follows:</p> <ul style="list-style-type: none"> Where public open space shown on the lot in Plan 6 and specified in Table 4 of this structure plan is equal to 6.51% of the lot's NDA that land must be transferred to Council at no cost. Where a public open space shown on the lot in Plan 6 and specified in Table 4 of this structure plan is equal to 6.51% or less than 6.51% of the lot's NDA: <ul style="list-style-type: none"> the relevant land must be transferred to Council at no cost. a cash contribution is to be made to Council to bring the total public open space contribution to a value equal to 6.51% of NDA. Where public open space shown on the land in Plan 6 and specified in Table 4 of this structure plan is greater than 6.51% of the lot's NDA, the relevant land must be transferred to Council at no cost. In this case Council will compensate the landowner, at a time to be agreed, for the amount of land provided in excess of 6.51% but no greater than difference between 6.51% and the amount of land shown as local park on Plan 6.
R48	The Northern and Central Parks as shown on Plan 6 must be a minimum of 70 metres in width and length, or as otherwise agreed with the Responsible Authority.
R49	All public landscaped areas must be designed and constructed to enable practical maintenance and planted with species suitable to the local climate and soil conditions.
R50	<p>Where a direct street frontage to open space is not provided, unless otherwise agreed by the Responsible Authority, lots must:</p> <ul style="list-style-type: none"> Directly front the open space and allow for vehicular access via a rear laneway; and Allow for a primary point of access from a footpath or shared path of a minimum width of 1.5 metres along the frontage of the lot.
R51	Buildings adjacent to open space must be located and designed to front the open space. This development must be designed to provide passive surveillance to the open space through the siting of windows, balconies and pedestrian access points.
R52	The final design and configuration of the urban plazas must consider pedestrian circulation, passive surveillance opportunities, and deliver a high quality urban finish which can support a range of informal uses.
R53	Any fencing adjoining open space, whether encumbered or unencumbered, must be low scale and visually permeable to facilitate public safety and surveillance.
R54	Native vegetation may be removed as illustrated in Plan 7 - Native Vegetation Retention and Removal Plan.

GUIDELINES

G40	Subject to being compatible with Table 4, parks and open spaces should contain extensive tree planting.
G41	Design of retarding basins and/or waterway corridors and any other encumbered open space should maximise the amenity value of that open space and provide for flexible recreational opportunities, particularly when such land also abuts unencumbered open space.
G42	The design and layout of open space should maximise water use efficiency, storm water quality and the long term viability of vegetation through the use of WSUD initiatives.
G43	Passive open space should cater for a broad range of users and support both structured and informal recreation activities.
G44	The urban plazas may take the form of a town square, urban space, or public market place, subject to detailed design, to the satisfaction of the Responsible Authority.
G45	Active uses such as outdoor markets and entertaining should occur in the portion of the urban plaza connected to The Strand high street.
G46	The urban plaza should be well integrated with pedestrian and cycle links around and through the activity centre and open space beyond.
G47	Public spaces within this precinct should be: <ul style="list-style-type: none"> ■ Accessible to all ages and abilities; ■ Suitable for use during the day, at night and on weekends; ■ Designed as a flexible and adaptive space so that a range of uses and activities can occur within the space; ■ Attractive and encourage congregation and social interaction; ■ Clearly identifiable by passing traffic; and ■ Meeting points as part of the first stage of development within the precinct.
G48	Public spaces should be oriented to the north to capture the sun and protect from prevailing winds.
G49	Landscaping of all areas in public view from the street or public space should be of a high quality and consistent character.
G50	Street furniture should be located in areas which are highly visible and close to or adjoining major pedestrian/cycle routes and gathering spaces.
G51	Streets and public places should be well lit and comply with Australian Standards. Lighting in public places should be generally pedestrian friendly (white) lighting and should be designed to avoid unnecessary spill to the sides or above.
G52	All public spaces should respond appropriately to the Design for Access and Mobility Standards (AS 1428).

Plan 7 - Native Vegetation Retention and Removal




Casey Central Town Centre Precinct Structure Plan

1:6,250 @ A4



0 50 100 150 200 250



-  precinct boundary
-  property numbers
-  remnant patches to be removed

NOTE:

Where this map does not show vegetation to be protected or removed, these are areas where there is no native vegetation unless an offset area has been located within this map unit.

3.5 Community Facilities

REQUIREMENTS	
R55	All civic facilities must be designed to front, and be directly accessed from, a public street with car parks located to the rear of the allotment, and respond appropriately to the Design for Access and Mobility Standards (AS 1428).
R56	Four hectares of land identified as Civic Facilities in Plan 6 Open Space and Community Facilities must be set aside for purchase by the City of Casey for the purposes of civic facilities (to include an integrated community facility, regional library, youth information centre, and indoor sports facility).
R57	The civic facilities in the Southern Sector of the precinct must be sited and designed to be a landmark building of a minimum three storey scale that terminates the view line along The Strand high street and the Community Spine, and provides an appropriate interrelationship with the Central Park.
R58	<p>Should the City of Casey no longer require part or all of the four hectares of land to be set aside for purchase as required by R56, alternative land uses and building proposals will be considered if they meet the following criteria:</p> <ul style="list-style-type: none"> ■ The land uses are compatible with the adjacent Central Park; ■ If sensitive uses as defined under AS 2885 – Gas and Liquid Petroleum are proposed a Safety Management Study may be required. Further consultation with the gas pipeline owner/operator will be required. ■ Buildings must be sited and designed to appropriately terminate The Strand high street view and the Community Spine, demonstrating high architectural merit, and contributing to the amenity of the adjacent Corporate Centre and Central Park. ■ The Requirements and Guidelines specified under Image, Character, Retail and Commerce, and Housing (as relevant) are met.
GUIDELINES	
G53	Regional level community facilities should be encouraged to locate within the Casey Central Town Centre adjacent to the Central Park.
G54	Land efficiency for civic facilities should be maximised through the sharing and overall reduction of car parking and the provision of multi-storey facilities.
G55	Any additional community or civic infrastructure not shown on Plan 6 should be located within the Lifestyle Retail area.

Plan 8 - Public Transport, Walking and Cycling

Casey Central Town Centre Precinct Structure Plan
1:6,250 @ A4



0 50 100 150 200 250



precinct boundary

Arterial road (bus capable)

connector road (bus capable)

key local access street (carriageway to be shared between bicycles & local vehicular traffic)

2 - way off-road bike path & pedestrian path

shared path

on-road bicycle lanes

signalised intersection (DCP)

signalised intersection (developer - funded)

left-in/left-out intersection

signalised pedestrian crossing developer-funded (location to be determined)

3.6 Transport and Movement

3.6.1 Public Transport

REQUIREMENTS	
R59	All connector roads shown on Plan 8 Public Transport, Walking and Cycling must be constructed (including partial construction where relevant) in accordance with the corresponding cross section in Appendix 4.4 and in accordance with the <i>Public Transport Guidelines for Land Use and Development</i> .
R60	Any roundabouts on connector roads as shown on Plan 8 must be constructed to accommodate ultra-low-floor buses in accordance with the <i>Public Transport Guidelines for Land Use and Development</i> .
R61	<p>Bus stop hard stands with direct and safe access to a pedestrian path must be constructed:</p> <ul style="list-style-type: none"> At locations approved, in writing, by Public Transport Victoria, at no cost to Public Transport Victoria; In accordance with the <i>Public Transport Guidelines for Land Use and Development</i> and the <i>Disability Discrimination Act - Disability Standards for Accessible Public Transport 2002</i>; All to the satisfaction of Public Transport Victoria.

3.6.2 Walking & Cycling

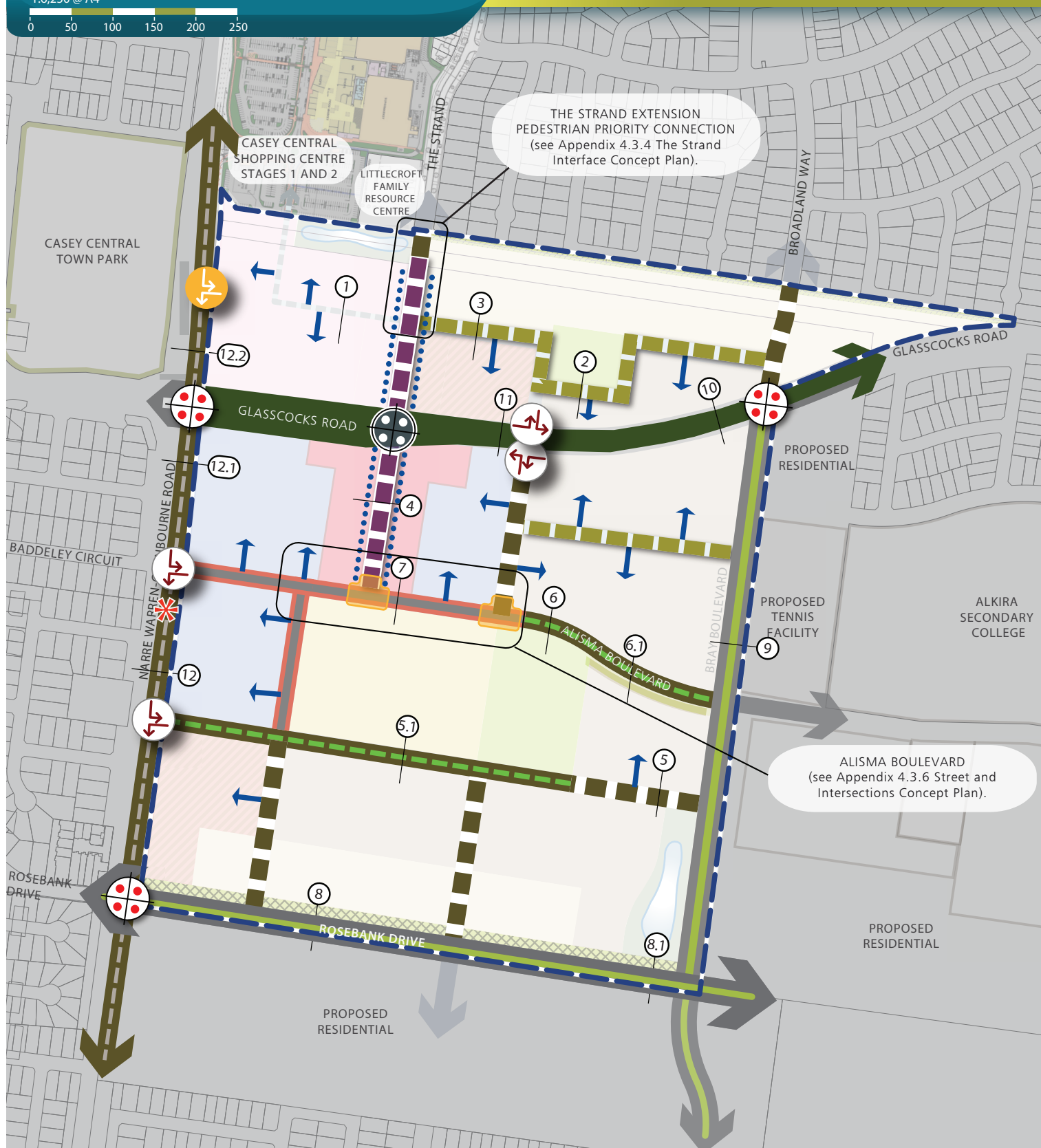
REQUIREMENTS	
R62	<p>Design of all streets and arterial roads must give priority to the requirements of pedestrians and cyclists by providing:</p> <ul style="list-style-type: none"> Footpaths of at least 1.5 metres on both sides of all streets and roads unless otherwise specified by the PSP. Shared paths or bicycle paths where shown on Plan 8 or as shown on the relevant cross-sections in Appendix 4.4 or as specified by another requirement in the PSP. Safe, accessible and convenient crossing points of connector roads and local streets at all intersections, key desire lines and locations of high amenity (e.g. Corporate Centre and open space). Safe pedestrian crossings of arterial roads at all intersections, at key desire lines, and on regular intervals appropriate to the function of the road and public transport provision. Pedestrian priority crossings on any slip lanes, at arterial intersections. Safe and convenient transition between on- and off-road bicycle networks. All to the satisfaction of the coordinating roads authority and the Responsible Authority.
R63	Bicycle parking facilities are to be provided by development proponents in convenient locations at key destinations such as within Civic Facilities area, Lifestyle Retail area, Central Park and alongside park spaces.
R64	Lighting must be installed along all major shared, pedestrian and cycle paths.
R65	On a construction or engineering plan approved under a subdivision permit, specification of any bicycle path on a connector road must also be to the satisfaction of Public Transport Victoria.
R66	Bicycle priority at intersections of minor streets and connector roads with dedicated off-road bicycle paths must be achieved through strong and consistent visual and physical cues and supportive directional and associated road signs.
R67	Shared path connections must be delivered between the existing cul-de-sac streets to the north of the precinct and the land nominated as High Density Residential in accordance with Plan 8.
R68	Shared path pedestrian and cycle links as shown on Plan 8 must be a minimum width of 3m to allow shared use.
R69	A pedestrian path connection must be delivered to connect the urban plaza to the Littlecroft Family Resource Centre to the north of the precinct and integrate the adjacent public assets.
R70	Dedicated pedestrian thoroughfares through car parking areas must include appropriate landscaping (including canopy trees).
R71	Pedestrian and cycle connections between this precinct and the proposed Casey Central Shopping Centre located to the north must be provided and maintained.
R72	Pedestrian and cycle links and/or linear green links must include appropriate landscape and passive surveillance opportunities to ensure these spaces are active, safe and attractive.
GUIDELINES	
G56	Increased private vehicle storage (including scooters and bicycles) along with future electric car cabling (for charging) should be provided within commercial/office buildings.

Plan 9 - Road Network

Casey Central Town Centre Precinct Structure Plan
1:6,250 @ A4



0 50 100 150 200 250



precinct boundary

primary arterial road

secondary arterial road

connector street - boulevard

commercial street

the strand high street

local access street level 2

local access street level 2 with shared path link

local access street level 1

'accessway'/laneway

rear access to carparking

street cross section number

pedestrian priority environment

signalised intersection (developer funded)

signalised intersection (DCP)

left in/left out intersection

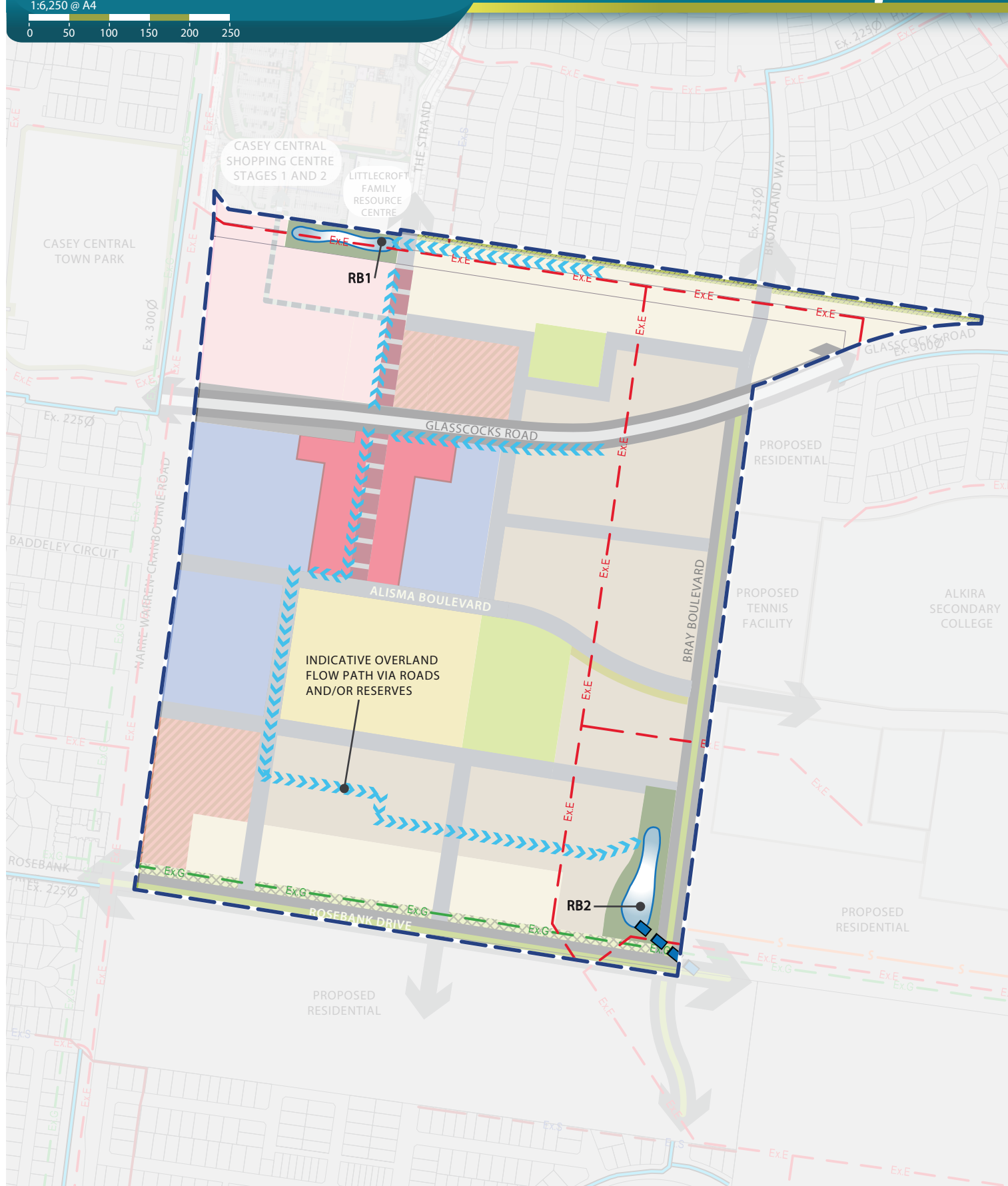
potential left in/left out intersection (service delivery only)

raised T-intersection

signalised pedestrian crossing developer-funded (location to be determined)

3.6.3 Road Network

REQUIREMENTS	
R73	An additional developer-funded interim signalised T-intersection at The Strand and Glasscocks Road must be provided generally in accordance with Plan 9 as part of the construction (partial or complete) of Glasscocks Road either side of The Strand. The land required for the ultimate intersection must also be provided to the satisfaction of VicRoads and the Responsible Authority. The pavement and kerbing works, traffic signal pits and conduits to the southern side of Glasscocks Road must also be provided, to facilitate future upgrade and complete signalisation as required by R74.
R74	The developer-funded signalised T-intersection at The Strand and Glasscocks Road required by R73 must be upgraded to a developer-funded fully directional signalised intersection as part of the construction of The Strand extension within the Southern Sector. The land required for the ultimate intersection must also be provided to the satisfaction of VicRoads and the Responsible Authority.
R75	Vehicle access to a lot which is six metres or less in width must be via a rear laneway.
R76	Subdivision layouts must provide for buildings to front or otherwise address all roads, including arterial roads. Vehicle access to lots fronting arterial roads must be provided from a rear internal road or rear lane only, in accordance with Plan 9, to the satisfaction of the Responsible Authority.
R77	Laneways servicing medium- and high-density dwellings are to be a maximum of 8 metres wide, excluding within the Transitional Retail area. A maximum 14m wide laneway is permitted within the Transitional Retail area, generally in accordance with Cross Section 1 - Laneway Transitional Retail Area (14m) Ultimate.
R78	Any road and/or path crossing the high pressure gas pipeline must be designed to protect the integrity of the gas pipeline to the satisfaction of the high pressure gas pipeline owner/operator.
GUIDELINES	
G57	Street layouts and subdivision patterns should be aligned to provide high quality connections and views to key destination points such as: <ul style="list-style-type: none"> ■ The urban plazas; ■ The Central Park; ■ Linear open spaces; and ■ Wetlands/waterbodies.
G58	Slip lanes should be avoided at all intersections within the activity centre due to the highly pedestrian nature of the precinct, unless adequate strategic justification and absence of a safe and reasonable alternative warrants their inclusion.
G59	The frequency of vehicular crossovers should be minimised through the use of a combination of: <ul style="list-style-type: none"> ■ Rear loaded lots with laneway access; ■ Vehicular access from the side of a lot; or ■ Combined or grouped crossovers.
G60	Street block lengths should not exceed 100 metres. Intervals between blocks may take the form of either trafficable street or pedestrian passage of no less than 4 metres in width. Where larger corporate uses are proposed, a similar level of public walking and cycling permeability should be provided.
G61	Streets where high vehicular and service vehicle movement is anticipated should be addressed with pedestrian refuge points so that a shared environment for pedestrians, cyclists and vehicles can be achieved.
G62	Service and delivery access to buildings should be screened from public view by way of built form or landscaping.



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3.7 Utilities and Energy

3.7.1 Integrated Water Management

REQUIREMENTS	
R79	Stormwater conveyance must be designed in accordance with the relevant Development Services Scheme(s) to the satisfaction of Melbourne Water.
R80	Final design and boundary of constructed waterway corridors, retarding basins, and associated paths, boardwalks, bridges and planting to the satisfaction of Melbourne Water and the Responsible Authority.
R81	The Southern Retarding Basin (ID# RB2) and any associated infrastructure proposed to cross the high pressure gas pipeline must be designed to maintain the integrity of the gas pipeline to the satisfaction of the high pressure gas pipeline owner/operator.
R82	<p>Subdivision applications must demonstrate how:</p> <ul style="list-style-type: none"> • Overland flow paths and piping within road reserves will be connected and integrated across property/parcel boundaries; • Melbourne Water freeboard requirements for overland flow paths will be adequately contained within road reserves; and • The development will deliver the Integrated Water Cycle Management (IWCM) requirements of the Precinct Structure Plan and any approved Integrated Water Management Plan. • Development within the Corporate Centre will prevent blockages prior to stormwater entering the downstream pipes, through the use of litter traps, where appropriate.
R83	Development staging must provide for the delivery of ultimate waterway and drainage infrastructure. Where this is not possible, development proposals must demonstrate how any interim solution adequately manages stormwater generated from the development and how this will enable delivery of an ultimate drainage solution, all to the satisfaction of the Responsible Authority in consultation with Melbourne Water.
GUIDELINES	
G63	The design and layout of roads, road reserves, and public open space should optimise water use efficiency and long-term viability of vegetation and public uses through the use of Water Sensitive Urban Design initiatives, including the use of locally treated stormwater for irrigation purposes, where practical.
G64	Development should include integrated water management systems to diversify water supply, reduce reliance on potable water and increase the utilisation of storm and waste water that contributes to a sustainable and green urban environment.
G65	Development should have regard to relevant policies and strategies being implemented by the Responsible Authority, Melbourne Water and South East Water, including any approved Integrated Water Management Plan.
G66	Land required for integrated water management systems (such as stormwater harvesting, aquifer storage and recharge, grey water recycling etc.) should be incorporated within multi-storey developments and the precinct open space system, where practicable.

Table 5 Stormwater Drainage Infrastructure

ID	DESCRIPTION	LOCATION	AREA (HA) AND/OR CORRIDOR WIDTHS	RESPONSIBILITY
RB1	Northern Retarding Basin	At northern boundary of the precinct	0.55 ha	City of Casey
RB2	Southern Retarding Basin	At south-eastern boundary of the precinct	1 ha	City of Casey

3.7.2 Utilities

REQUIREMENTS	
	Before development commences on a property, functional layout plans are to be submitted of the road network showing the location of all: <ul style="list-style-type: none"> ■ Underground services ■ Driveways/crossovers ■ Street lights ■ Street trees
R84	<p>A typical cross section of each street is also to be submitted showing above and below ground placement of services, street lights and trees.</p> <p>The plans and cross sections must demonstrate how services, driveways and street lights will be placed so as to achieve the road reserve width (consistent with the road cross sections outlined in this PSP) and accommodate the minimum level of street tree planting (as outlined in this PSP). If required, the plan and cross sections will nominate which services will be placed under footpaths or road pavement. The plans and cross sections are to be approved by the Responsible Authority and all relevant service authorities before development commences.</p>
R85	Delivery of underground services must be coordinated, located and bundled (utilising common trenching) to facilitate the planting of trees and other vegetation within road verges.
R86	New electricity substations and sewer pump stations (if required) must be identified at the subdivision design stage to ensure effective integration and minimise amenity impacts, and be designed to the satisfaction of the relevant authority. These facilities must not be located on land forming part of a park classified as open space under Clause 52.01, unless otherwise agreed with the Responsible Authority.
R87	The developer must enter into an agreement with South East Water requiring the subdivision to be reticulated with a dual pipe recycled water system to provide for the supply of recycled water from a suitable source or scheme to all lots and open space reserves within the subdivision.
R88	Irrespective of whether South East Water has entered into an agreement as required by R87, any plan of subdivision must contain a restriction which provides that no dwelling or commercial building may be constructed on any lot unless the building incorporates dual plumbing for the use of recycled water in toilet flushing and garden watering.
R89	Traffic lights or street lights within the gas easement must be located a minimum of 3 metres from the high pressure gas pipeline and on wide bases to protect the integrity of the gas pipeline.
R90	Canopy trees planted within the high pressure gas pipeline easement must be of a suitable species and located a minimum of 3 metres from the gas pipeline, to the satisfaction of the high pressure gas pipeline owner/operator.
R91	Low height shrub plantings are permitted within 3 metres of the high pressure gas pipeline but must not exceed 1.5 metres in height at maturity, to ensure the line of sight between high pressure gas pipeline awareness markers is maintained at all times.
R92	Road and street crossings of the gas pipeline easement must be minimised.
GUIDELINES	
G67	Above-ground utilities, including electrical substations, sewer pump stations, fire hydrants and other building services, should be located outside of key view lines and screened with vegetation, as appropriate. Locating substations within open space is discouraged.
G68	Design and placement of underground services in new or upgraded streets should utilise the service placement guidelines outlined in Appendix 4.5.
G69	Land within the gas easement should be utilised for open space and recreation uses as outlined in Table 4 in consultation with the gas pipeline owner/operator.

3.8 Precinct Infrastructure Plan and Staging

The Precinct Infrastructure Plan (PIP) at Appendix 4.1 sets out the infrastructure and services required to meet the needs of the proposed development within the precinct. The infrastructure items and services are to be provided through a number of mechanisms including:

- Subdivision construction works by developers.
- Agreements under s173 of the *Planning and Environment Act 1987*.
- Utility service provider requirements.
- The Cranbourne North Stages 1 and 2 Development Contributions Plan.
- Relevant development contributions from adjoining areas.

An indicative Staging Plan that illustrates how development in the precinct may proceed in stages can be found in Appendix 4.3.3 Activity Centre Indicative Staging Plan.

3.8.1 Development Staging

REQUIREMENTS	
R93	<p>Development staging must provide for the timely provision and delivery of:</p> <ul style="list-style-type: none"> • Arterial road reservations; • Connector streets; • Street links between properties, constructed to the property boundary; and • Connection of the on and off-road pedestrian and cycle network.
GUIDELINES	
G70	<p>Development staging will be determined largely by the development proposals on land within the precinct and the availability of infrastructure services. Development applications should demonstrate:</p> <ul style="list-style-type: none"> ■ How the development, to the extent practicable, will be integrated with adjoining developments, through the timely provision of connecting roads and walking/cycling paths. ■ Where development does not directly adjoin the urban edge, how local open space will be provided in the early stages of the development to provide new residents with amenity. ■ How sealed road access will be provided to each new allotment. ■ How any necessary trunk service extensions will be delivered, including confirmation of the agreed approach and timing by the relevant infrastructure/service provider.

3.8.2 Subdivision Works by Developers

REQUIREMENTS	
R94	<p>Subdivision of land within the precinct must provide and meet the total cost of delivering the following infrastructure:</p> <ul style="list-style-type: none"> • Connector roads and local streets. • Local bus stop infrastructure (where locations have been agreed in writing by Public Transport Victoria). • Landscaping of all existing and future roads and local streets. • Intersection works and traffic management measures along arterial roads, connector streets and local streets (except those included within the DCP). • Council approved fencing and landscaping (where required) along arterial roads. • Local shared, pedestrian and bicycle paths along local arterial roads, connector roads, utilities easements, local streets, drainage lines/waterways and within local parks including bridges and intersections (except those included within the DCP). • Appropriately scaled lighting along all roads, major shared and pedestrian paths, and traversing public open space. • Basic improvements to local parks and open space (refer to Open Space Delivery below). • Local drainage system. • Local street or pedestrian path crossings of waterways unless included in the DCP or outlined as the responsibility of another agency in the Precinct Infrastructure Plan. • Infrastructure as required by utility service providers including water, sewerage, drainage (except where the item is funded through a Development Services Scheme), electricity, gas and telecommunications. • Interim signalised T-intersection at The Strand high street and Glasscocks Road as required by R73. • Completion of signalised intersection at The Strand high street and Glasscocks Road as required by R74. • A continuous pedestrian path at least 1.5 metres wide along Narre Warren-Cranbourne Road as required by R13. • Concrete 2-way off-road bicycle path and pedestrian path within the gas easement, generally in accordance with Cross Sections 8 and 8.1. • Concrete shared path at least 3 metres wide within the proposed 10m wide linear park along the precinct's northern boundary, generally in accordance with Plan 6 and Table 4. • A signalised pedestrian crossing across Narre Warren-Cranbourne Road (unless otherwise agreed with VicRoads) as required by R32.

R95

OPEN SPACE DELIVERY

All public open space (where not otherwise provided via the DCP) must be finished to a standard that satisfies the requirements of the Responsible Authority prior to the transfer of the public open space, including:

- Removal of all existing and disused structures, foundations, pipelines and stockpiles.
- Clearing of rubbish and weeds, leveled, top soiled and grassed with warm climate grass.
- Provision of water tapping, potable and recycled water connection points.
- Provision of sewer and gas connection points to land identified as the Central Park.
- Planting of trees and shrubs.
- Provision of vehicular exclusion devices (fence, bollards or other suitable methods) and maintenance access points.
- Installation of park furniture including barbeques, shelters, furniture, rubbish bins, local scale playground equipment, local scale play areas, and appropriate paving to support these facilities, consistent with the type of public open space listed in the open space delivery guide (Table 4).
- Construction of a minimum 1.5 metre wide pedestrian path at the perimeter of the open space.

3.9 Planning Permit Application Requirements

In order for a permit to be granted for future works within the Casey Central Town Centre the following must be submitted with any future permit applications to the satisfaction of the Responsible Authority.

Future permit applications must address the following items:

- How the development addresses the vision, relevant principles and objectives as stated within this Precinct Structure Plan;
- Address the design requirements and guidelines set out within this PSP;
- The fine grain road network, road cross sections and the pedestrian and cycle network;
- Landscape plan which includes detailed design of public spaces and streetscapes;
- Locations of medium and high density residential housing including proposed dwelling yields; and
- A staging plan including indicative timing of development.

In addition, the permit application must include the following information:

- A master plan showing the intended land uses, heights and setbacks which comply with the requirements and guidelines set out in this PSP;
- Address any additional design guidelines prepared by the Responsible Authority;
- Show how the proposed development relates to any existing or approved developments within the area;
- Set out provisions for car parking including the location and design of the car parking areas and car parking rates for proposed uses within the precinct;
- Set out arrangements for the provision of service areas and waste disposal including access for delivery vehicles and measures to minimise the impact on the amenity of the activity centre and adjoining neighbourhoods; and
- Set out design guidelines for the provision of advertising signs.

4.0 APPENDICES

4.1 Precinct Infrastructure Plan (PIP)

GROUP	CATEGORY	TITLE	DESCRIPTION	LEAD AGENCY	TIMING	INCLUDED IN CRANBOURNE NORTH DCP (DCP PROJECT NUMBER)
Transport Projects						
Transport	Road	Glasscocks Road	Land and first carriageway	Casey City Council	M	Y (RD01 & RD05)
Intersection Projects						
Transport	Intersection	Glasscocks Road/ Narre Warren- Cranbourne Road	Arterial/arterial intersection	Casey City Council	M	Y (RD08 & RD15)
Transport	Intersection	Glasscocks Road/ Bray Boulevard	Arterial/connector intersection	Casey City Council	M	Y (RD16)
Transport	Intersection	Rosebank Drive/ Narre Warren- Cranbourne Road	Arterial/connector intersection	Casey City Council	L	Y (RD13 & RD 14)
Transport	Intersection	Glasscocks Road/ The Strand	Additional developer-funded arterial/high street interim intersection	Casey City Council	M - L	N
Transport	Pedestrian Crossing	Alisma Boulevard/ Narre Warren- Cranbourne Road	Developer-funded signalised pedestrian crossing	VicRoads	L	N
Community Facilities						
Community	Community	Integrated Community Facility	Integrated Community Facility including a regional library and youth information centre	Casey City Council	L	N
Active Recreation Reserves						
Open Space	Active	Indoor Sports Facility	Civic facility that provides a range of indoor sports, including gymnastics.	Casey City Council	L	N

* S = 0-5 years, M = 5-10 years, L = 10+ years

4.2 Property Specific Land Budget

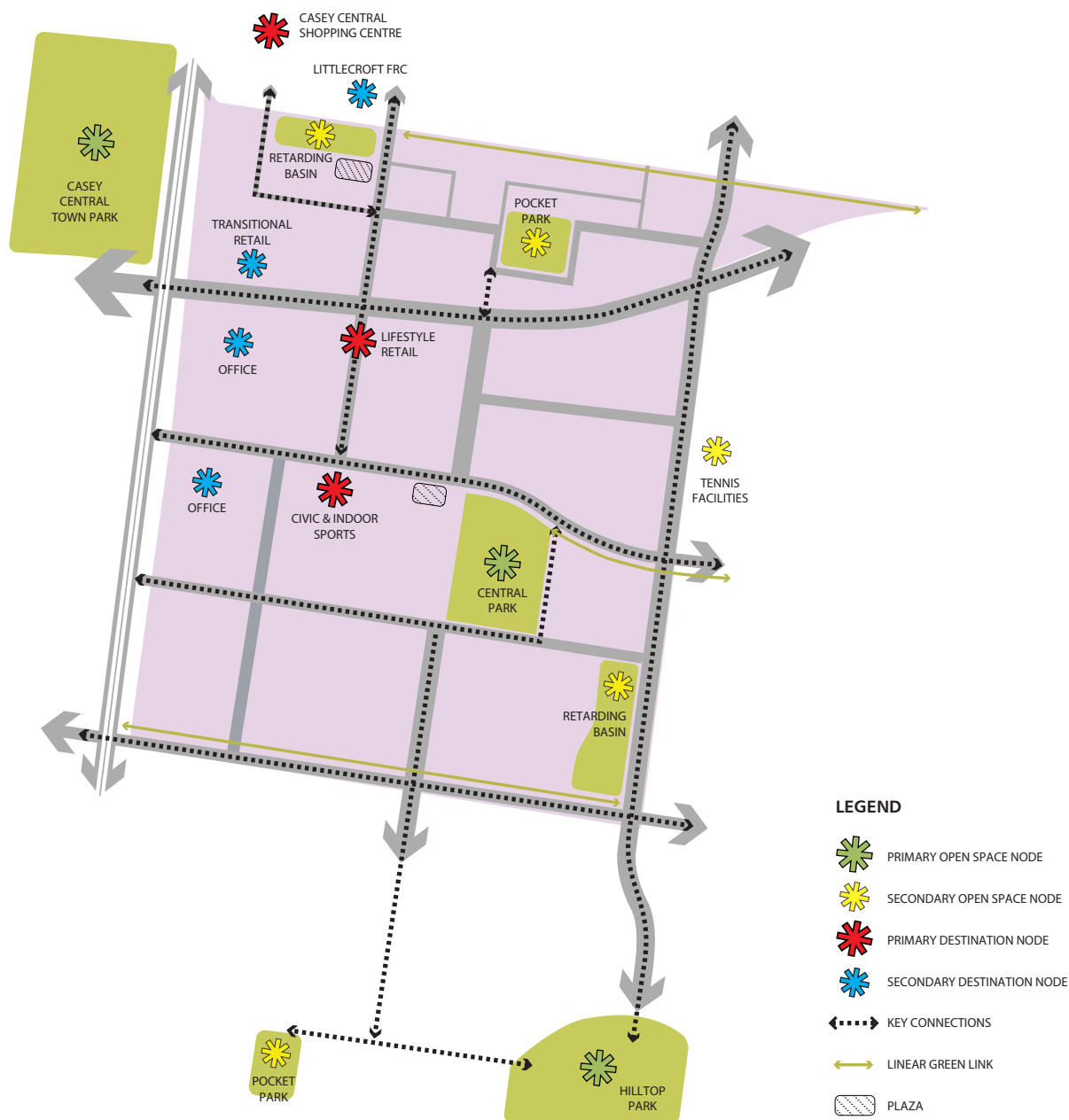
PROPERTY NUMBER	TOTAL AREA (HECTARES)			TRANSPORT		COMMUNITY	ENCUMBERED LAND AVAILABLE FOR RECREATION		UNENCUMBERED LOCAL OPEN SPACE		TOTAL NET DEVELOPABLE AREA (HECTARES)	KEY PERCENTAGES			OTHER LAND USES				TOTAL NET RESIDENTIAL AREA HA (NRA)
	6 LANE ARTERIAL ROAD / WIDENING	4 LANE ARTERIAL ROAD / WIDENING	EXISTING ROAD RESERVE PAO	INTEGRATED COMMUNITY FACILITY & INDOOR SPORTS FACILITY	GAS EASEMENT		WATERWAY / DRAINAGE LINE / WATER QUALITY TREATMENT / RETARDING	LINEAR PARK 'COMMUNITY SPINE'	LOCAL PARKS & URBAN PLAZA	NET DEVP AREA % OF PRECINCT		PASSIVE OS % NDA	TOTAL PASS & ACTIVE OS %	LIFESTYLE RETAIL	TRANSITIONAL RETAIL	MIXED USE	OFFICE		
PROPERTY																			
1	2.019	0.031					0.966			1.023	50.65%	0.00%	0.00%	0.176				0.847	
2	1.791	0.028					0.269			1.494	83.42%	0.00%	0.00%	0.173				1.321	
3	56.303	0.397	2.188	4.000		1.399	0.985	0.158	2.900	44.276	78.64%	6.91%	6.91%	2.6697	4.286	3.960	7.561	29.758	
4	0.154									0.154	100.00%	0.00%	0.00%					0.154	
5	0.134	0.010	0.124							0.000	0.00%	0.00%	0.00%					0.000	
Sub-total	60.400	0.455	2.312	4.000		1.399	2.221	0.158	2.900	46.946	77.72%	6.51%	6.177%	2.67	4.64	3.96	7.56	32.08	
TOTAL	60.40	0.45	2.31	4.00		1.40	2.22	0.16	2.90	46.95	77.72%	6.51%	6.18%	2.67	4.64	3.96	7.56	32.08	

4.3 Concept Plans and Cross Sections

4.3.1 - Activity Centre Concept Plan



4.3.2 - Activity Centre Organising Elements Plan



Open Space and Placemaking

Pocket Park

- Intimate scaled local park providing amenity for adjacent medium- and high-density housing

Central Park

- Located on ridgetop in association with civic facilities at the termination of the 'Community Spine' from Cranbourne North
- Surrounded by high density residential and civic activities at the heart of the activity centre
- Forms a key node in the broader open space network
- Provides views to and from the activity centre

Civic Facilities

- Terminates The Strand high street with a landmark civic building
- Creates a key desire line along The Strand high street
- Functions as the civic heart of the activity centre
- Reflects the Littlecroft Family Resource Centre to form civic book ends to The Strand high street

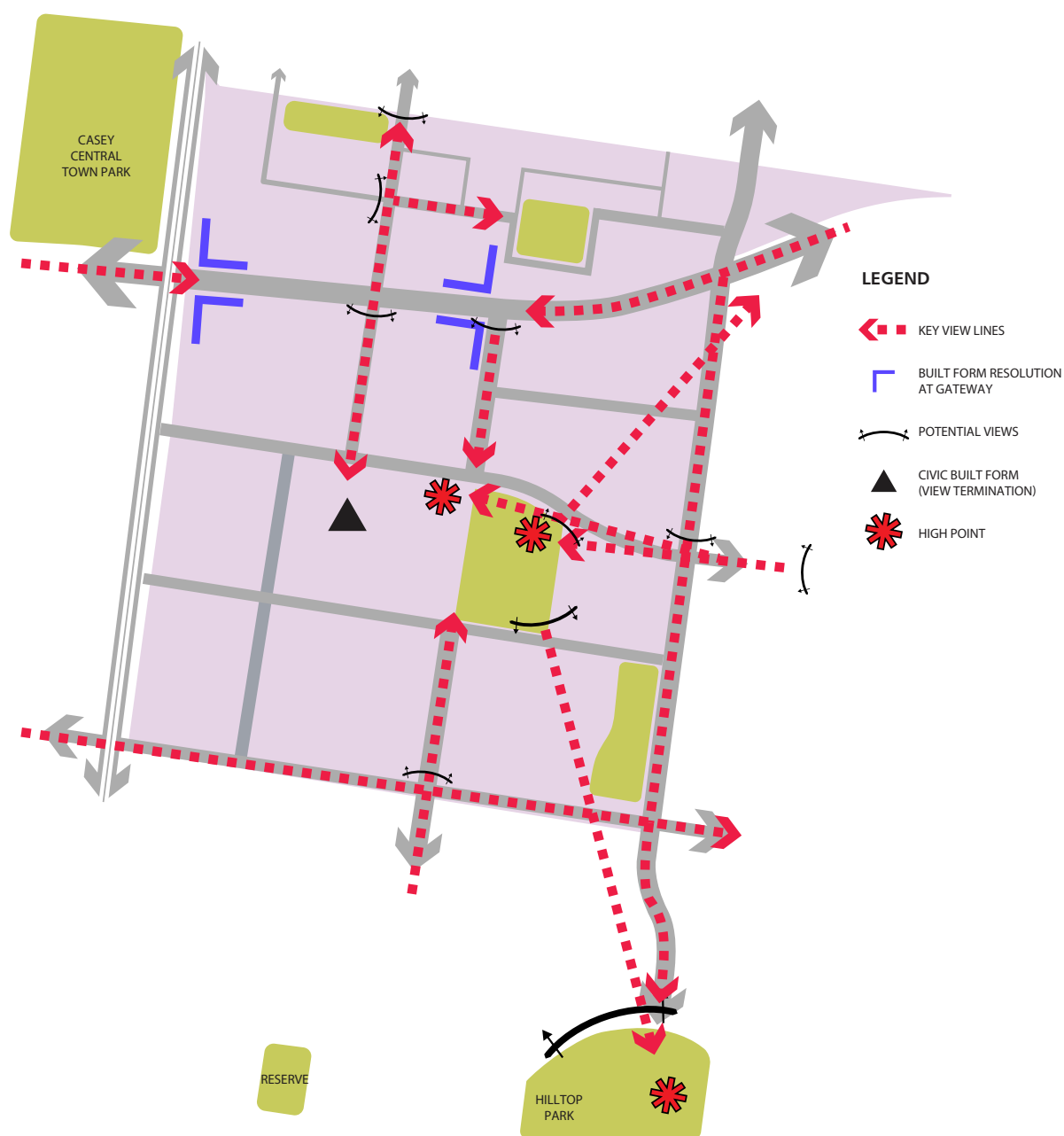
Urban Plazas

Northern Market Plaza

- Functions as a vibrant urban space that capitalises on the pedestrian movement between The Strand high street, Littlecroft Family Resource Centre and Casey Central Shopping Centre

Southern Civic Plaza

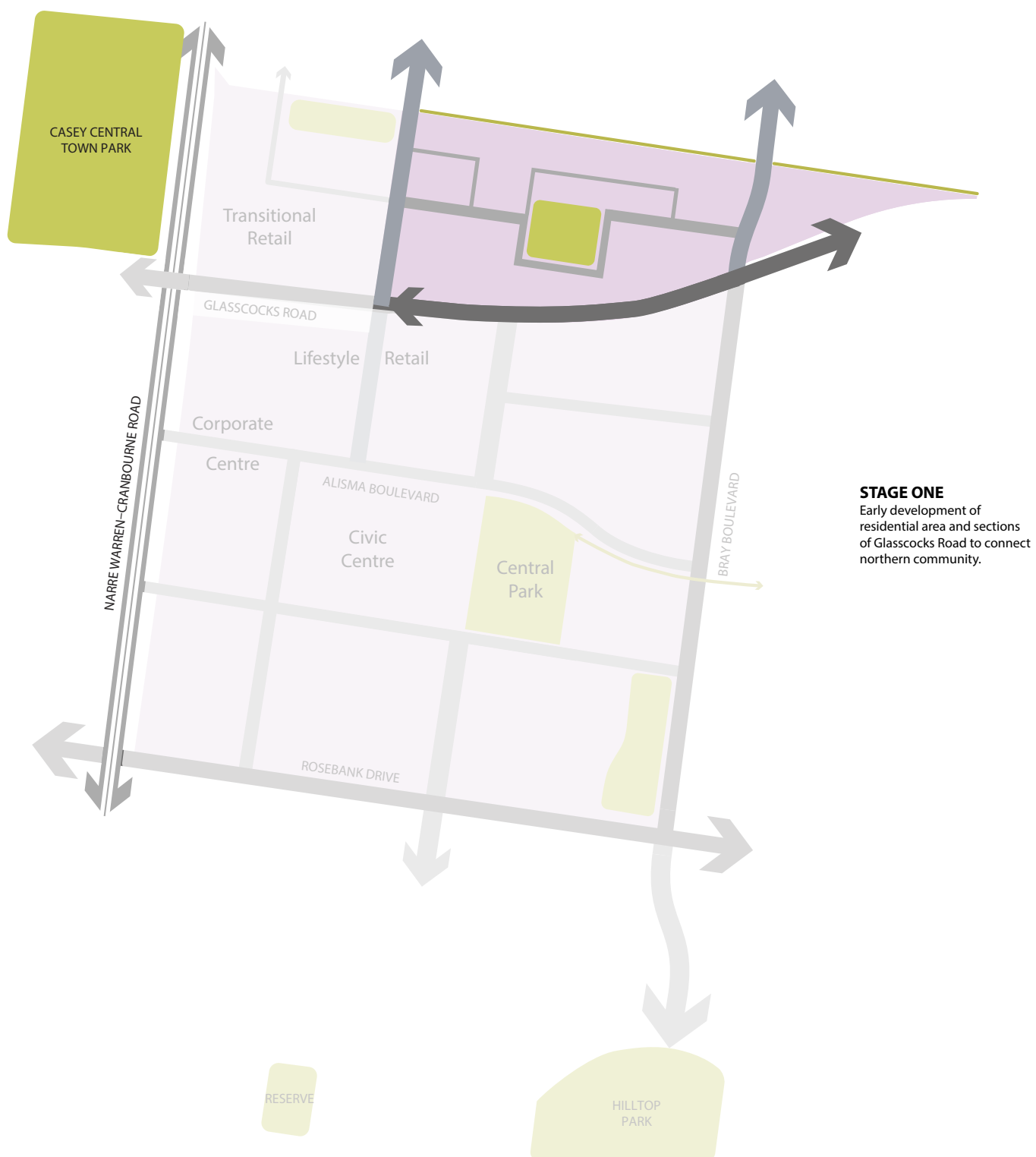
- Urban Space to facilitate overflow of civic activities
- Functions as a gathering place at the heart of the activity centre

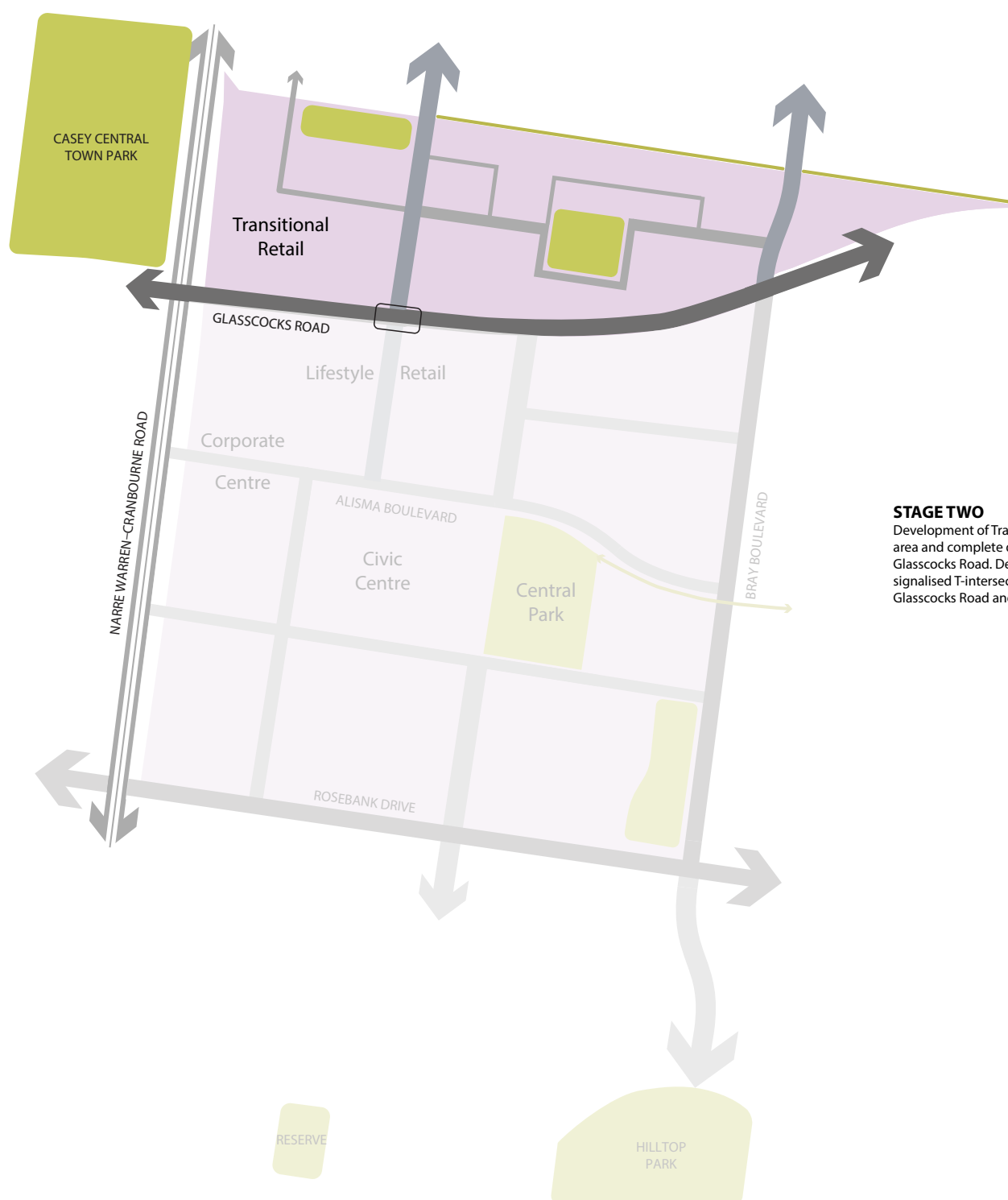


Views and Vistas

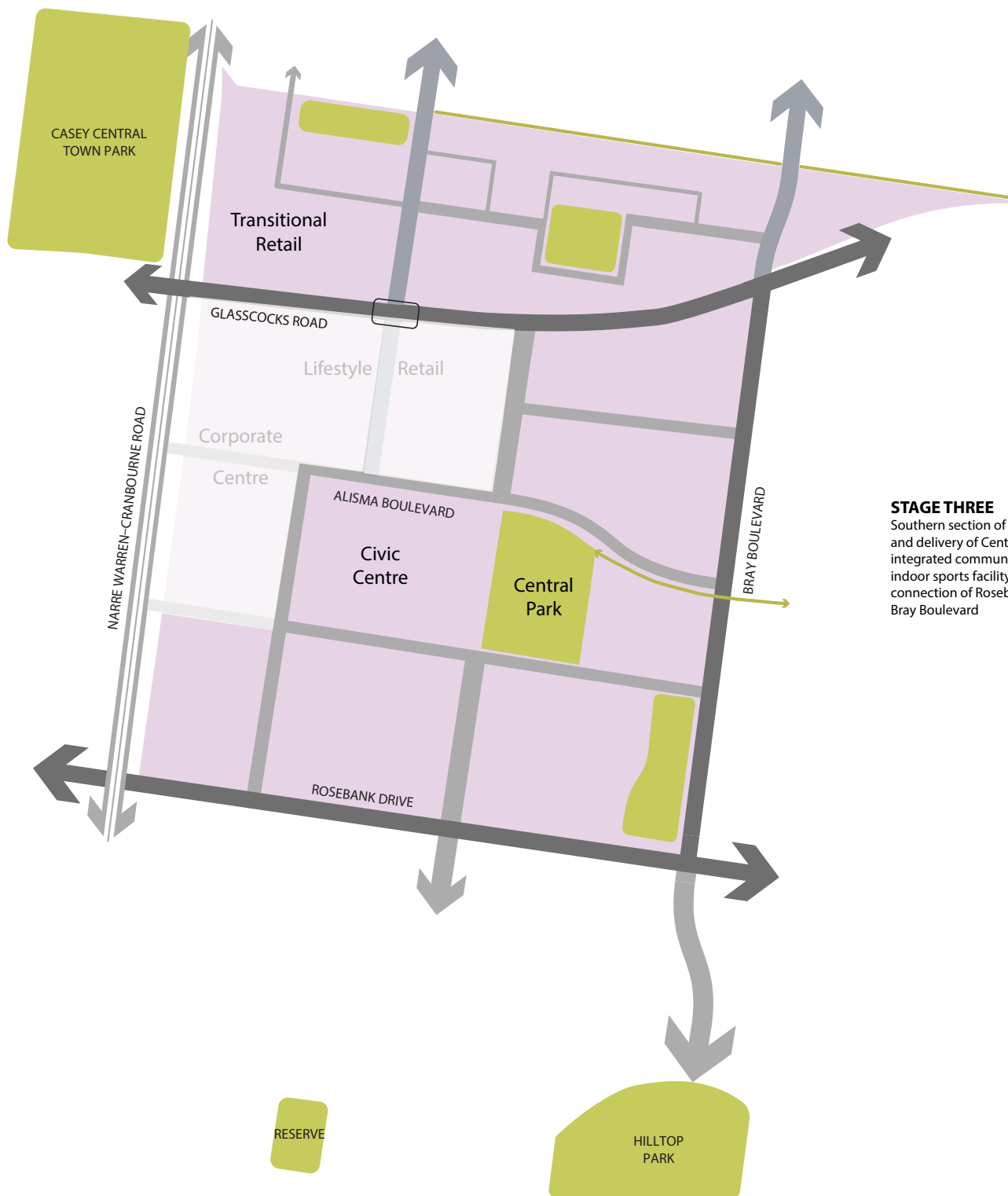
- Capture elevated and long distance views to Hilltop Park and Dandenong Ranges beyond
- Terminate views from Cranbourne North along the 'Community Spine' at the civic heart of the activity centre
- Terminate views along The Strand high street with a landmark civic building
- Create a legible urban edge to the core pedestrian area

4.3.3 - Activity Centre Indicative Staging Plan



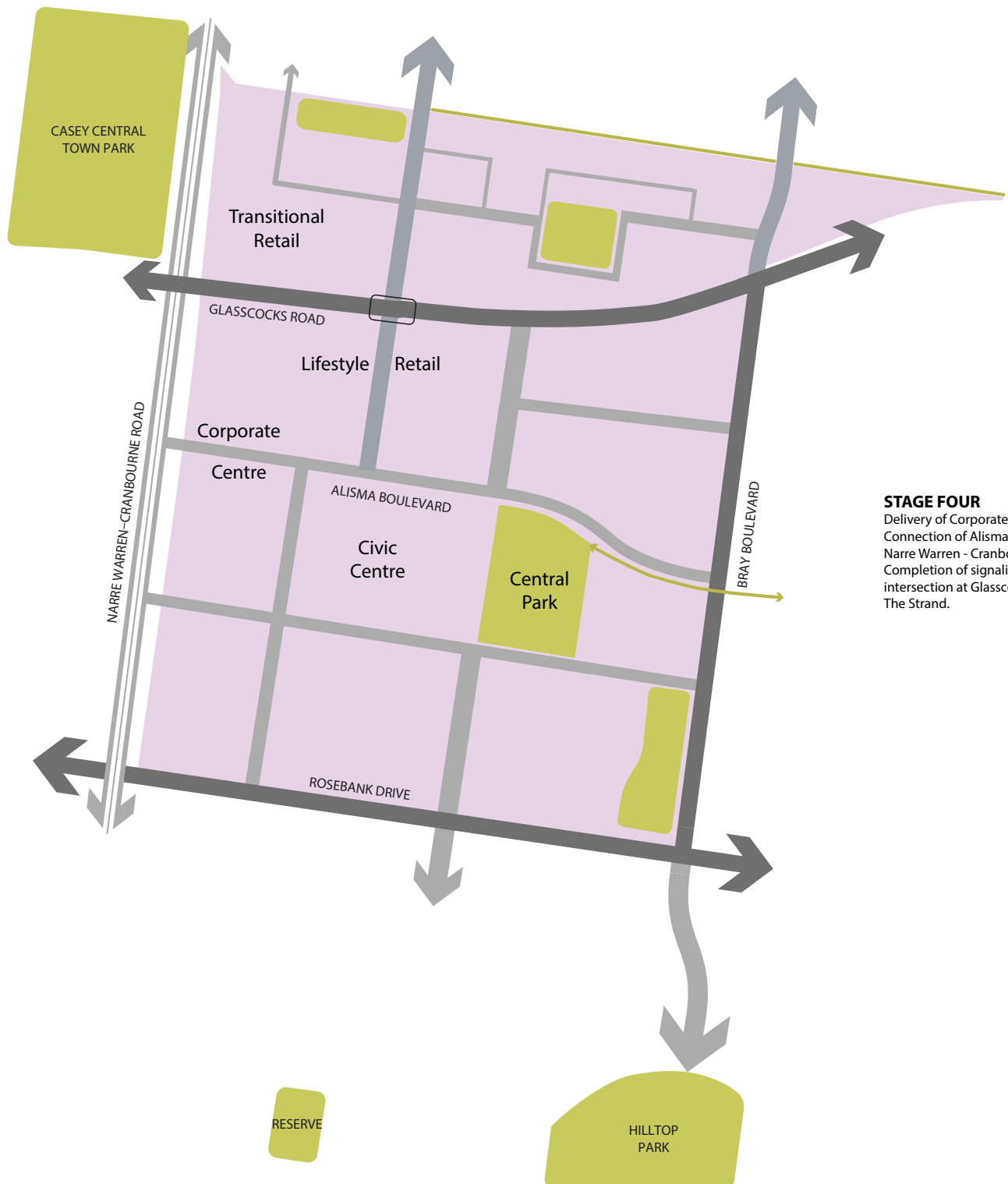


STAGE TWO
Development of Transitional Retail area and complete delivery of Glasscocks Road. Delivery of signalised T-intersection at Glasscocks Road and The Strand.



STAGE THREE

Southern section of residential area and delivery of Central Park, integrated community facility and indoor sports facility, and connection of Rosebank Drive and Bray Boulevard

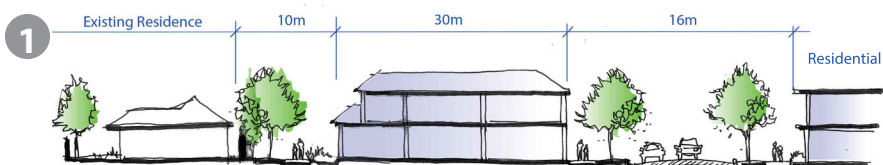
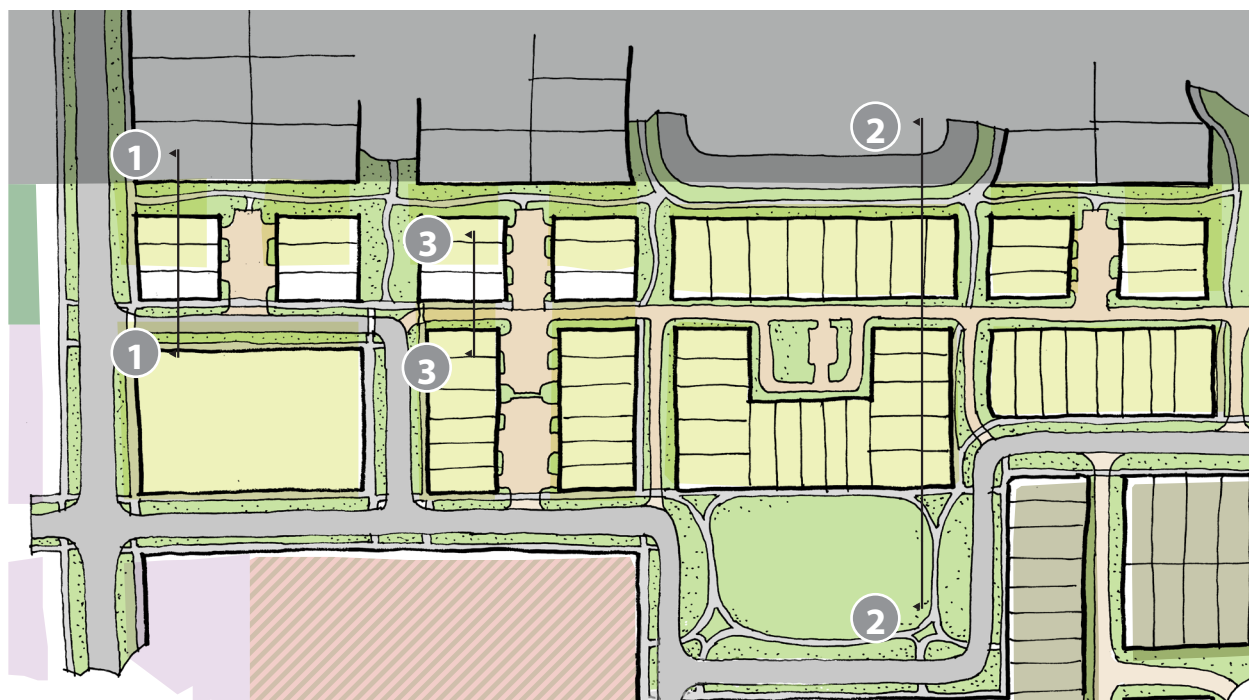


STAGE FOUR
Delivery of Corporate Centre.
Connection of Alisma Boulevard to
Narre Warren - Cranbourne Road.
Completion of signalised
intersection at Glasscocks Road and
The Strand.

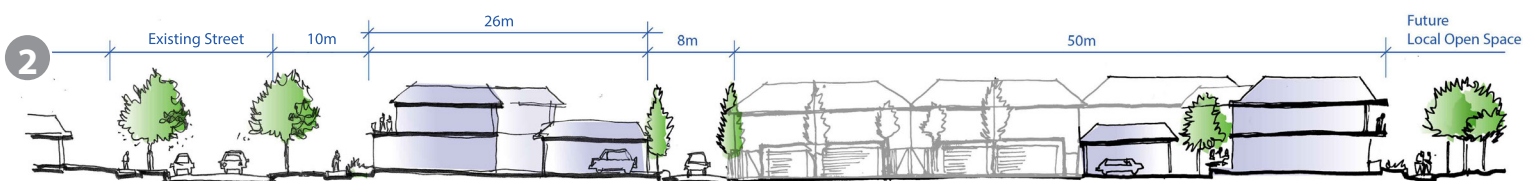
4.3.4 - The Strand Interface Concept Plan



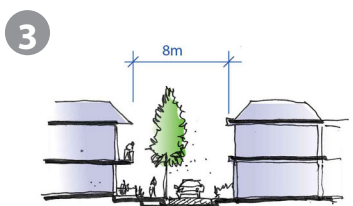
4.3.5 - Interface Housing Concept Plan and Cross Sections



Section 1 - Existing residential to local access road

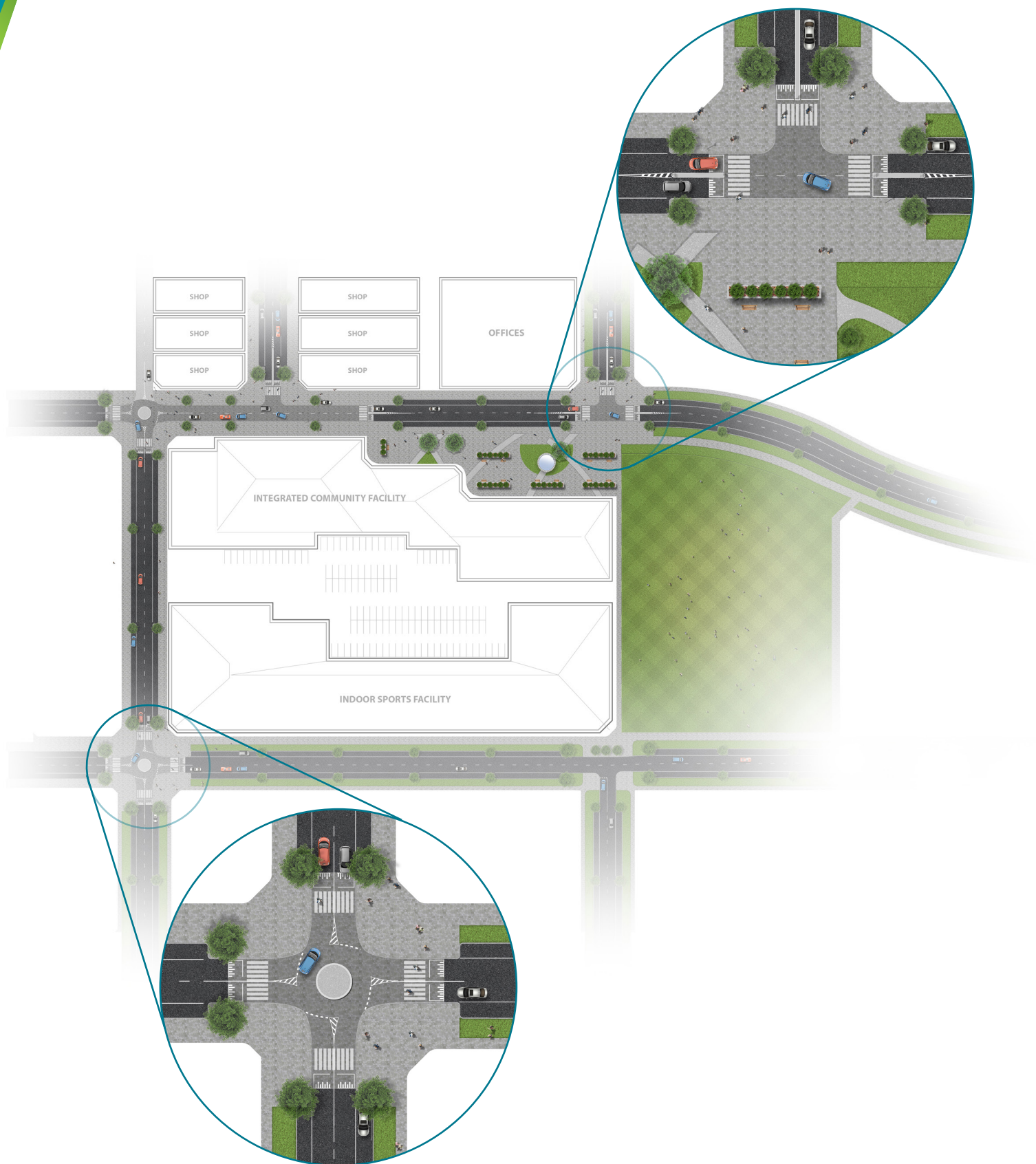


Section 2 - Existing residential to open space

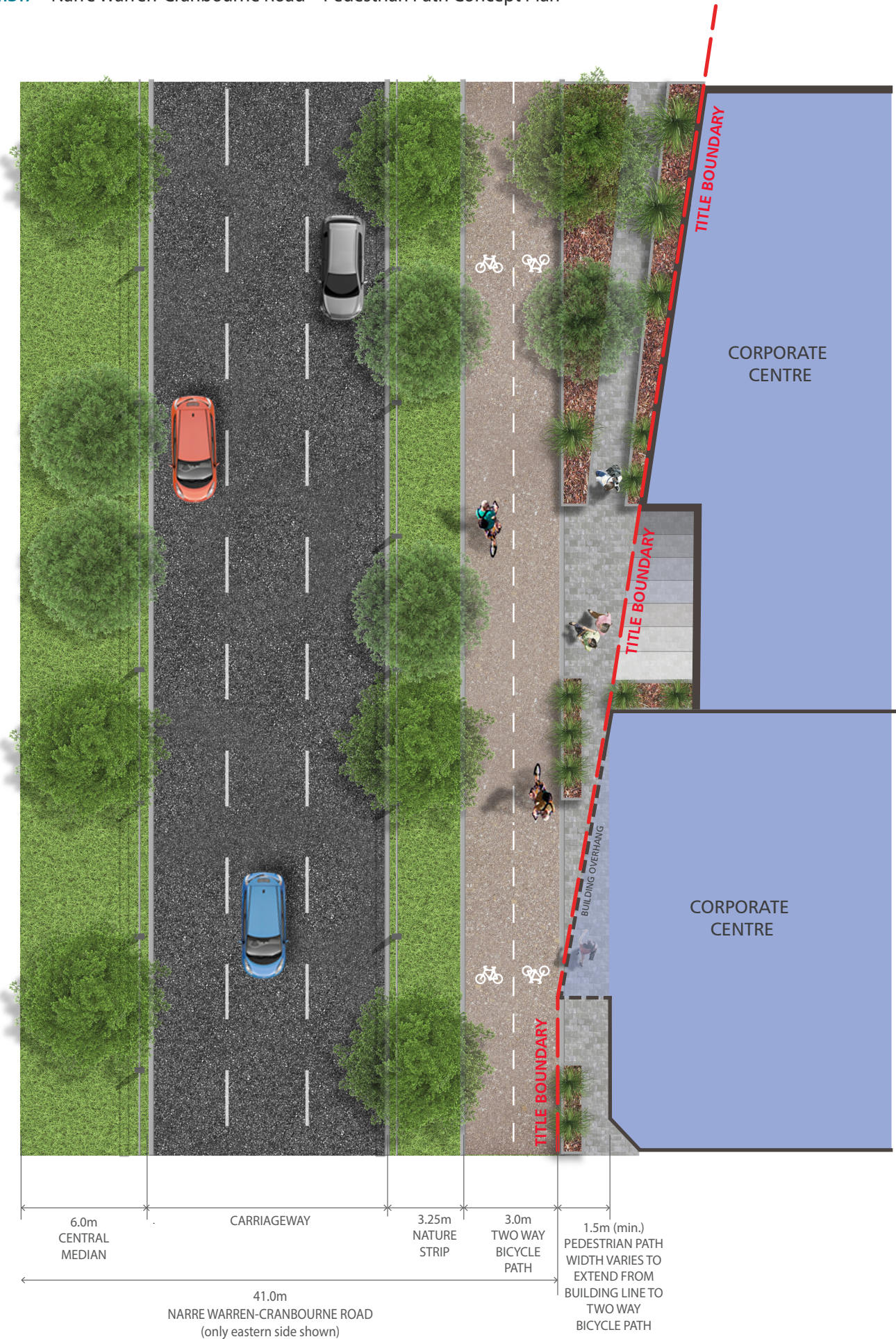


Section 3 - Typical walkway/shared drive

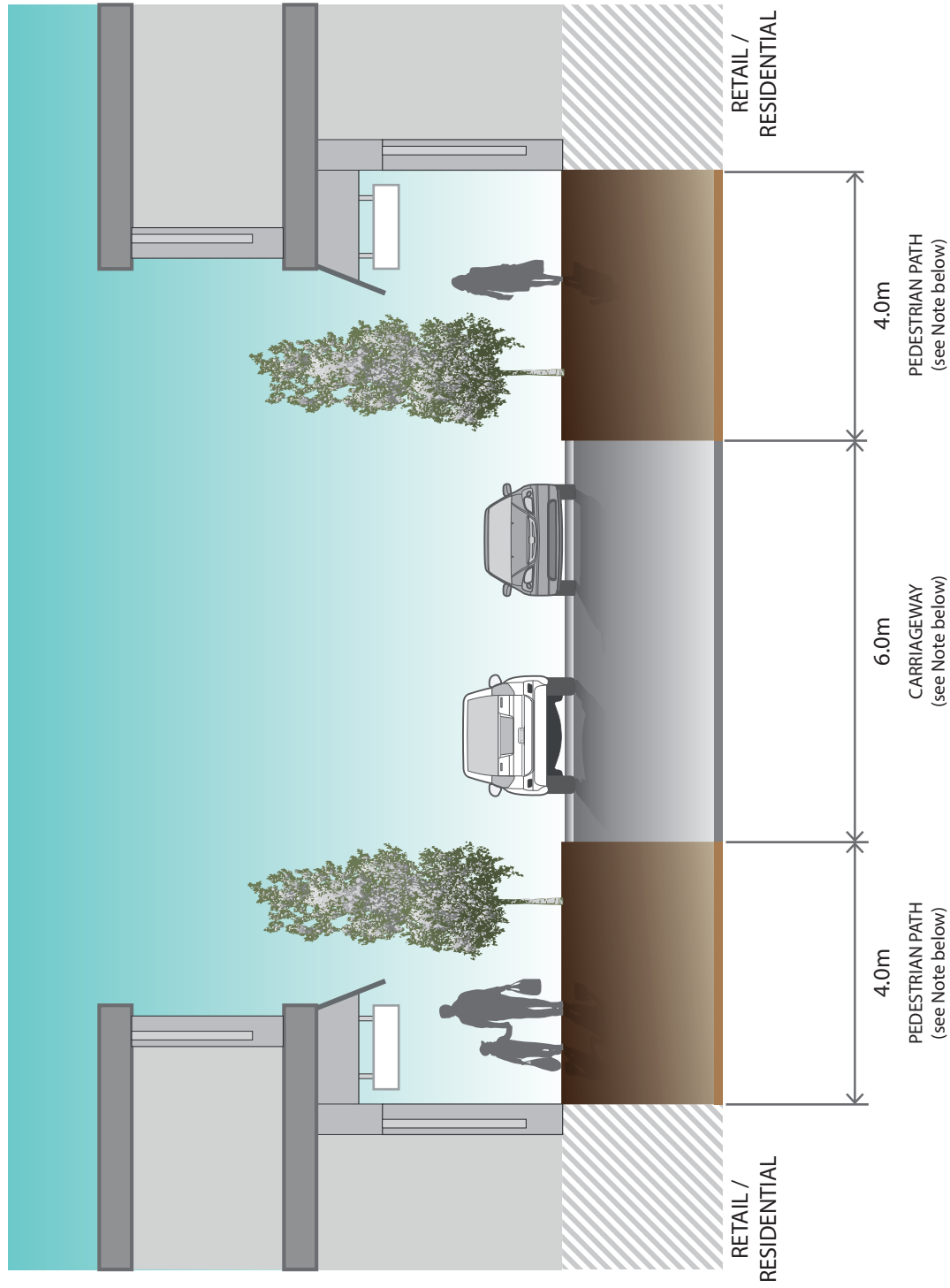
4.3.6 - Alisma Boulevard – Street and Intersections Concept Plan



4.3.7 - Narre Warren-Cranbourne Road – Pedestrian Path Concept Plan

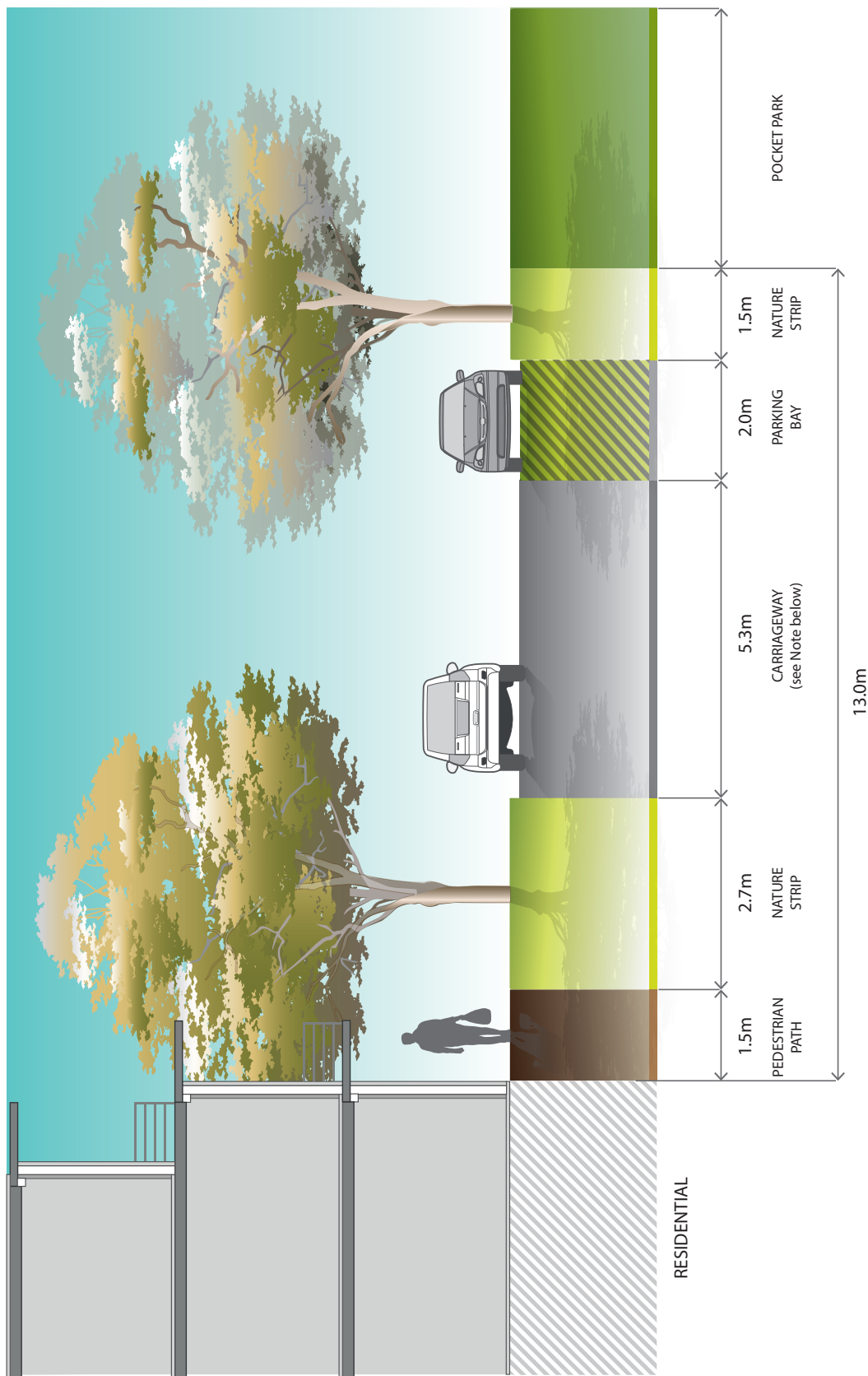


4.4 Street Cross Sections



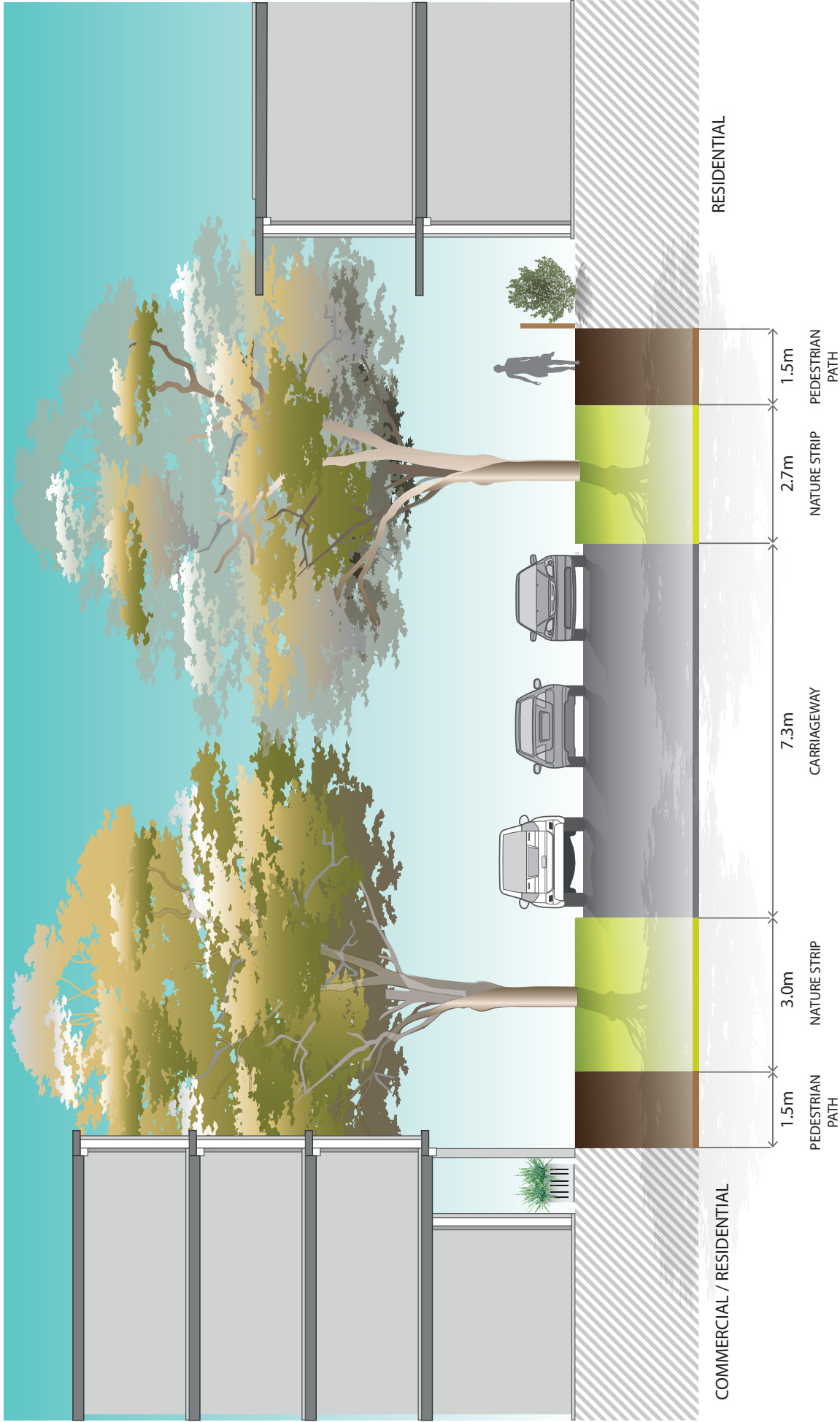
NOTES:

- Raised carriageway surface to control traffic speed and prioritise pedestrian movement
- Street trees to be planted in sufficiently sized pits within pedestrian trafficable grades



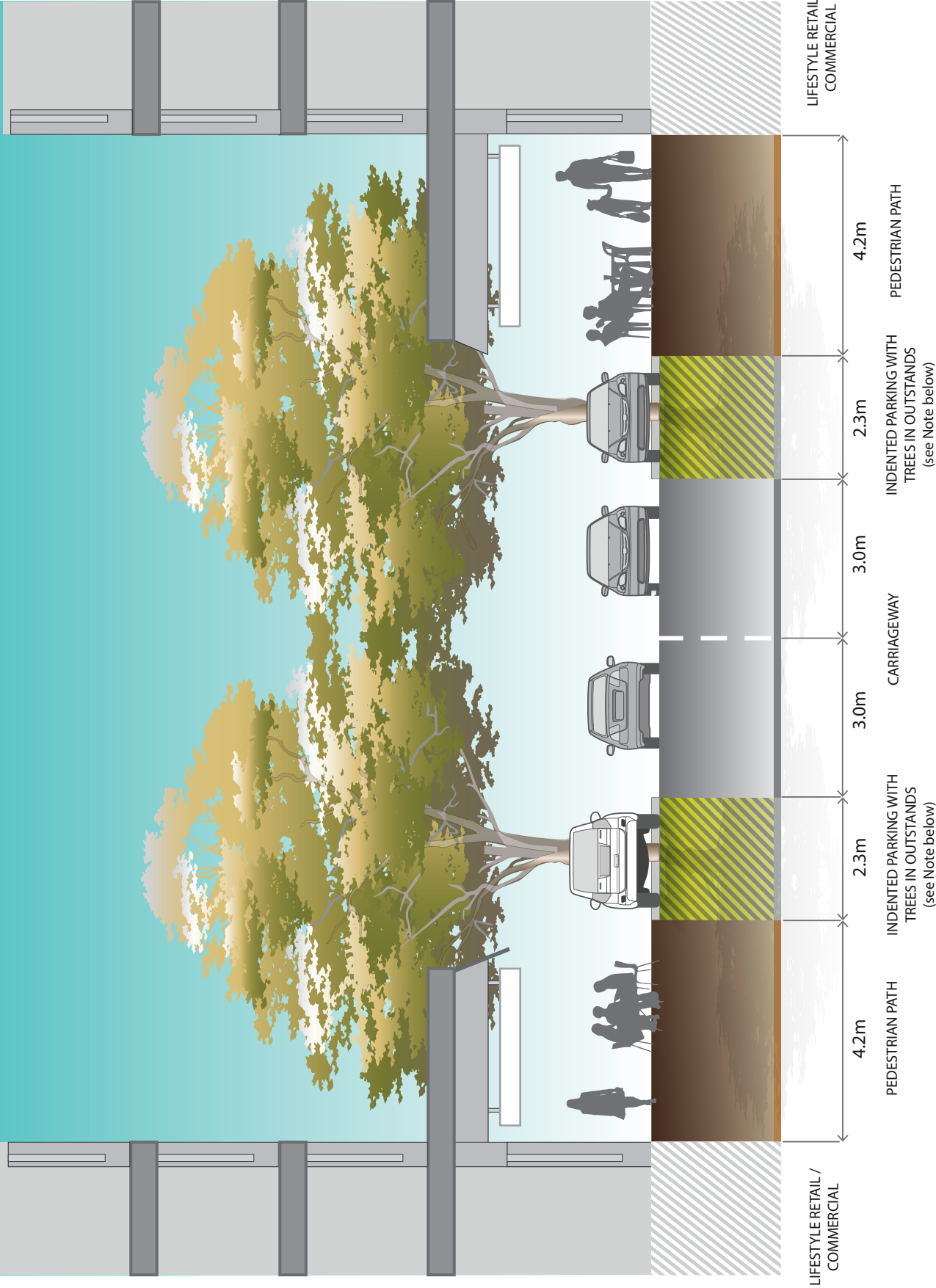
NOTES:

- Minimum street tree mature height 12 metres
- The carriageway is to be shared between bicycles and local vehicular traffic
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)



NOTES:

- Minimum street tree mature height 12 metres
- The carriageway is to be shared between bicycles and local vehicular traffic
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)
- Where adjacent a park road reserve width may be reduced to 13m by removing park side footpath and narrowing nature strips

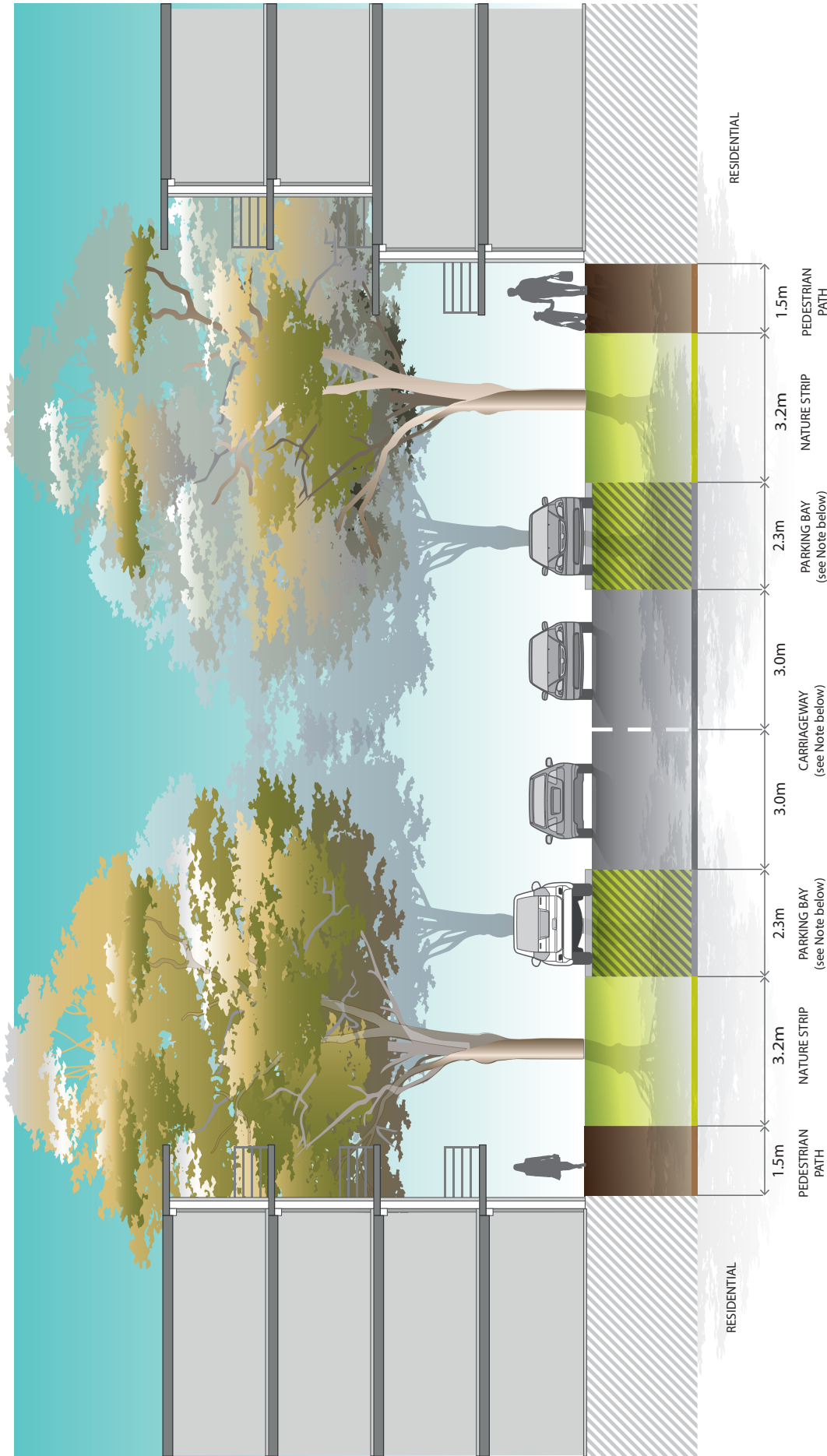


NOTES:

- Street tree outstands to be provided at regular intervals not exceeding six parking bays or approximately 40 metre centres

metropolitan
planning
advisory

Cross Section 4 The Strand High Street (19m)



- NOTES:**
- Minimum street tree mature height 12 metres
 - Street tree outstands to be provided at regular intervals not exceeding 10 parking bays or approximately 65 metre centres and at intersections
 - The carriageway is to be shared between bicycles and local vehicular traffic
 - All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)



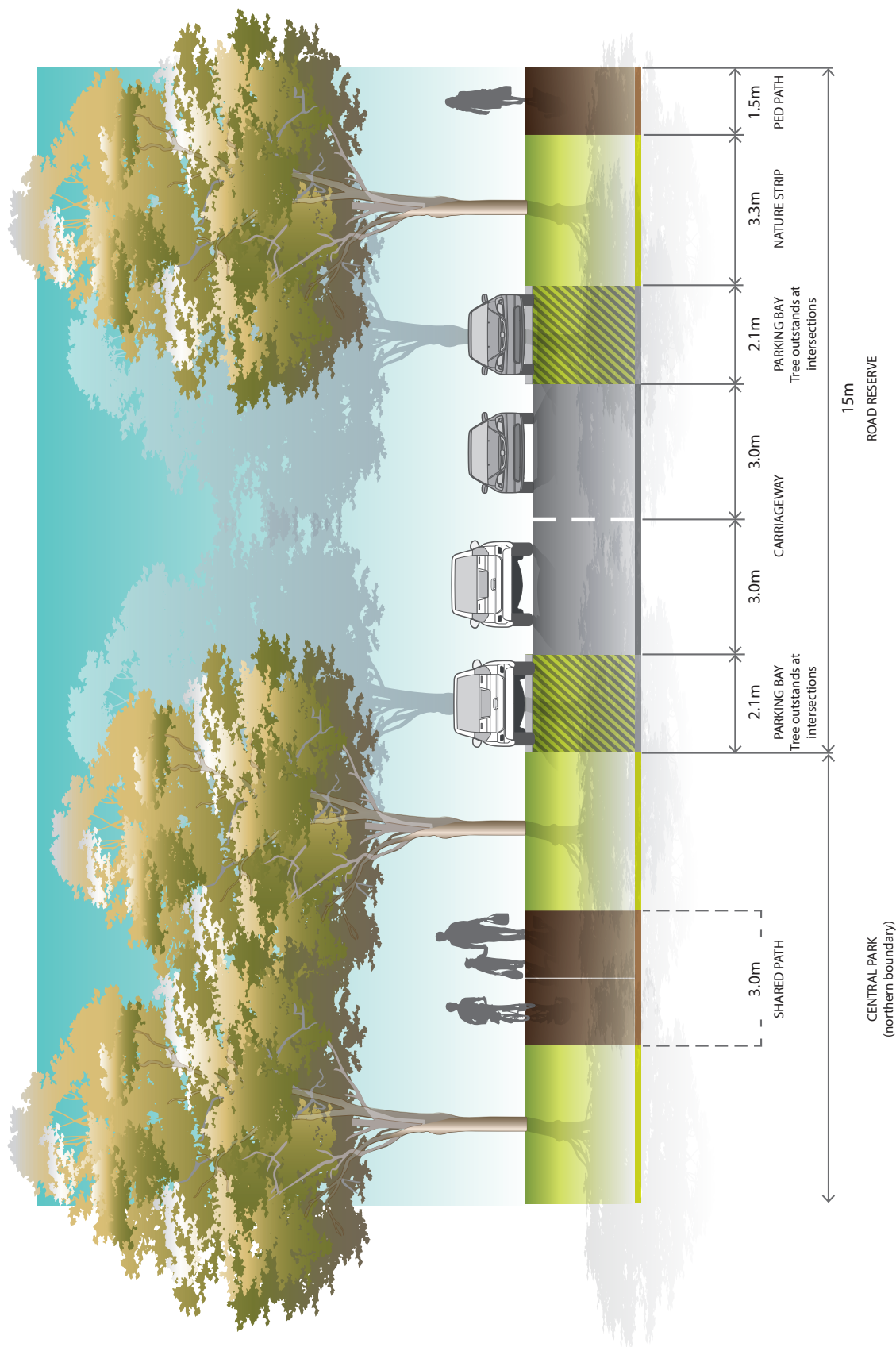
Cross Section 5.1

Local Access Street Level 2 with Shared Path Link (20m)
adjacent indoor sports facility, Corporate Centre and
Central Park (southern boundary)

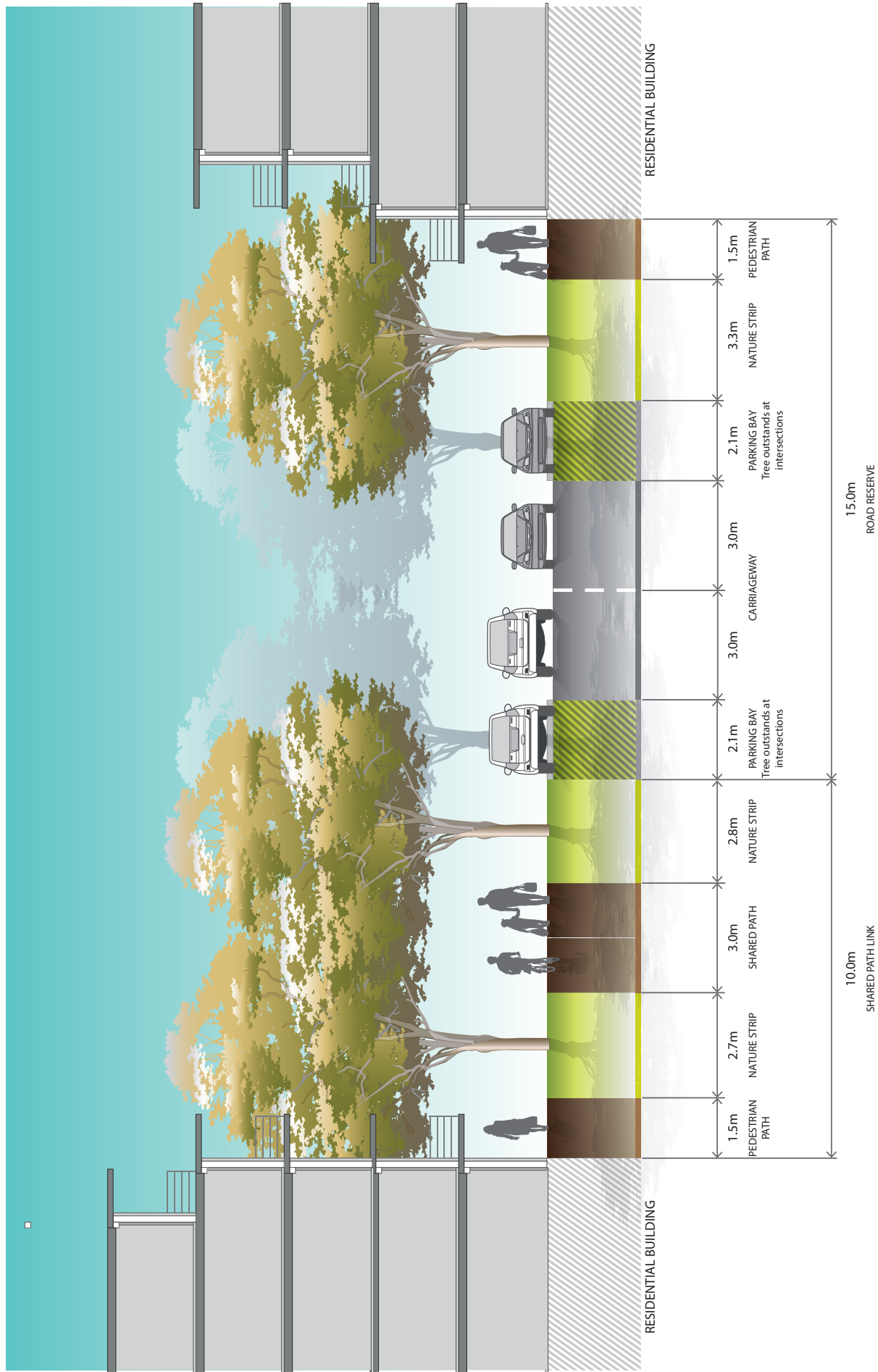
MPA
METROPOLITAN
PLANNING
AUTHORITY

NOTES:

- Minimum street tree mature height 12 metres
- Street tree outstands to be provided at regular intervals not exceeding 10 parking bays or approximately 65 metre centres and at intersections
- The carriageway is to be shared between bicycles and local vehicular traffic
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)

**NOTES:**

- Minimum street tree mature height 15 metres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual* for *Subdivision in Growth Areas* (April 2011)



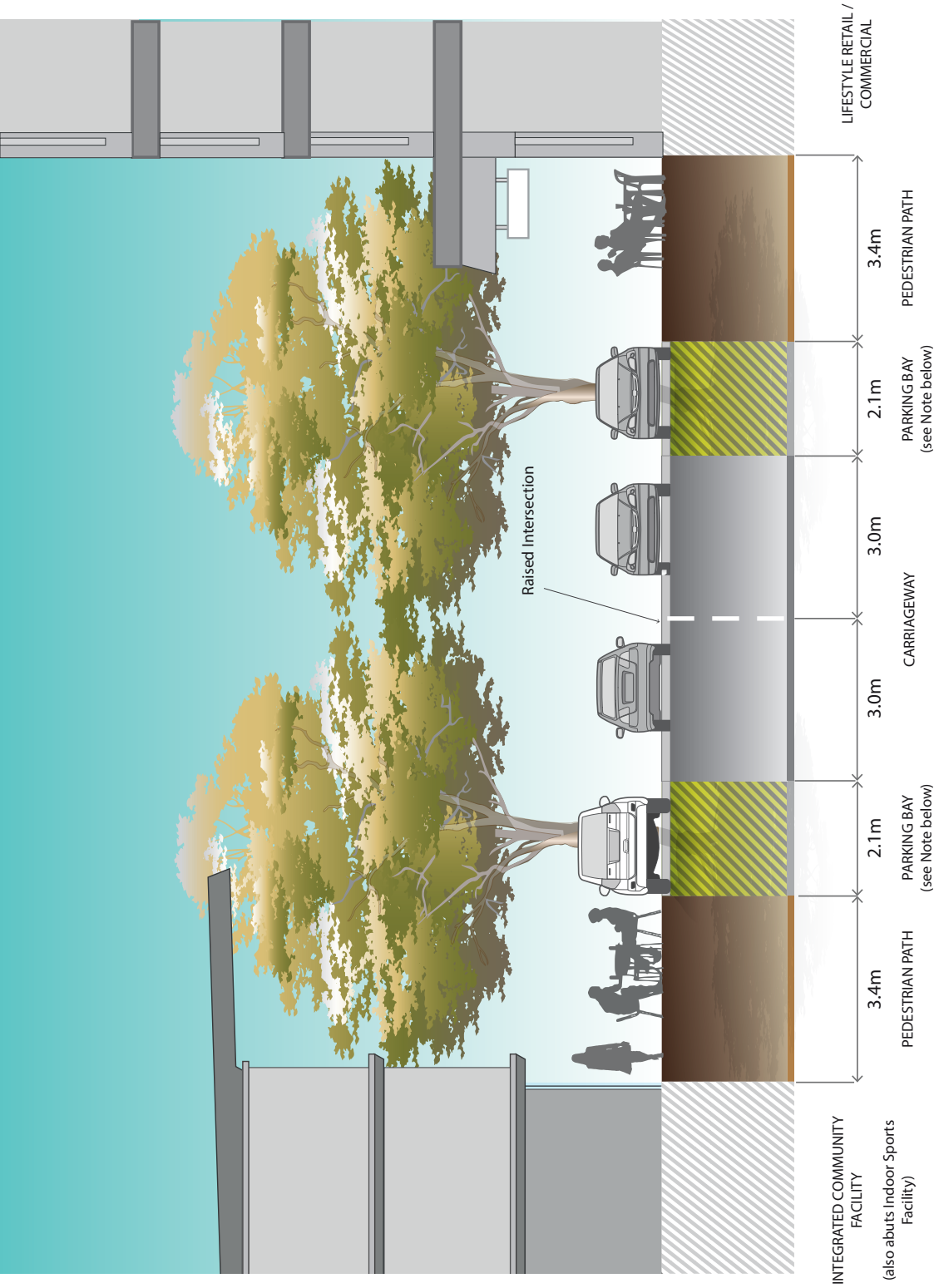
Cross Section 6.1

Local Access Street Level 2 (15m) with 10m Shared Path Link adjacent to high density residential area

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PLANNING
AUTHORITY

NOTES:

- Minimum street tree mature height 12 metres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas (April 2011)



Cross Section 7
Commercial Street (17m)



NOTES:

- Minimum street tree mature height 15 metres
- Street tree outstands to be provided at regular intervals not exceeding six parking bays or approximately 40 metre centres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)
- Raised intersection to control traffic speed and prioritise pedestrian movement (See Plan 9 and Alisma Boulevard Street and Intersections Concept Plan in Appendix 4.3.6)



NOTES:

- Pre-dominantly medium density residential (min. 300m² lot & max. 3 storeys), however includes small areas of high density residential & mixed use (see plan 9)
- Minimum street tree mature height 12 metres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)
- Where no local access street, housing may abut gas easement

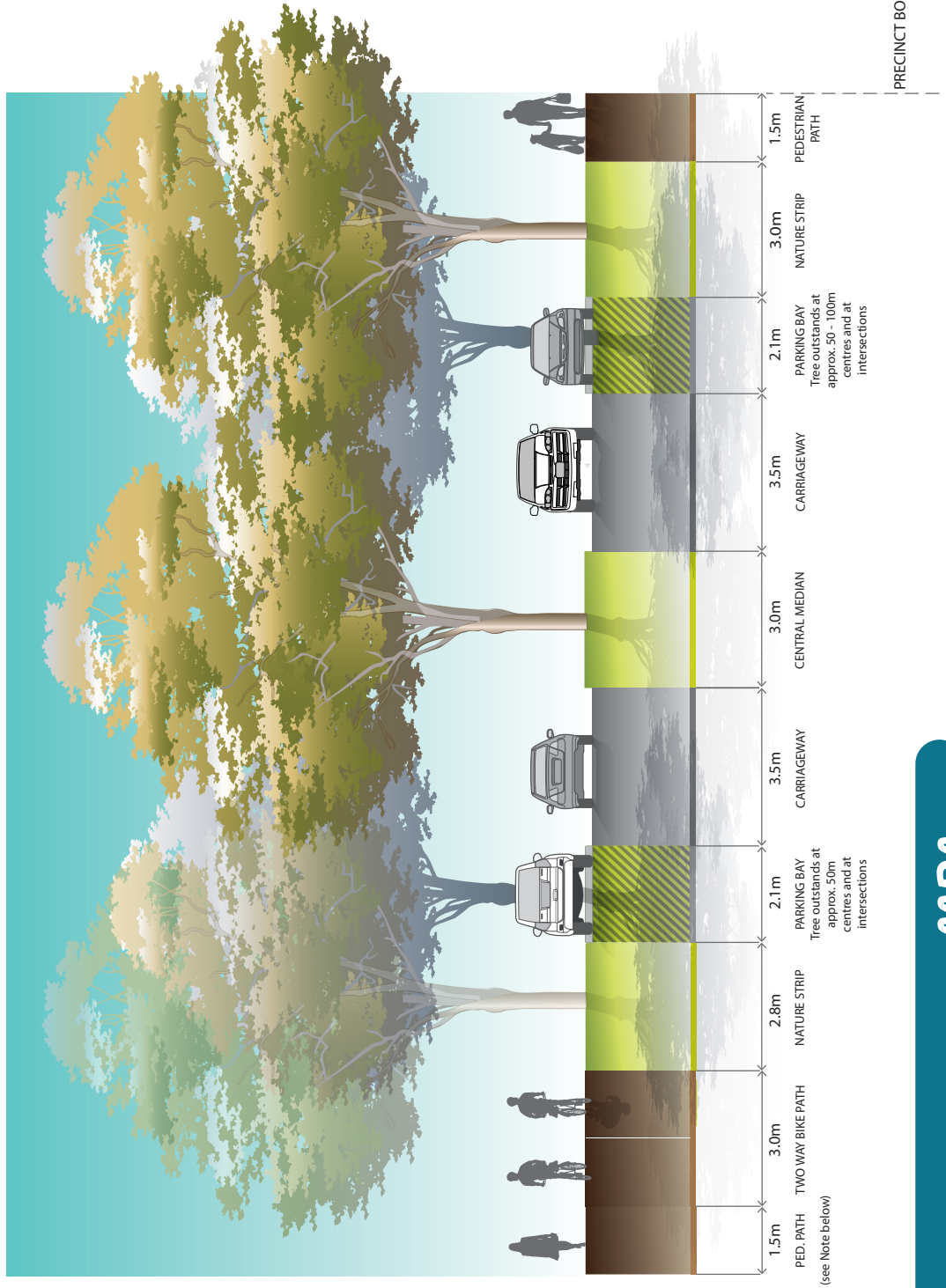


Cross Section 8.1

Boulevard Connector Street

Retarding basin interface with gas easement

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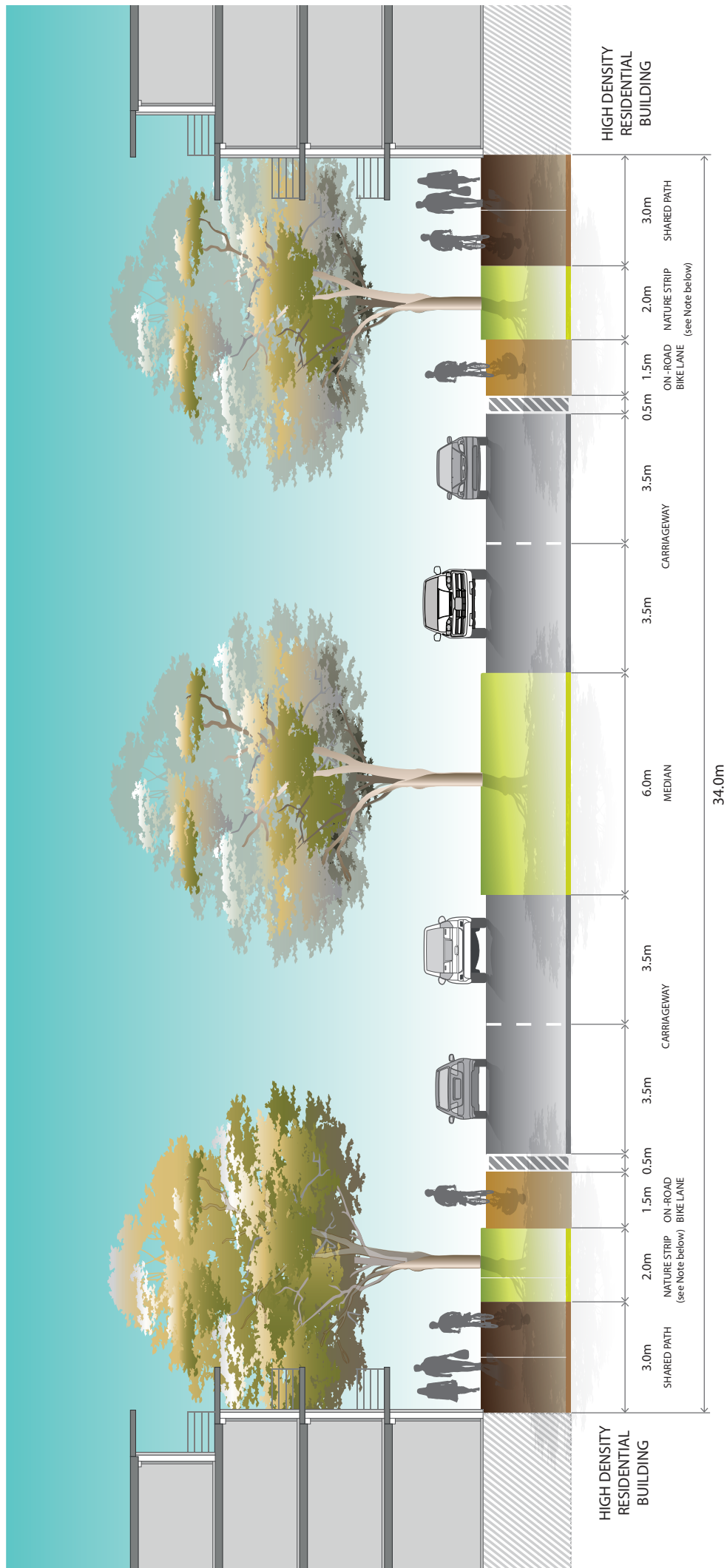


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Cross Section 9 Boulevard Connector Street (26m)

NOTES:

- Continuous demarcation by way of line-marking or different surface materials to be provided between pedestrian path and two-way bicycle path
- Breaks in median permitted only at intersections with those streets identified on Plan 9
- Minimum street tree mature height 12 metres
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)
- Include a central median with large canopy trees to create a boulevard effect. Trees are to be centrally planted in median.
- Topsoil used in central medians is to be sandy loam, with a minimum depth of 200mm. The surface of medians is to be free-draining with a minimum cross fall of 2%, and is to be planted with warm season grasses.
- In areas where high pedestrian volumes are expected (e.g. around schools) central medians should be paved with harder wearing surfaces such as granitic sand or other pavements.
- Any garden beds in central medians are to be offset 1.5m from back of kerb.
- Kerb to central median is to be SM2 Semi-mountable kerb.
- Depending on the location of breaks in the median, provide intermediate pedestrian crossing points to accommodate mid-block crossings
- An alternative boulevard treatment can be achieved through a wider verge on one side capable of accommodating a double row of canopy trees.
- Verge widths may be reduced where roads abut open space with the consent of the Responsible Authority.

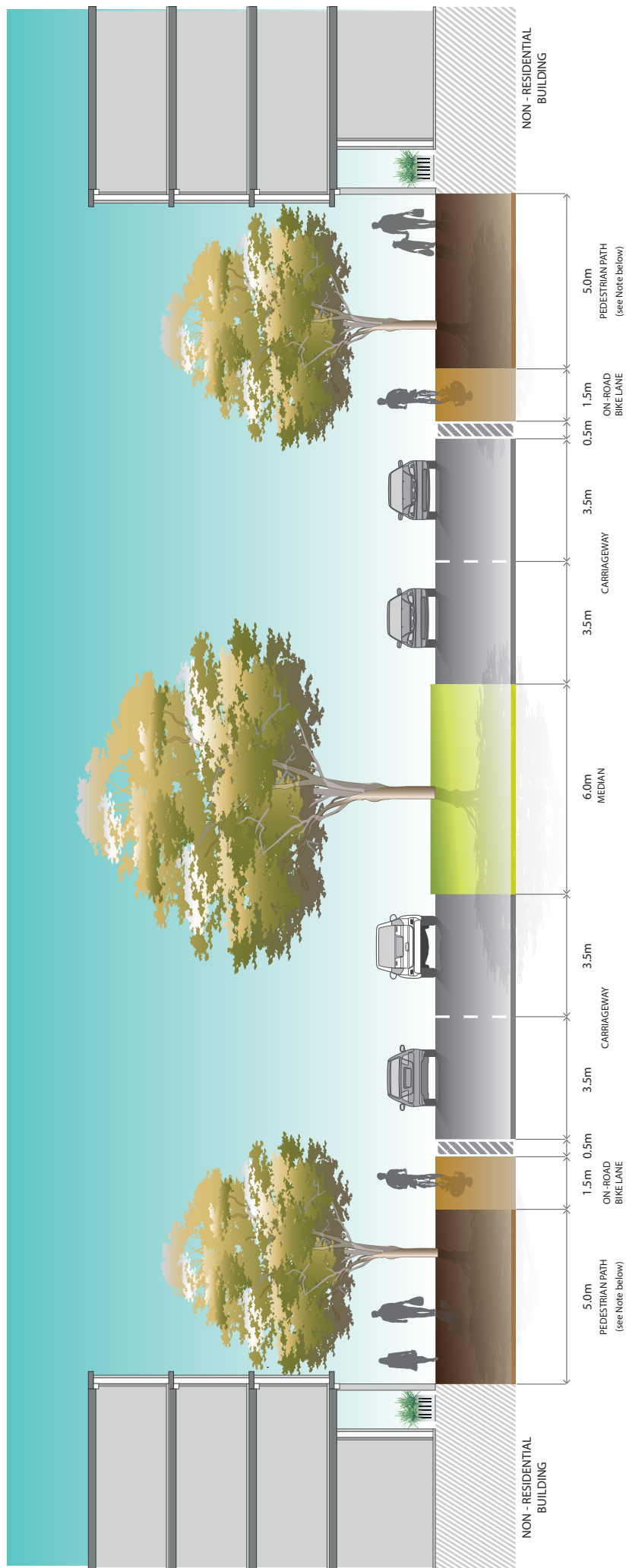
**NOTES:**

- Street trees to be planted in sufficiently sized pits and structural soil to support plant growth
- 60km/hr – enables large canopy trees to median and increased tree planting to verge if no frontage road
- Cross section treatment subject to detailed design approval by the Responsible Authority
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in Engineering Design and Construction Manual for Subdivision in Growth Areas (April 2011)

Cross Section 10

Secondary Arterial Road 4 Lane Glasscocks Road (34m)

adjacent to high density residential area



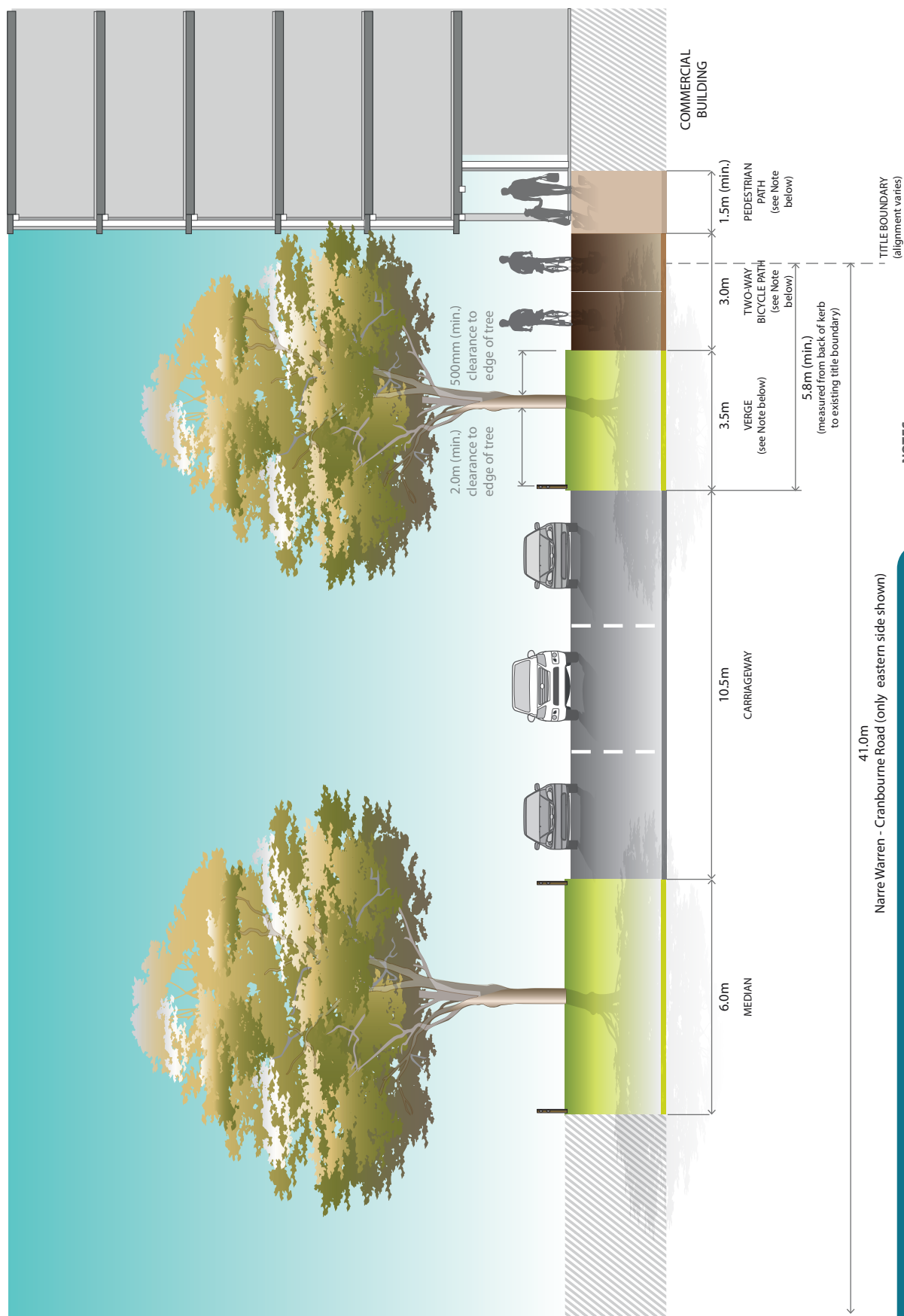
Cross Section 11

Secondary Arterial Road 4 Lane Glasscocks Road (34m)

adjacent to non - residential areas

NOTES:

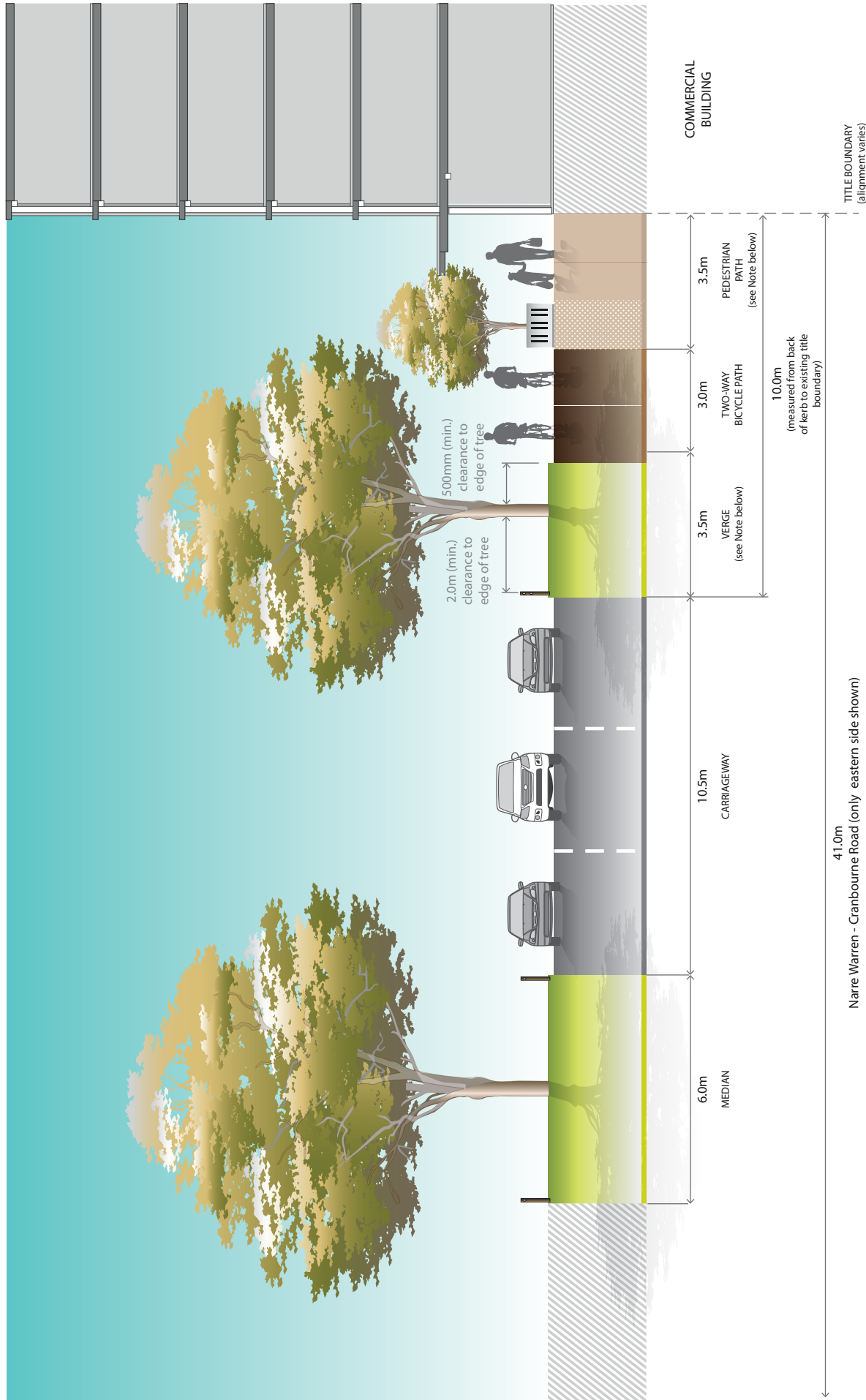
- Minimum street tree mature height 12 metres
- Street trees within pedestrian path to be planted in sufficiently sized pits with pedestrian trafficable grates
- All kerbs are to be B2 Barrier Kerb as per Figure 008 in *Engineering Design and Construction Manual for Subdivision in Growth Areas* (April 2011)



Cross Section 12

Activity Centre Interface to Primary Arterial Road (6 lanes) (41m)
Narre Warren - Cranbourne Road (Corporate Centre South)

mpa
 METROPOLITAN
 PLANNING
 AUTHORITY

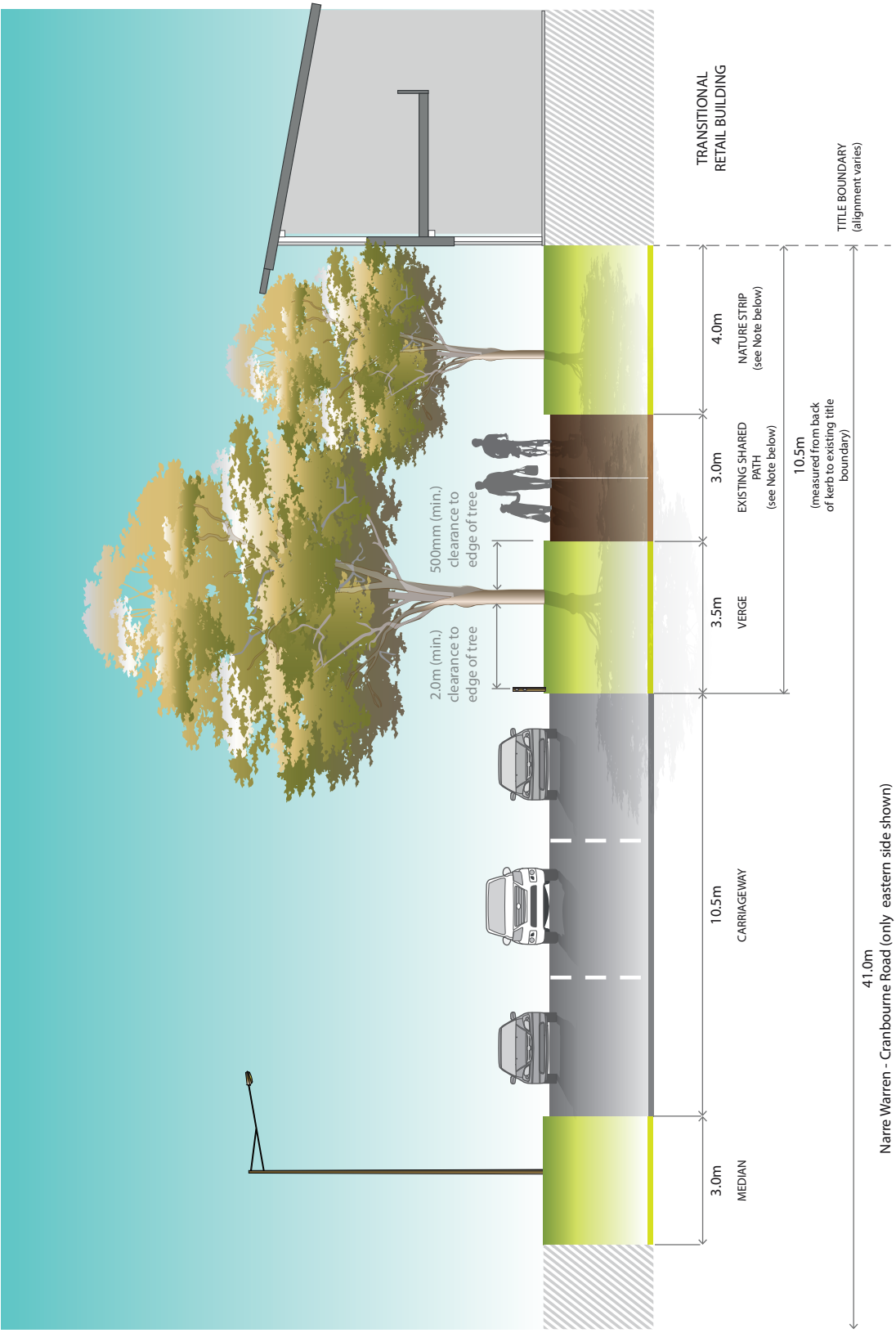


NOTES:

- The existing shared path may need to be relocated in locations to enable tree planting in verge.
- See Appendix 4.3.7 Narre Warren - Cranbourne Road Pedestrian Path Concept Plan

Cross Section 12.1
Activity Centre Interface to Primary Arterial Road (6 lanes) (41m)
Narre Warren - Cranbourne Road (Corporate Centre North)

MPA
 METROPOLITAN
 PLANNING
 AUTHORITY



NOTES:

- A minimum 3 metre wide nature strip should be provided to enable a second row of tree planting.
- The existing shared path may need to be relocated in locations to enable tree planting in verge.

Cross Section 12.2
Activity Centre Interface to Primary Arterial Road (6 lanes) (41m)
Narre Warren - Cranbourne Road (Transitional Retail)

MPA
 METROPOLITAN
 AUTHORITY

4.5 Services Placement Guidelines

Figures 003 and 004 in the Engineering Design and Construction Manual for Subdivision in Growth Areas (Growth Areas Authority, April 2011) outline placement of services for a typical residential street environment. This approach is appropriate for the majority of the 'standard' road cross sections outlined in Appendix 4.4 of this PSP containing grassed nature strips, footpaths and road pavements.

NON-STANDARD ROAD CROSS SECTIONS

To achieve greater diversity of streetscape outcomes, which enhances character and amenity of these new urban areas, non-standard road cross sections are required. Non-standard road cross sections will also be necessary to address local needs, such as fully sealed verges for high pedestrian traffic areas in town centres and opposite schools. This PSP contains suggested non-standard 'variation' road cross sections (refer Appendix 4.4 Street Cross Sections), however other non-standard outcomes are encouraged.

For non-standard road cross sections where service placement guidance outlined in Figure 003 and 004 in the *Engineering Design and Construction Manual for Subdivision in Growth Areas* (Growth Areas Authority, April 2011) is not applicable, the following service placement guidelines will apply.

	UNDER PEDESTRIAN PAVEMENT	UNDER NATURE STRIPS	DIRECTLY UNDER TREES ¹	UNDER KERB	UNDER ROAD PAVEMENT ²	WITHIN ALLOTMENTS	NOTES
SEWER	Possible	Preferred	Possible	No	Possible	Possible ³	
POTABLE WATER	Possible ⁴	Preferred	Preferred	No	Possible	No	Can be placed in combined trench with gas
RECYCLED WATER	Possible ⁴	Preferred	Preferred	No	Possible	No	
GAS	Possible ⁴	Preferred	Preferred	No	No	No	Can be placed in combined trench with potable water
ELECTRICITY	Preferred ⁴	Possible	Possible	No	No	No	Pits to be placed either fully in footpath or nature strip
FTTH/TELCO	Preferred ⁴	Possible	Possible	No	No	No	Pits to be placed either fully in footpath or nature strip
DRAINAGE	Possible	Possible	Possible	Preferred	Preferred	Possible ³	
TRUNK SERVICES	Possible	Possible	Possible	Possible	Preferred	No	

- NOTES**
1. Trees are not to be placed directly over property service connections
 2. Placement of services under road pavement is to be considered when service cannot be accommodated elsewhere in road reserve. Placement of services beneath edge of road pavement/parking bays is preferable to within traffic lanes
 3. Where allotment size/frontage width allows adequate room to access and work on a pipe
 4. Where connections to properties are within a pit in the pedestrian pavement/ footpath

GENERAL PRINCIPLES FOR SERVICE PLACEMENT

- Place gas and water on one side of road, electricity on the opposite side.
- Place water supply on the high side of road.
- Place services that need connection to adjacent properties closer to these properties.
- Place trunk services further away from adjacent properties.
- Place services that relate to the road carriageway (e.g. drainage, street light electricity supply) closer to the road carriageway.
- Maintain appropriate services clearances and overlap these clearances wherever possible.

