Altona North

August 2018

Comprehensive Development Plan



Victorian Planning Authority

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1.0 INTRODUCTION

The Altona North Comprehensive Development Plan (the CDP) applies to approximately 67 hectares of land, eight kilometres west of the Melbourne CBD, in Altona North and South Kingsville; within the municipality of Hobsons Bay. The land is bordered to the north by the West Gate Freeway, AusNet's Brooklyn Terminal sub-station, the Sunshine to Newport freight line and 2 Watson Street, to the east by New Street, to the south by Blackshaws Road, and to the west by Kyle Road.

The Precinct has been used for industry for much of the 20th century and is now largely vacant and undergoing decontamination.

The CDP is a long-term plan to facilitate the redevelopment of the Precinct as a residential and commercial/mixed use precinct. It describes the future layout and use of the partially vacant precinct as a modern urban residential based community, including how and where community and transport infrastructure are planned to support development.

The CDP and Altona North Development Contributions Plan, Schedule 2 to the Comprehensive Development Zone and the Environmental Audit Overlay provide a set of controls, requirements and guidelines that will guide the development of the Precinct for many years.

1.1 How to read this document

The CDP is incorporated into the Hobsons Bay Planning Scheme. As such it should be read as part of the planning scheme.

The way in which the various elements of the CDP are to be applied is as follows:

- Vision and Objectives: The vision and objectives must be complied with.
- Future Urban Structure: The future urban structure of the site as shown on Plan 1, must be generally complied with, to the satisfaction of the responsible authority. Minor variations may be permitted by the responsible authority, provided the overall vision and objectives for the development of the site are complied with.
- Requirements: All requirements must be complied with. Requirements outline matters that must be taken into account in the design of a development.
- Guidelines: All guidelines should be complied with. Guidelines outline matters that should be taken into account
 in the design of a development. If the responsible authority is satisfied that an application for an alternative to a
 guideline satisfies the vision, objectives or requirements of the CDP, then the responsible authority may consider
 the alternative.

Table 1 provides a summary of the land use budget for the Precinct.

Table 1 Summary land use budget

ALTONA NORTH COMPREHENSIVE DEVELOPMENT PLAN	HECTARES	% OF TOTAL	% OF NDA
TOTAL PRECINCT AREA	66.95		
TRANSPORT			
and required for the West Gate Tunnel Project	1.04	1.6%	2.0%
Connector Roads – Widening and Intersection Flaring	4.26	6.4%	8.3%
Non-Arterial Road – Retained existing road reserve	0.96	1.4%	1.9%
Sub-total Transport	6.26	9.4%	12.2%
COMMUNITY BUILDINGS			
Local Community Facility (DCP land)	0.50	0.7%	1.0%
Sub-total Community	0.50	0.7%	1.0%
OPEN SPACE			
JNCREDITED OPEN SPACE			
Redundant utility easement / tree reserve	1.11	1.7%	2.2%
Proposed area required by West Gate Tunnel Project	3.00	4.5%	5.8%
Sub-total Uncredited Open Space	4.11	6.2%	8.0%
CREDITED OPEN SPACE			
ocal Park (via Cl 52.01)	4.74	7.1%	9.2%
Sub-total Credited Open Space	4.74	7.1%	9.2%
Total All Open Space	8.85	13.2%	17.2%
TOTAL NET DEVELOPABLE AREA (NDA)	51.35	76.7%	
SUB-TOTALS			
RESIDENTIAL – NDA (HA)	47.42	70.8%	
TC & COMMERCIAL/MIXED USE AREA – NDA (HA)	3.93	5.9%	
Local Town Centre (LTC) (New)	2.15	3.2%	
Commercial / Mixed Use area (existing)	1.13	1.7%	
Commercial / Mixed Use area (new)	0.65	1.0%	
ASSUMPTIONS (NEW DEVELOPMENT)			
Dwellings	3,000	dwelling units	
Retail floorspace	5,500	m² GLFA	
Commercial/Mixed Use floorspace (new)	10,000	m ² GLFA	
RESIDENTIAL	NDA (HA)	DWELLINGS/ NDHA	LOTS/ DWELLINGS
		NOTIA	3,000

Note: Numbers in this table have been rounded

2.0 OUTCOMES

2.1 Vision

The Altona North Precinct represents an exciting opportunity to develop a vibrant, accessible and sustainable residential community that will support approximately 7,000 people in high quality homes with a full range of facilities to provide a mixed-use development that integrates with and enhances the existing urban environment.

The area will allow for the conversion of previously industrial lands into a new community in the heart of an existing residential area. Development will respond well to the character of the surrounding area through the provision of low-rise townhouses around the perimeter of the site, transitioning toward some medium rise apartments in the centre of the large site where the impact of development on existing residents will be limited. New development will respond sympathetically to allow existing industrial activities to continue to operate and will reference its former industrial past through the interpretation of design.

A new Local Town Centre is located on Blackshaws Road and its alignment is essential to linking existing and future communities. It is envisaged to include a supermarket, cafes, restaurants and other specialty retail with apartments located above the first floor. The Local Town Centre will include civic spaces to encourage pedestrian activity and the ability to hold small public events. The Local Town Centre will integrate with the existing mixed-use centre, 'Shaws Business Park' at 216–230 Blackshaws Road including a large medical centre, as well as a future 'Commercial/ Mixed Use' area to the west which will incorporate a new community centre and a mix of office and residential uses to encourage the creation of local jobs.

Combined with the Local Town Centre, and some of the existing uses within the existing Shaws Business Park, the area will integrate as a mixed use centre over time to encourage activity and intensification along Blackshaws Road and the north–south spine roads.

The Commercial/Mixed Use area will be centred upon a distinctive boulevard that will intersect with The Broadway to the south of Blackshaws Road. This new intersection will mark the entrance to the new community and provide a direct view line from the community centre to the large open space in the centre of the precinct. The new boulevard has been designed with enhanced street trees and a focus on the amenity of the cyclist and pedestrian.

Residents will have access to a generous amount of high quality local parks and public spaces. Public spaces including streets will be extensively planted with trees to create an attractive, pleasant and safe place to work and live.

Key routes and open spaces will link to an excellent network of cycle paths including a link to the Federation Trail beneath the West Gate Freeway and to train stations at Spotswood and Newport. The precinct will also benefit from excellent access to buses that will connect with these stations and to the CBD. A mix of sustainable transport solutions have been provided to ease traffic congestion in the wider area.

The development will facilitate the collection of development contributions for key roads, cycling facilities and community infrastructure to provide the critical connections and ensure reliable access throughout the precinct to essential services.

2.2 Objectives

OBJECTIVES

- To establish well designed development that contributes to high quality, integrated built form throughout the precinct generally in accordance with Plan 1.
- To facilitate residential development that comprises a variety of households and living styles throughout the precinct in predominantly low rise buildings (generally 2–3 storeys) interspersed with suitably located mid-rise buildings (generally 4–6 storeys).
- To transition the area from industrial to residential, commercial and mixed-use and to appropriately manage interfaces with any continuing uses.
- To achieve environmentally sustainable design in relation to energy management, water sensitive urban design, construction materials, green walls/roofs, indoor climate control, waste management and transport.
- To create a safe and vibrant Local Town Centre and Commercial/Mixed Use area, with pleasant public spaces, and a range of jobs and services, appropriate to the scale of the centre.
- To allow for the development of a multipurpose and flexible community facility within the precinct that supports residents of all ages, encourages social interaction, and creates a sense of place and civic pride, reinforcing the prominent location of the centre on The Broadway corner.
- To develop a legible and properly inter-connected street, bus, bike and pedestrian network within the precinct that connects into surrounding neighbourhoods.
- O8 To facilitate a network of diverse and highly accessible open spaces capable of accommodating a wide range of social and recreational activities.
- To ensure that development staging is co-ordinated for efficient delivery to reduce the cost to the community and that first-acting development does not prevent the realisation of cohesive and integrated neighbourhoods.



3.0 IMPLEMENTATION

3.1 Land use

3.1.1 Image & character

REQUIREMENTS

Street trees must be planted on both sides of all new roads and streets at regular intervals appropriate to tree size at maturity, unless otherwise agreed by the responsible authority.

Trees in parks and streets must be:

- Larger species wherever space allows (to facilitate continuous canopy cover);
- Planted in modified and improved soil to support tree establishment;
- Appropriate in size to nature strips, nearby utilities and built form;
 - Used consistently across neighbourhoods to reinforce movement hierarchy and local character;
 - Consistent with any guidance provided on the relevant cross section within this CDP;

unless otherwise approved by the responsible authority.

- Consistent informational and way-finding signage, suite of lighting and furniture must be employed across the Precinct as approved by the responsible authority.
- The proposed extension of The Broadway must provide a distinctive new boulevard that will provide a direct view to the central park from Blackshaws Road.

GUIDELINES

High quality and cohesive landscape treatments should be provided throughout the precinct, within the streetscape and public open spaces, particularly in the Local Town Centre, the community facility and at key interfaces in gateway locations.

Variations in street tree species should be used to reinforce and support the road hierarchy or create visual cues in appropriate locations such as forecourts to building entries, pedestrian spaces, the termination of view lines and key intersections. Street trees should be planted at the following average intervals and heights:

G2 Average interval Tree size (in height)

5–7 metres Small trees (less than 10 metres)
7–10 metres Medium trees (10–15 metres)
10–15 metres Large trees (15 metres or greater)

Retention of mature trees throughout the precinct is encouraged where practical and appropriate.

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3.1.2 Land use & built form

REQUIREMENTS

Built form in the Local Road Frontages sub-precinct must conform with the maximum heights and setbacks contained in Table 2 and Plan 2.

GUIDELINES

- Interfaces should be constructed in accordance with Plan 7 and cross sections illustrated at Section 4 or use an alternative solution to the satisfaction of the responsible authority.
- Dwelling apportionment in each of the sub-precincts should be generally consistent with the Dwelling Yield and Density Plan (Plan 8) at Section 5.
- Land use for all sub-precincts should comply with Table 2 and Plan 2.
- Built form in the Internal Residential, Blackshaws Road Residential Frontage, Local Town Centre and Commercial/ Mixed Use sub-precincts should comply with the preferred heights and setbacks contained in Table 2 and Plan 2.
- Architecture should be designed to contribute to the character of the precinct, providing visual interest, articulation and encouraging passive surveillance.
- G9 Development should incorporate high quality materials and finishes on all buildings.
- **G10** Encourage distinctive built form at gateway locations (as identified on Plan 1), focal points and view lines along streets to provide a recognisable and identifiable sense of address.
- Where buildings directly abut open spaces, easements or other public realms, they should have a positive address to that space.
- Buildings on corner lots should be activated by providing a positive address to both frontages. This can be achieved through the use of appropriate glazing, architectural elements and high quality boundary fencing.
- Buildings and layout including the design of laneways, interfaces with bicycle links and pedestrian areas should incorporate appropriate measures from the Crime Prevention Through Environmental Design ('CPTED') and Safer Design Guidelines.
- **G14** All buildings should be designed to incorporate universal design principles.
- **G15** Front fences should not be higher than 1.2 metres.

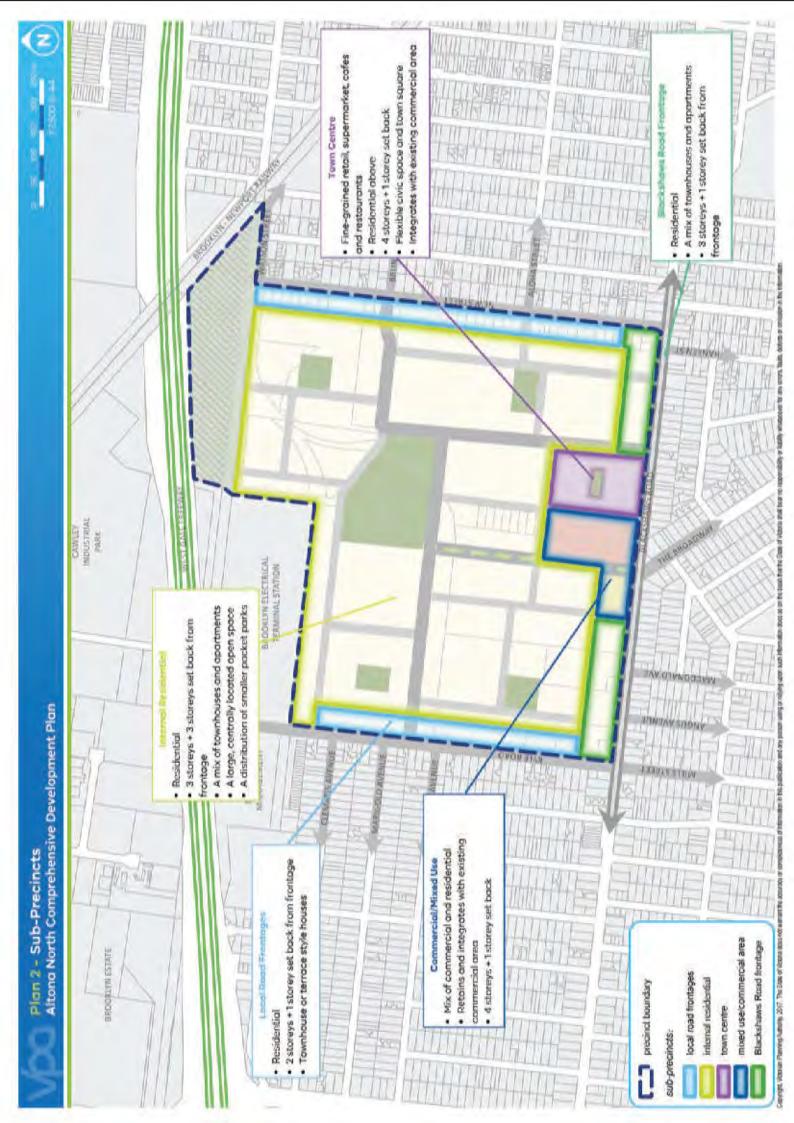


Table 2 Land use & built form outcomes

SUB-	LAND USE	DEVELOPMENT	BUILDING	FRONT	FRONT
PRECINCT	Entro de la	521223112111	HEIGHT	FAÇADE HEIGHT	SETBACK
Local Road Frontages	Residential. New Street includes a row of industrial premises that will convert to residential over time.	Townhouse or terrace style built form, appropriate to the scale of existing dwellings on the opposite side of the street.	9.0m	2 storeys	4m setback
Blackshaws Road Residential Frontage	Residential. Does not include the frontage in the Commercial/Mixed Use Area or Local Town Centre.	Townhouses or apartments, appropriate to the scale of existing dwellings on the opposite side of the street. Buildings should front onto Blackshaws Road and provide an active frontage where possible. Rear accessways are required at rear of dwellings to reduce car movements at the front	13.6m	3 storeys	4m setback
Internal Residential Areas	Residential with provision of a centrally located larger open space that should support a diverse range of activities. A distribution of smaller local parks should provide a specific role for the surrounding community.	of the site. A mix of townhouses and terrace style dwellings with occasional medium-rise apartments located away from existing neighbourhoods and focussed along connector roads, open spaces, near to the Local Town Centre and Commercial/ Mixed Use area or where it can be demonstrated that it is providing a noise attenuation function. All apartments should include some open space on site. Encourage apartment buildings that capitalise on key views and vistas to Port Phillip Bay and the central Melbourne skyline. Public open space areas should be a focal point	20m	3 storeys	3m setback
		for the surrounding residential uses.	40.0		
Commercial/ Mixed Use Area	A mix of uses for the existing commercial area comprising of commercial, light industrial uses and residential above. In the unestablished area, predominantly offices and other suitable uses at ground floor with the potential for residential properties to be located above first floor. Some residential uses may be appropriate at ground floor if it can be demonstrated that it is not a prominent location and allows for the Boulevard connector to remain punctuated with active frontages at street level. Includes a location for a new community centre opposite The Broadway.	The existing commercial area at Shaws Business Park will continue in its existing capacity and over time may intensify and integrate further with the new development for this area and the proposed Local Town Centre. Physical linkages between the existing and proposed centre should be encouraged to assist in the transition towards an integrated centre in the future. Buildings should be built to the property boundary adjoining the street frontage, or otherwise have activity within the front setback. Active frontages should be located on street corners, along Blackshaws Road and distributed along the Boulevard connector to ensure activity at ground level. Car parking and service infrastructure should be located to the rear of primary pedestrian access points.		4 storeys	None specified (except Blackshaws Road which is 3m)
Local Town Centre	A mixed use Local Town Centre made up of fine grain retail, a supermarket, offices and cafes. Residential can be located above first floor. A civic space will provide the community with a flexible, central meeting space	Encourage the Local Town Centre to be oriented toward a 'main' street. The supermarket will include an overhead/ underground car park or a car park at grade that could convert in the future to a more intense Local Town Centre development. Car parking should not be visible from key street frontages. Buildings should either be built to the property boundary adjoining the street frontage or should allow a front setback for on-street dining. Ground level façades should be articulated into sections no greater than 8m wide in order to establish a fine grain built form. Shops along Blackshaws Road should ensure an active frontage is provided.	16.8m	4 storeys	2m (except Blackshaws Road which is 3m)

3.2 Housing

REQUIREMENTS

Apartments must be located in the internal residential area, Blackshaws Road Residential Frontage, the Local Town Centre or the Commercial/Mixed Use area. Locations within these sub-precincts that are more suitable for apartments are:

R6

- At least 60m away from interfaces with Kyle Road and New Street reserve;
- Along the connector roads;
- In areas within or abutting the Local Town Centre and Commercial / Mixed Use area;
- · Adjacent to the south, east or west of open spaces; or
- In locations which provide a visual or noise attenuation function.

GUIDELINES

G16

Specialised housing forms such as lifestyle communities, retirement living or aged care facilities, and opportunities for affordable housing should be located in close proximity to the Local Town Centre, community hubs, open space and locations easily accessible by public transport.

3.3 Employment and local centres

REQUIREMENTS

R7

New development must provide connection points into the existing commercial / mixed-use site at 216-230 Blackshaws Road (Shaws Business Park) to encourage integration with the proposed Local Town Centre and Commercial/Mixed Use area.

Buildings within the Local Town Centre must provide:

- Primary access to tenancies from the main street;
- **R8**
- Active and articulated frontages;
- Sensitive design of loading requirements that does not impact the surrounding residential area; or detract from the design of the centre.
- Pedestrian access to the site, including opportunities for pedestrian crossings and cycling paths in proximity to bus stop locations, must be provided.

GUIDELINES

G17

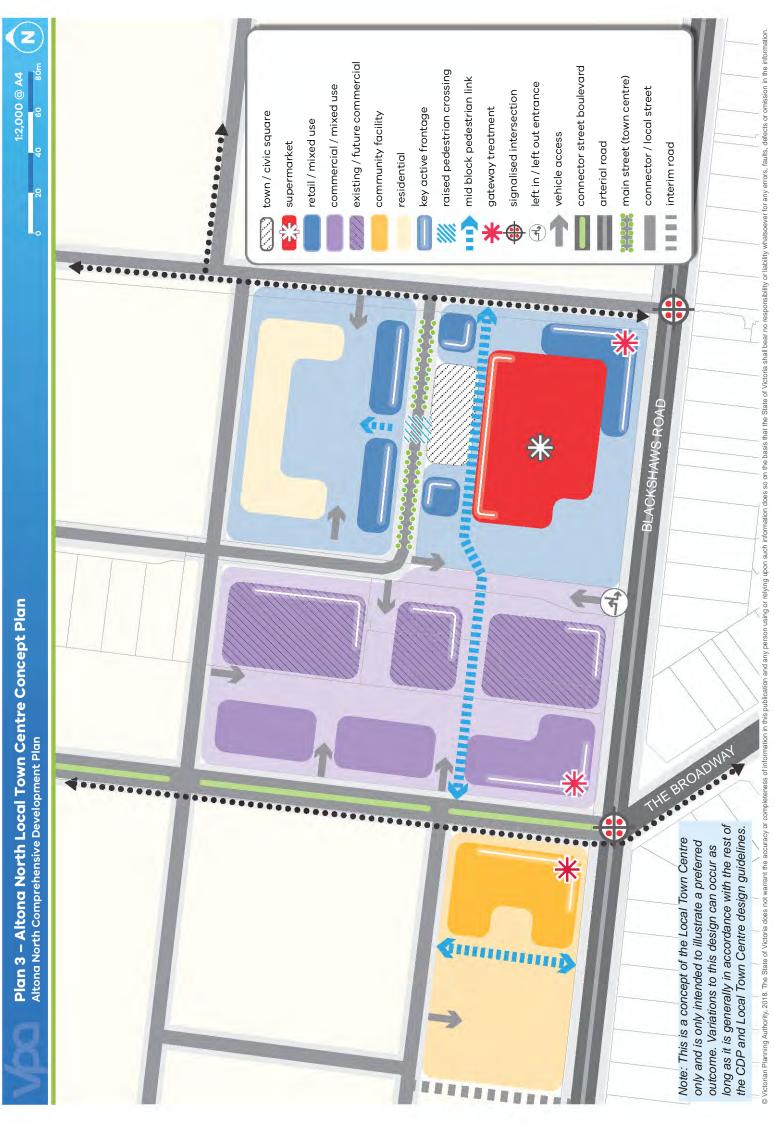
Pedestrian activities including outdoor dining is encouraged within the Local Town Centre along the main street and within the town square.

Subdivision, land and development in the Local Town Centre should be developed in accordance with the Local Town Centre guidelines in this document.

- **G18** The Local Town Centre concept plan depicts an indicative response to the Local Town Centre design guidelines; it does not describe the only possible layout of the centre. Alternative layouts responding to the Local Town Centre guidelines can also be acceptable.
- Residential dwellings located above shops and offices are encouraged within the Local Town Centre and Commercial/Mixed Use area.

LOCAL TOWN CENTRE DESIGN GUIDELINES

- Provide a town square to act as a focal point for surrounding retail and commercial uses and to provide public space for community activities.
- Where practical the Local Town Centre should be surrounded by a pattern of smaller scale individual tenancies that sleeve a central supermarket.
- DG3 All buildings should have their main pedestrian entrance onto the street frontage.
- Development blocks should be based on a flexible layout to enable a variety of land uses and allow viable short-term development, as well as efficient long term evolution and adaption.
- Main street (illustrated on Plan 3) should be designed to include canopy trees, outdoor dining, pedestrian activity and on-street parking.
- Development should be designed to avoid shadows on the town square between 10.00am and 3.00pm on 22 September.
- The Local Town Centre should integrate with the existing mixed-use area at 216-230 Blackshaws Road (Shaws Business Park) and allow for connections into the development.
- At least 80 per cent of each building façade at ground level in the Local Town Centre precinct should be maintained as an entry or window with clear glazing.
- The town square should be designed in such a way to enable a variety of community activities to be held within it including consideration of appropriate paving, utility services, lighting, landscaping, street furniture and weather protection including awnings.



3.4 Community facilities

REQUIREMENTS

Community facilities must be designed to:

- Locate entries to be visible from a public street;
- Locate communal outdoor areas and child care / kindergarten facility entries away from main roads;
 - · Locate the majority of car parking away from the main entry; and
 - Respond appropriately to Design for Access and Mobility Standards (AS 1428).
- The community facilities must be sited and designed to be a landmark building that terminates the view line along The Broadway and frames the entry to the precinct.
- Land vested in Council for open space and the community facility must be remediated and accompanied by statements of audit before the transfer of land.

GUIDELINES

- G20 Community facilities should be planned and designed to have the flexibility and capacity to meet the changing needs of the community and provide for a range of uses. Consideration should be given to shared spaces which can be used by agreement with the Council by other community service providers and not-for-profit organisations.
- The location of key entries to community facilities should allow for safe and convenient pedestrian and cyclist access for all ages and abilities.
- G22 Apply universal design and access principles to buildings and facilities.

3.5 Open space

REQUIREMENTS

- R13 All parks must comply with the land areas in Table 3 and locations in Plan 4 and be designed and developed to enable practical maintenance.
- Parks and open spaces must contain extensive planting of large canopy trees that are suitable to the urban environment, local climate and soil conditions.
- R15

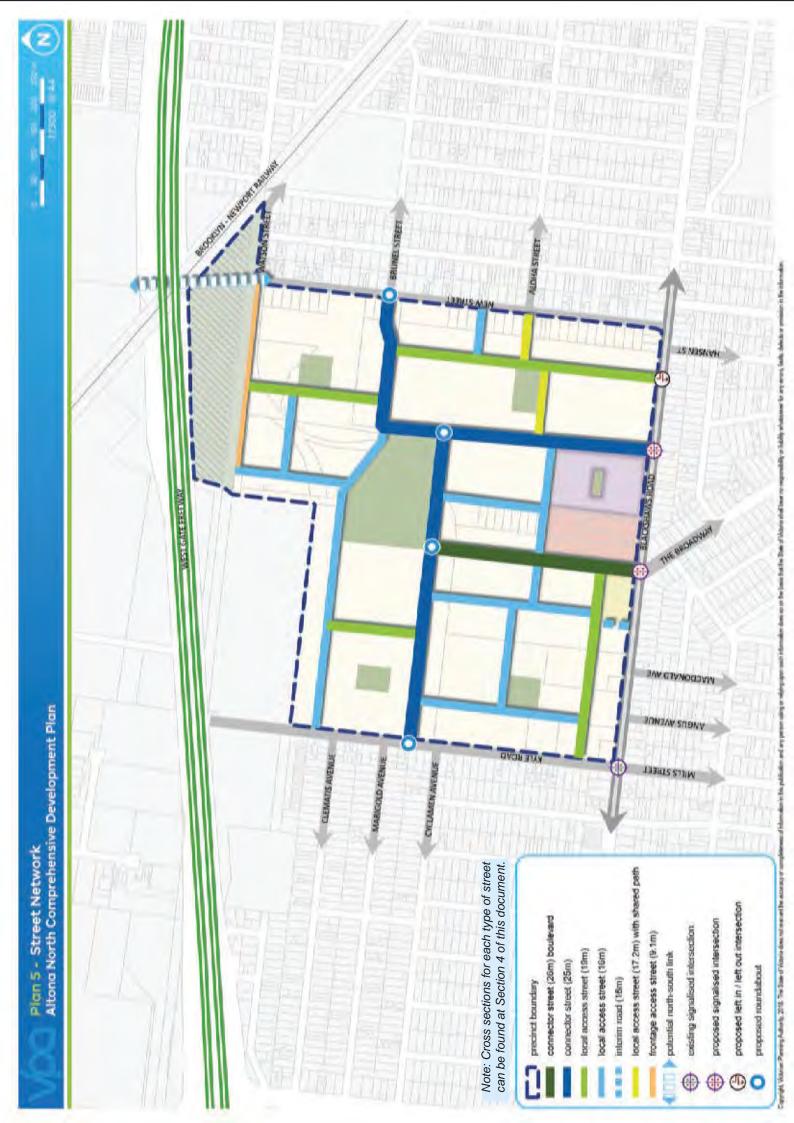
 Buildings adjacent to open spaces must be located and designed to front the open space. Development must be orientated towards open spaces, easements and other public realm to maximise the activation and passive surveillance of these areas.
- The central open space must have a road boundary on all sides, while the small reserves must have a road on a minimum of two sides, and preferably three sides. Where housing directly abuts open space a paper road must be provided.
- Local parks must act as a focal point for the neighbourhood and each must demonstrate its distinct function and character.

GUIDELINES

- **G23** Local parks should be designed to cater for a broad range of users by providing a mix of spaces and planting to support both structured and unstructured recreational activities and play opportunities for all ages and abilities.
- G24 Design of the drainage easement should maximise the amenity value of that open space and provide for flexible recreational opportunities.
- The Brooklyn Terminal Station easement (owned by Ausnet Services) should be gifted to Hobsons Bay City Council as a linear open space (uncredited) subsequent to the easement's drainage function being replaced by new underground drainage infrastructure.
- G26 Development should be designed to avoid casting unreasonable shadows on the Public Open Space areas between 11:00am and 2:00pm on 22 September.

Table 3 Local parks

RESIDENTIAL LOCAL OPEN SPACE (EXPRESSED AS % OF NDA)	AREA (HECTARES)	% OF NDA	% OF TOTAL PRECINCT AREA
LP-01	0.30	0.6%	0.4%
LP-02	0.40	0.8%	0.6%
LP-03	3.15	6.1%	4.7%
LP-04	0.40	0.8%	0.6%
LP-05	0.40	0.8%	0.6%
UP-01	0.10	0.2%	0.1%
Sub-total Credited Open Space	4.75	9.3%	7.0%
LP-06	1.11	2.2%	1.7%
LP-07	3.00	5.8%	4.5%
Sub-total Uncredited Open Space	4.11	8.0%	6.2%
Total All Open Space	8.86	17.3%	13.2%



3.6 Integrated transport

3.6.1 Transport

REQUIREM	

- The street network must be designed so that there are no additional vehicular connections directly onto Blackshaws Road other than what is shown in the CDP.
- **P19** Bus stop facilities must be designed to integrate with and support access to high visitation land uses.
- There must be no intersecting roads or vehicle crossovers within 80m of a signalised intersection.

GUIDELINES

Local streets should be generally consistent with Plan 5 and the relevant cross-section illustrated at Section 4.

Alternative cross sections may be considered and approved by the responsible authority however an alternative should ensure that:

G27

- Minimum required carriageway dimensions are maintained to ensure safe and efficient operation of emergency vehicles on all streets as well as buses on Connector Streets (as shown in Plan 5);
- The performance characteristics of standard cross sections as they relate to pedestrian and cycle uses are maintained; and
- Relevant minimum road reserve widths for the type of street (illustrated at Section 4) are maintained unless otherwise approved by the responsible authority.

Street layouts and subdivision patterns should be aligned to provide high quality connections and views to key destination points such as:

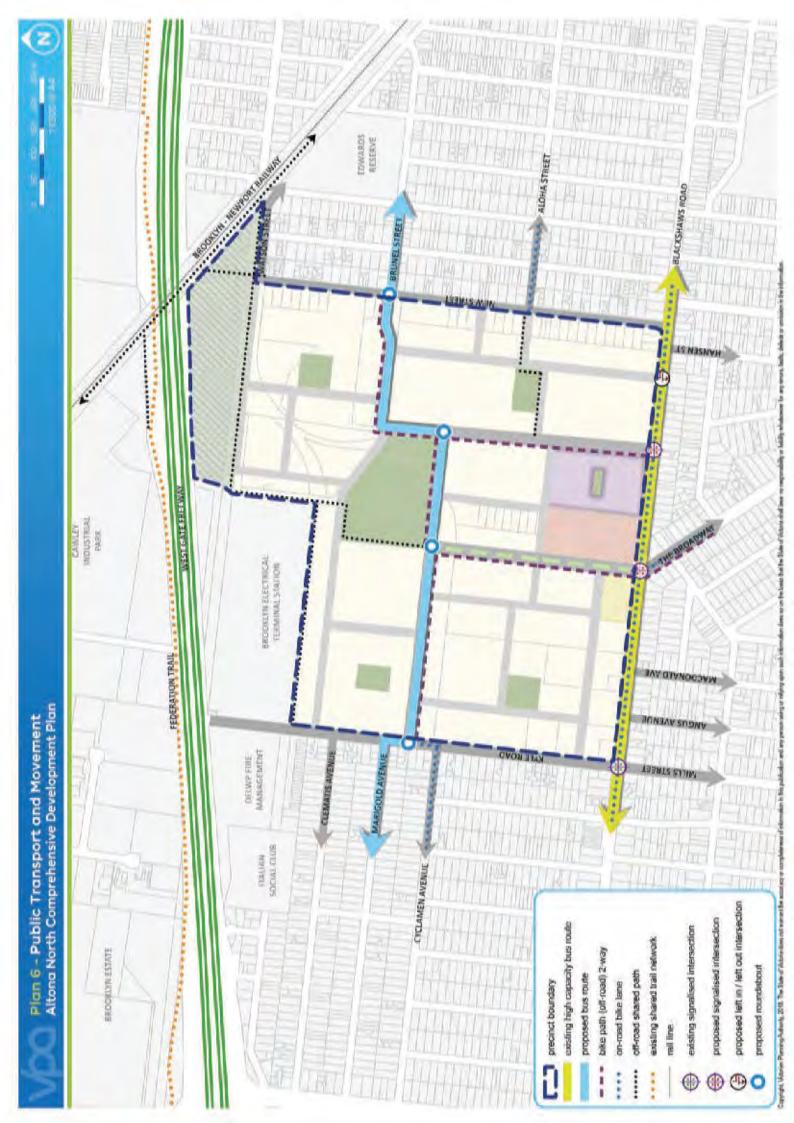
G28

- The central park;
- Local open spaces;
- The Commercial/Mixed Use area; and
- The Local Town Centre.

The frequency of vehicular crossovers should be minimised through the use of a combination of:

G29

- Rear loaded lots with laneway access;
- Vehicular access from the side of the lot; or
- Combined or group crossovers.
- **G30** Laneways should be discouraged from accessing directly onto arterial roads.



3.6.2 Walking and cycling

REQUIREMENTS

Design of all streets and arterial roads must give priority to the requirements of pedestrians and cyclists by providing:

- Footpaths of at least 1.8 metres in width on both sides of all streets and roads unless otherwise specified by this plan;
- Shared paths or bicycle paths of 3.0 metres in width;
 - Safe and convenient crossing points of connector and local streets at all intersections and at key desire lines and locations of high amenity;
 - · Pedestrian and cyclist priority crossings on all slip lanes;
 - · Consistent line/lane marking, visual clues and signage identifying cycle priority routes; and
 - Safe and convenient transition between on-and off-road bicycle networks.
- **R22** Walking and cycling path networks must provide permeability and link to key destinations within the precinct.

GUIDELINES

- **G31** Pedestrian priority should be provided across all side roads along main streets and all car park entrances.
- **G32** Pedestrian movements should be prioritised by providing clear links between key destinations within the precinct.

Integrated water management, sustainability & utilities servicing

3.7.1 Integrated water management and sustainability

- Stormwater runoff from new development must meet or exceed the performance objectives of the CSIRO Best Practice Environmental Management Guidelines for Urban Stormwater (1999), prior to discharge to receiving **R23** waterways, unless otherwise approved by Melbourne Water and the responsible authority.
- Quantity of stormwater runoff from development must not exceed the runoff generated from the pre-developed site, **R24** unless otherwise agreed to the satisfaction of the responsible authority and Melbourne Water.
- Design of stormwater drainage retarding and quality treatment infrastructure must be to the satisfaction of the **R25** responsible authority and Melbourne Water.

Development applications must demonstrate how:

- Overland flow paths and piping within road or other reserves will be connected and integrated across property/ parcel boundaries;
- Melbourne Water and the responsible authority freeboard requirements for overland flow paths will be **R26** adequately contained within road or other reserves;
 - The development will deliver Integrated Water Management requirements of any approved Integrated Water Management Plan or Strategy; and
 - Development will prevent litter from entering the downstream drainage system through the use of litter traps, as required by the drainage authorities.
- A permit must ensure that the ultimate stormwater management assets and associated land are provided by the developer prior to the issue of a Statement of Compliance.

In the event that Melbourne Water and the responsible authority agree to an interim storm water management solution, the developer must:

- Provide the land required for the ultimate drainage solution prior to the issue of a Statement of Compliance; and
 - Demonstrate that the interim solution will not result in an increase in the cost of achieving the ultimate solution.

GUIDELINES

- To the extent practical, development should have regard to relevant policies and strategies being implemented by the responsible authority, Melbourne Water and water retail authority, including any approved Integrated Water **G33** Management Plan.
- 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 overland flow paths, Water Sensitive Urban **G34** Design initiatives such as rain gardens and/or locally treated storm water for irrigation, where practical.
- Developments should include Integrated Water Management systems to diversify water supply, reduce reliance on potable water and increase the utilisation of stormwater that contributes to a sustainable and green urban **G35** environment (such as stormwater harvesting, aquifer storage and recharge, grey water recycling etc).
- Development should reduce reliance on potable water by increasing the utilisation of fit-for-purpose alternative water sources such as storm water, rain water and recycled water. This may involve entering into partnership **G36** projects with the water authorities.

Ecological Sustainable Development principles should be explored and encouraged in all development, such as the inclusion of:

- Material re-use and recycling;
- Use of materials with reduced embodied energy;
- Electrical self-generation, car charge schemes, smart grids and battery storage;
 - Use of Built Environment Sustainability Scorecard (BESS);
 - Measures that reduce the urban heat island effect; and
 - Waste management initiatives.

3.7.2 Utilities servicing

REQUIREMENTS

- All existing above-ground electricity cables on the land or on the same side of the land in an abutting road reserve less than 66kV voltage must be placed underground as part of the upgrade of existing roads.
- R30 All new electricity supply infrastructure (excluding substations and cables with voltage greater than 66kV) must be provided underground.
- Above-ground utilities must be identified at the subdivision design stage to ensure effective integration with the surrounding neighbourhood and to minimise amenity impacts whilst also designed to the satisfaction of the relevant authority.

GUIDELINES

Above-ground utilities should be located outside of key view lines and screened with vegetation, as appropriate. Substations located within open space must be appropriately screened.

3.8 Infrastructure delivery & development staging

3.8.1 Infrastructure delivery

REQUIREMENTS

- R32 Convenient and direct access to the road network must be provided through neighbouring properties where a property does not have access to the local or connector network, or signalised access to the arterial road network.
- Where a street has already been constructed or approved for construction to a property boundary, subsequent development must connect with that street to adopt a consistent cross-section until a suitable transition can be made.
- Any land transferred to the responsible authority must be accompanied by a certificate or statement of environmental audit in accordance with Part IXD of the *Environment Protection Act 1970*.

3.8.2 Development staging

REQUIREMENTS

Development staging must provide for the timely provision and delivery of:

- Connector streets;
- R35 Street links bet
 - Street links between properties, constructed to the property boundary;
 - Public land areas, including open space reserves; and
 - Connection of the on- and off-road pedestrian and bicycle network.

Staging will be determined largely by the development proposals on land within the precinct and the availability of infrastructure services. Development applications must demonstrate how the development will:

- Integrate with adjoining developments, including the timely provision of road and walking/cycling path connections, to a practical extent;
- How local open space will be provided in the early stages of development;
- Provide sealed road access to each new allotment and constructed to a residential standard: and
- Deliver any necessary trunk services extensions, including confirmation of the agreed approach and timing by the relevant service provider.

3.8.3 Precinct Infrastructure Plans

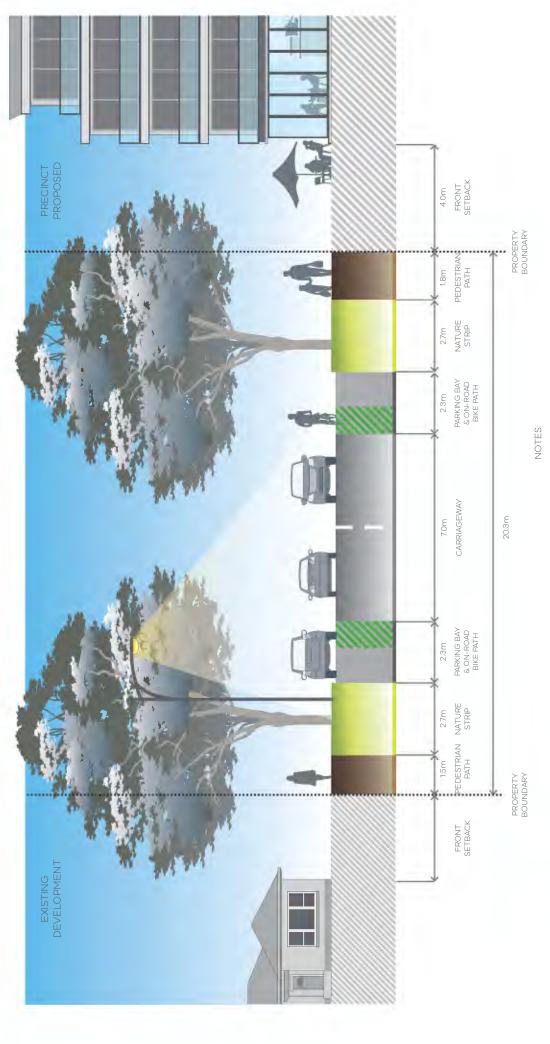
The Precinct Infrastructure Plan (PIP) sets out the infrastructure and services required to meet the needs of proposed development within the precinct. The infrastructure items and services are to be provided through a number of mechanisms including:

- Subdivision construction works by developers;
- · Agreement under section 173 of the Act;
- Utility service provider requirements;
- The DCP, including separate charge areas for the provision of residential and non-residential items (see DCP for details);
- Relevant development contributions from adjoining areas;
- Capital works projects by Council, State government agencies and non-government organisations; and
- Works-in-kind (WIK) projects undertaken by developers on behalf of Council or State government agencies.

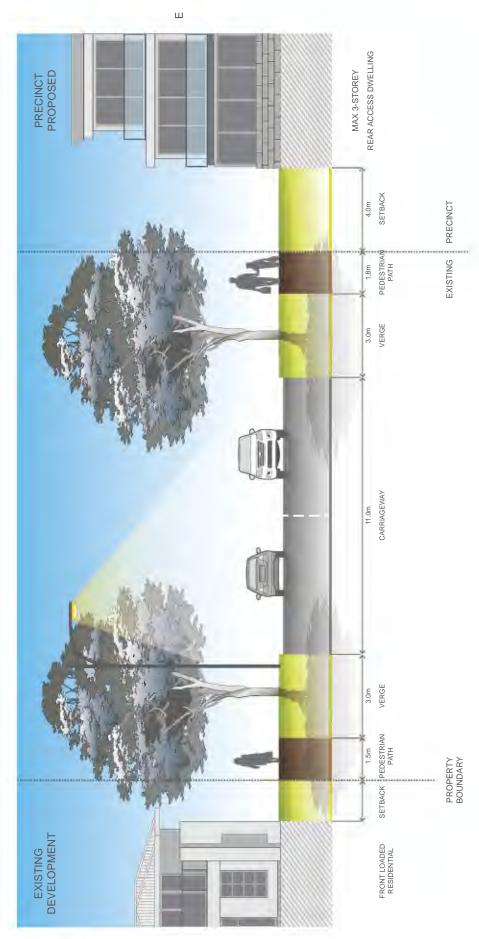
Table 4 Precinct infrastructure plan

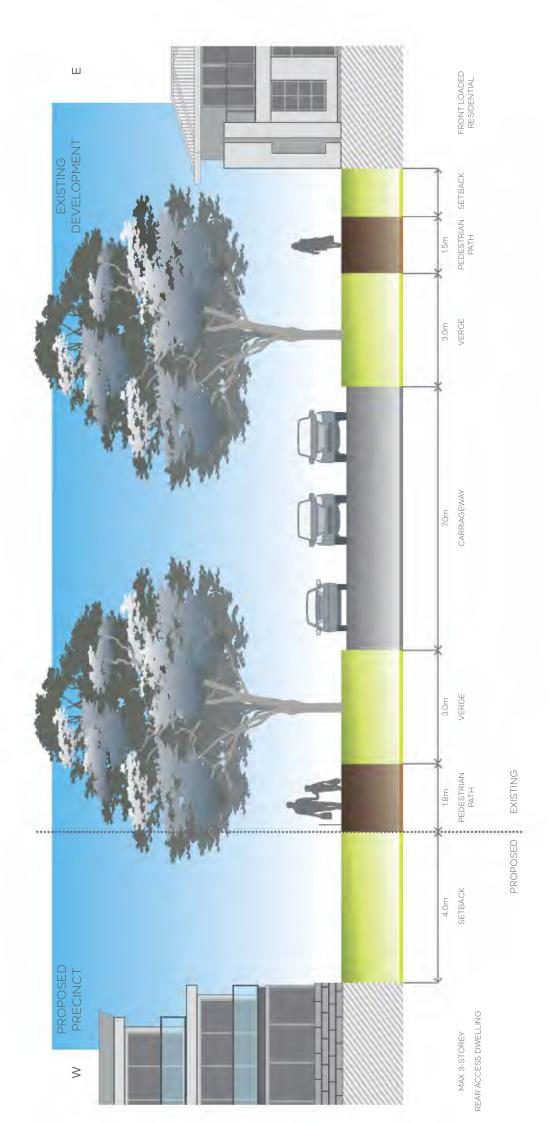
	DCD		LEAD	INIDICATIVE	INCLUDED
PROJECT CATEGORY	DCP PROJECT	PROJECT DESCRIPTION	LEAD AGENCY	INDICATIVE TIMING	INCLUDED IN DCP?
ROAD AND SHARED PATH PRO	JECTS				
Blackshaws Road: Cycle Lane markings	-	Line marking for on-road cycle lanes	VicRoads	М	No
North–South Boulevard Road	RD-01	Land and full construction of carriageway and road reserve	HBCC	S	Yes
North–South Connector Road	RD-02	Land and full construction of carriageway and road reserve	HBCC	S	Yes
East–West (Bus Capable) Connector Road	RD-03	Land and full construction of carriageway and road reserve	HBCC	М	Yes
Blackshaws Road: Frontage Works	RD-04	Full construction of frontage works	VicRoads	М	Yes
Local Area Traffic Management (LATM) Study	RD-05	Full cost of study	НВСС	S	Yes
INTERSECTION PROJECTS					
		Land and construction of 2-lane arterial to	LIDOC /		
Blackshaws Road & North–South Boulevard	IN-01	2-lane boulevard signalised intersection (4 way intersection)	HBCC / VicRoads	S	Yes
Blackshaws Road & North–South Connector	IN-02	Land and full construction of 2-lane arterial to 2-lane connector signalised intersection (3 way intersection)	HBCC / VicRoads	S	Yes
Kyle Road & East–West Connector Road	IN-03	Land and construction of 2-lane connector to 2 lane existing local street for a roundabout (3 way intersection)	НВСС	S	Yes
North–South Boulevard and East–West Connector Road	IN-04	Land and full construction of 2-lane bus capable connector to 2-lane boulevard (3 way intersection)	НВСС	S	Yes
North–South Connector Road and East–West Connector Road	IN-05	Land and full construction of 2-lane bus capable connector to 2-lane connector (3 way intersection)	НВСС	M	Yes
New Street & East–West Connector Road	IN-06	Land and construction of a 2-lane connector to 2 lane existing local road roundabout (4 way intersection)	НВСС	M	Yes
Millers Road & Blackshaws Road	IN-07	Construction works to existing signalised intersection (4 way intersection)	VicRoads	М	Construction only
Blackshaws Road, Kyle Road & Mills Street	IN-08	Construction works to existing signalised intersection (4 way intersection)	HBCC / VicRoads	М	Construction only
Blackshaws Road & New Street	_	Construction works to existing signalised intersection (4 way intersection)	HBCC/ VicRoads	М	No
Blackshaws Road & Hansen Street	-	Construction works to existing intersection (4 way intersection)	HBCC/ VicRoads	М	No
PUBLIC TRANSPORT PROJECT	S				
Marigold Avenue: Bus Stop Improvements	-	Construction of in-lane bus stops	PTV	М	No
Brunel Street: Bus Stop Improvements	-	Construction of in-lane bus stops	PTV	М	No
SHARED PATH AND AMENITY P	ROJECTS				- 6
Federation Trail link shared path	-	Construction of shared user path and basic landscaping works	WDA	S	No
Linear Reserve Shared path and landscaping	SP-1 & AM-1	Construction of shared user path and basic landscaping works	НВСС	S	Yes
Cyclamen Avenue bike path	-	Installation of bicycle lanterns	HBCC	M	No
Cyclamen Avenue bike path	-	Speed reduction measures	HBCC	M	No
Cyclamen Avenue bike path	-	Construction of pram ramp	HBCC	M	No
Aloha Street bike path	-	Speed reduction measures	HBCC	M	No
Aloha Street bike path	_	Pram ramps on Stephenson Street	HBCC	M	No
The Broadway bike path	- -	Line marking for bike lanes	HBCC	M	No
COMMUNITY BUILDING PROJE Community Centre	CB-1	Land and construction of a new community	НВСС	М	Yes
	-c	centre			
SPORTING RESERVE PROJECT Sporting Reserve	SR-1	Construction or cash in lieu contribution equivalent to active sports facility	НВСС	M	Construction only
Pavilion for Sporting Reserve	SR-2	Construction or cash in lieu contribution equivalent to develop a sporting Pavilion associated with SR-01	HBCC	M	Construction only

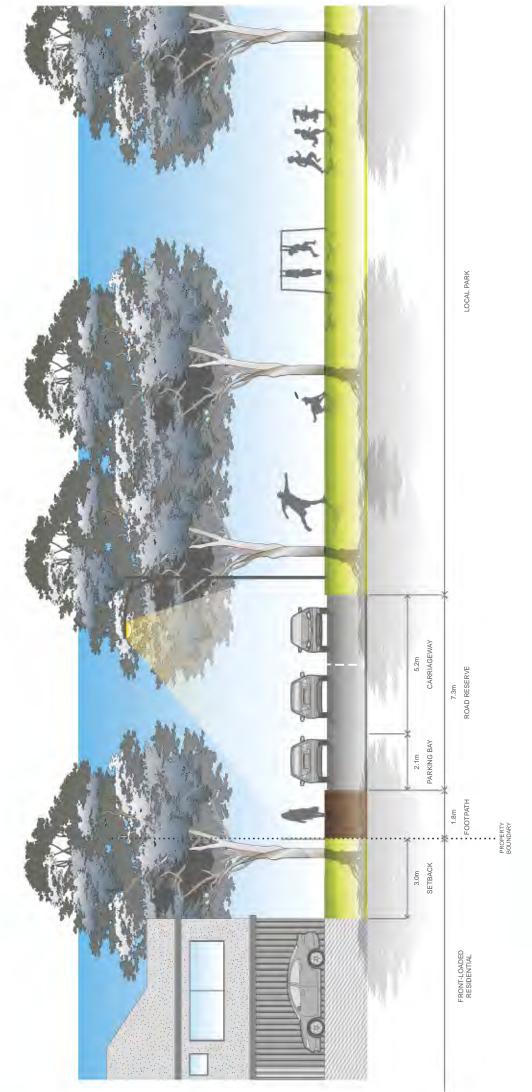
4.0 INTERFACE AND ROAD CROSS SECTIONS



- Development should incorporate a front setback to complement the existing pattern of development on the opposite side of the road, this should be 4m for residential properties.
- Development should be recessed at upper levels that front Blackshaws Road to retain the
 existing scale and open nature of the streetscape.
- Development should be acoustically protected by minimising gaps between development and locating external living areas away from the road interface.



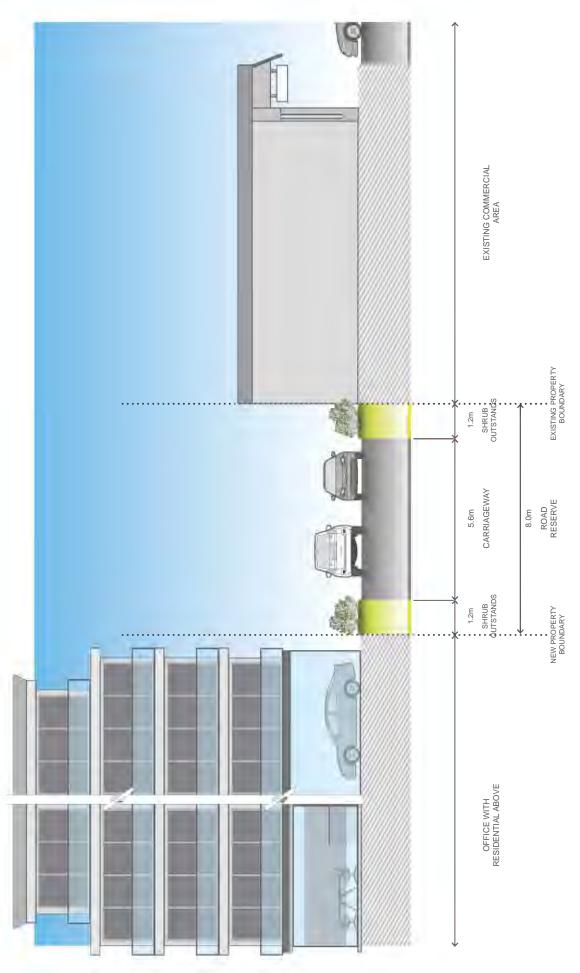




NOTE:

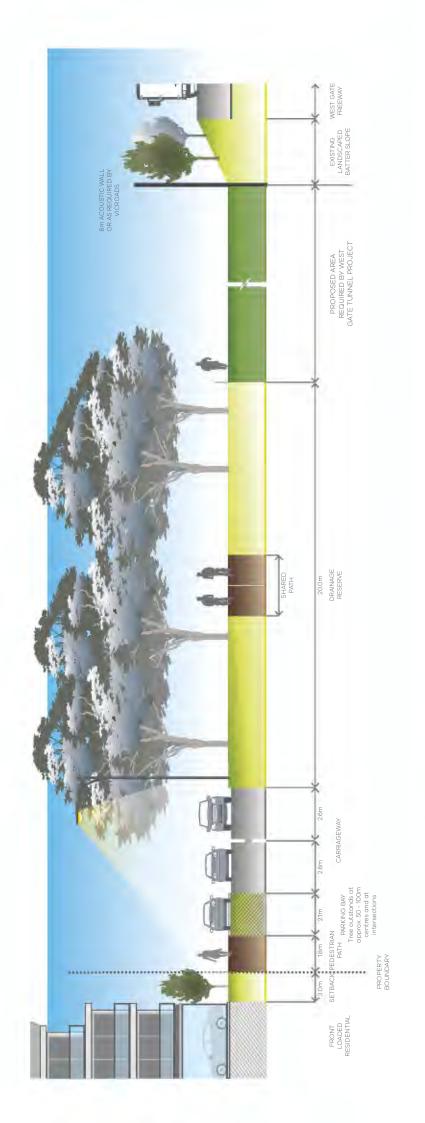
Development should positively address local parks





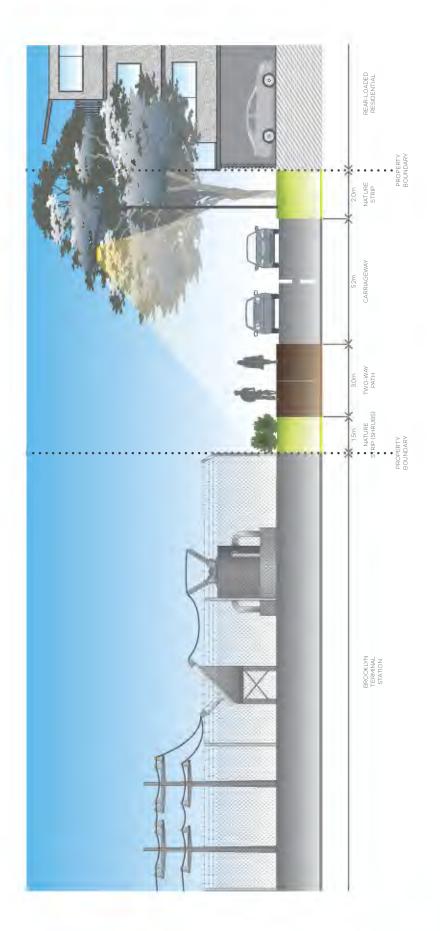
Notes:

- Development must be designed to face away from existing commercial uses.
- Development must be designed to provide landscaping within the laneway.
- Development must be designed to address amenity impacts from existing commercial uses.
- Existing commercial uses must not come under new obligations as a consequence of new noise-sensitive uses.
- All noise generated from any commercial use must continue to comply with SEPP N-1.



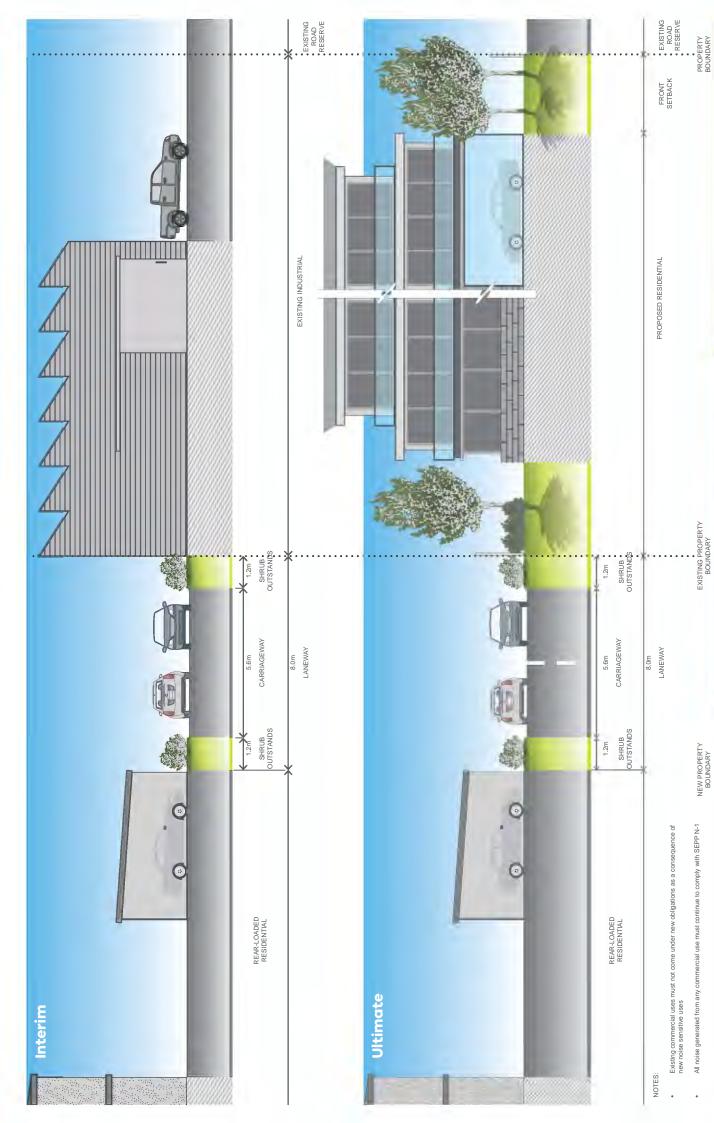
NOTE:

Development should positively address the drainage reserve



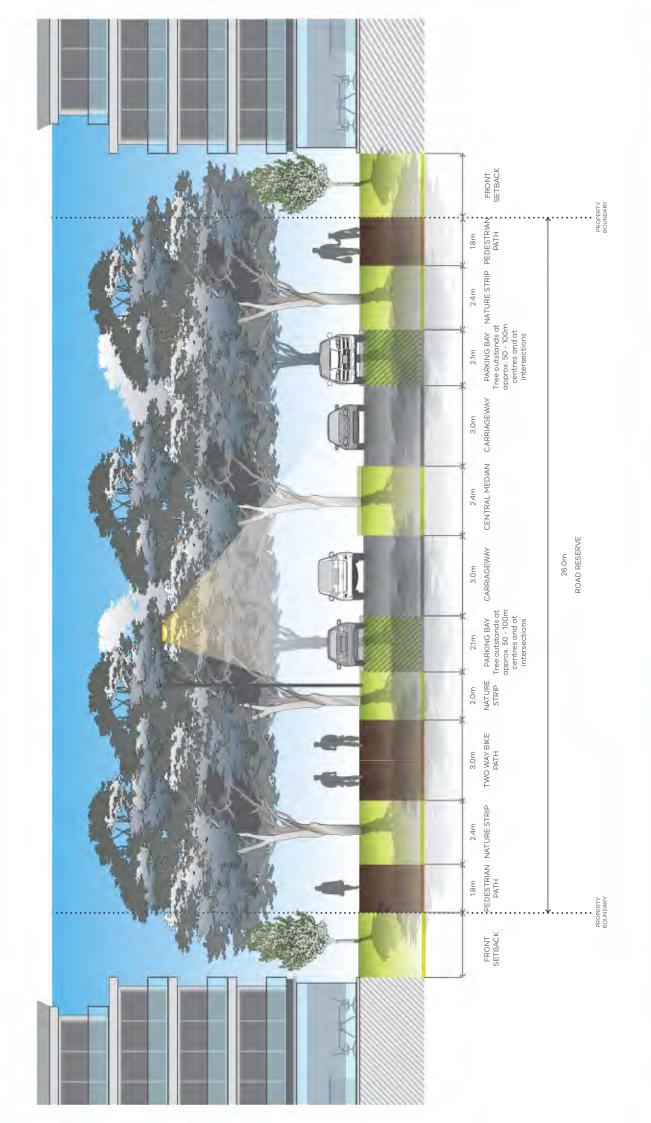
NOTES:

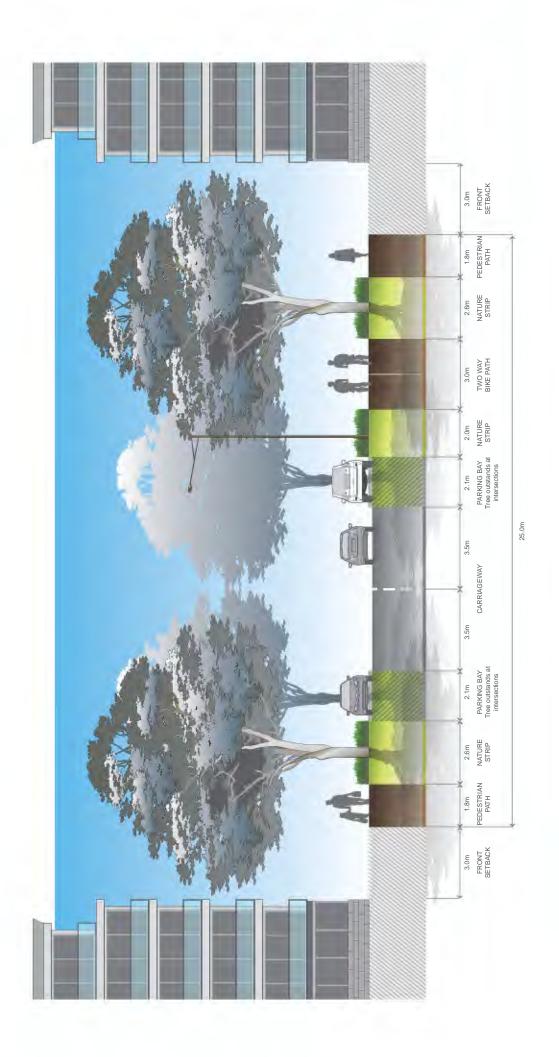
- Buildings are not permitted within 3 metres of the Brooklyn Terminal Station
- \bullet Any landscaping within 2 metres of the Brooklyn Terminal Station requires the approval of Ausnet Services
 - Decorative screening of the Brooklyn Terminal Station is encouraged
- Existing commercial uses must not come under new obligations as a consequence of new noise sensitive uses
- All noise generated from any commercial use must continue to comply with SEPP N-1

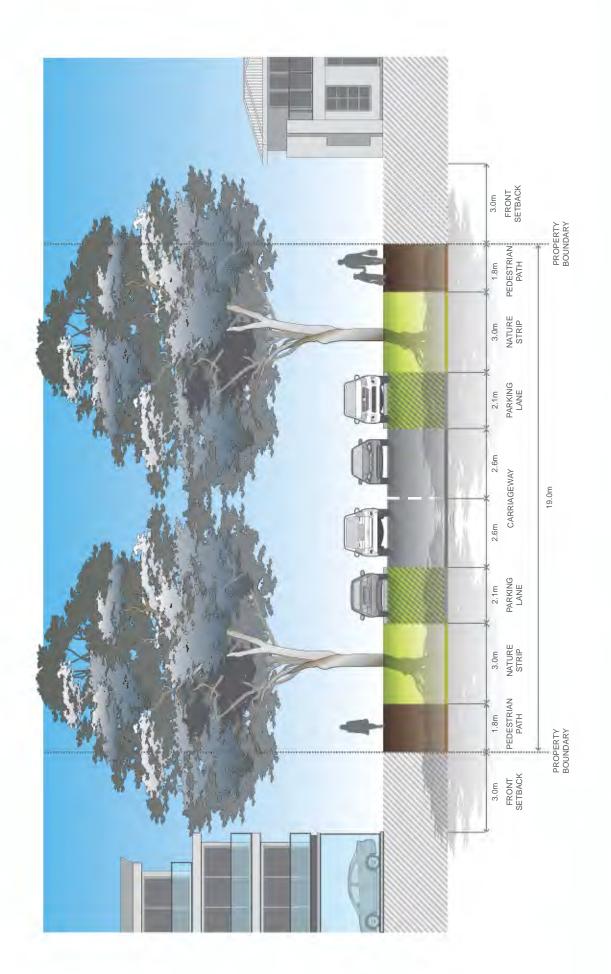


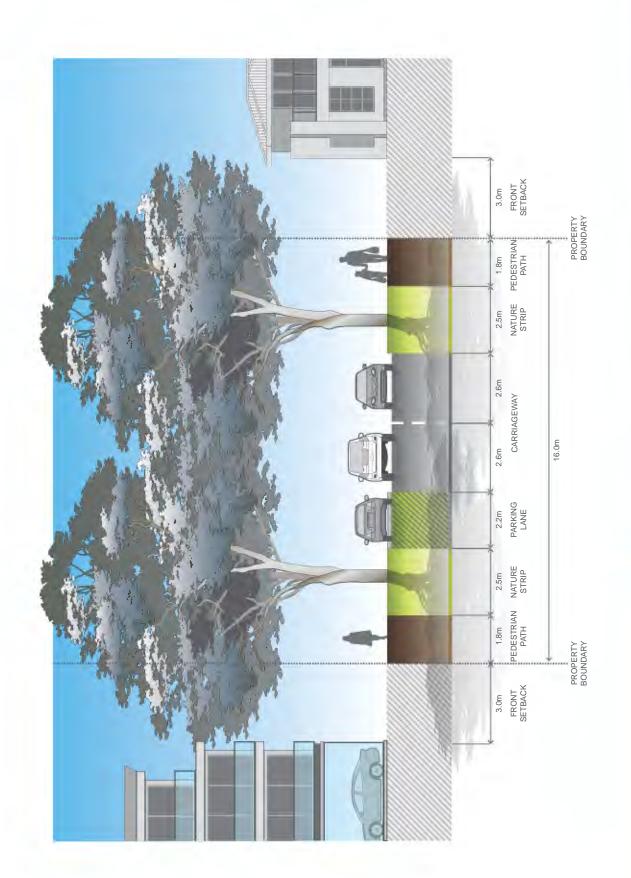


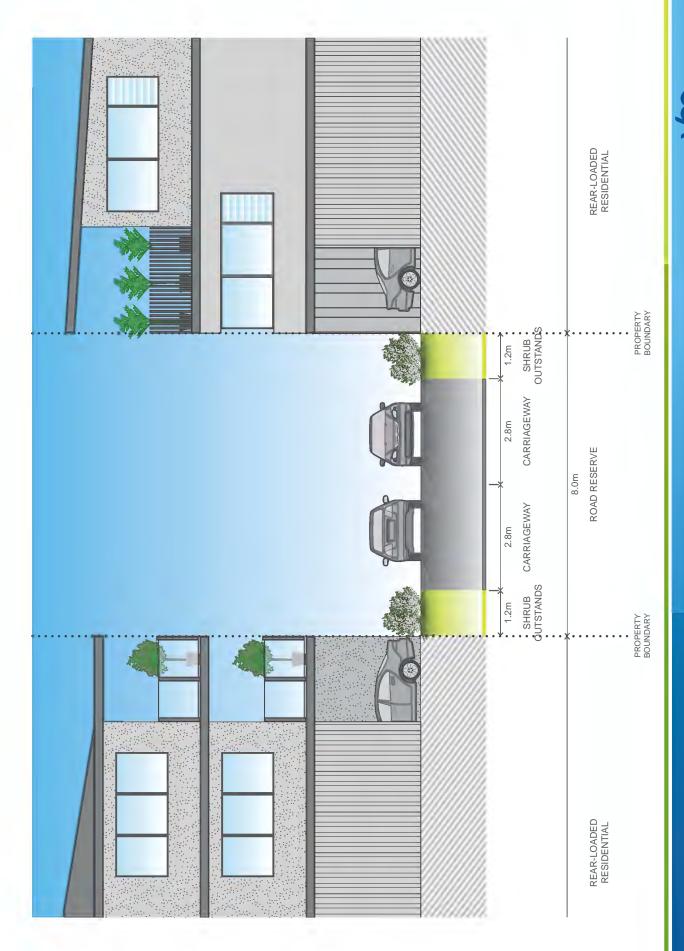




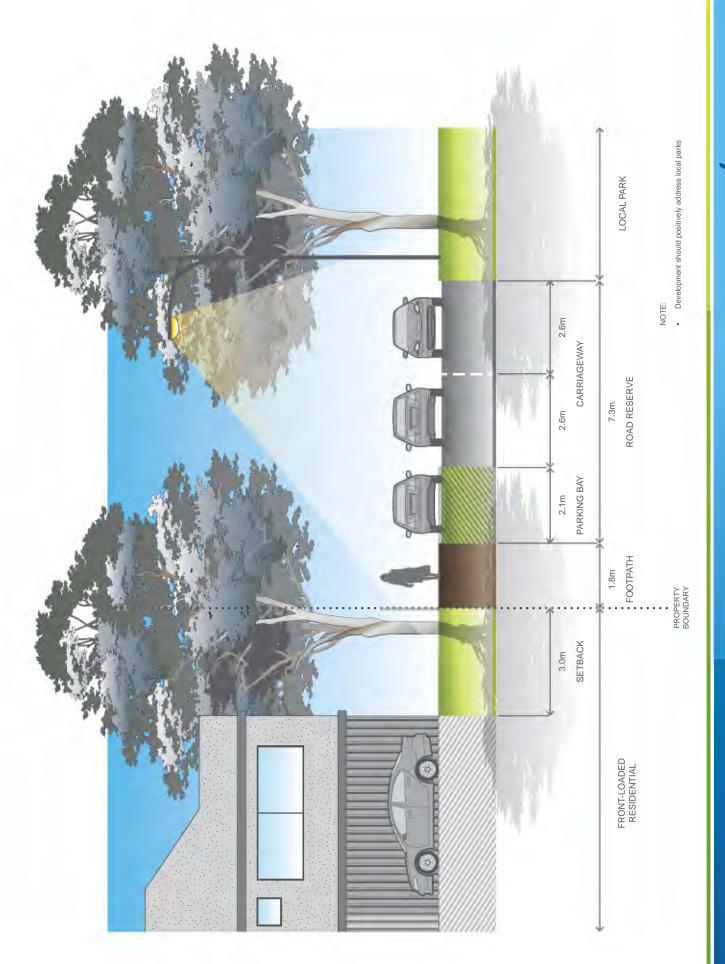




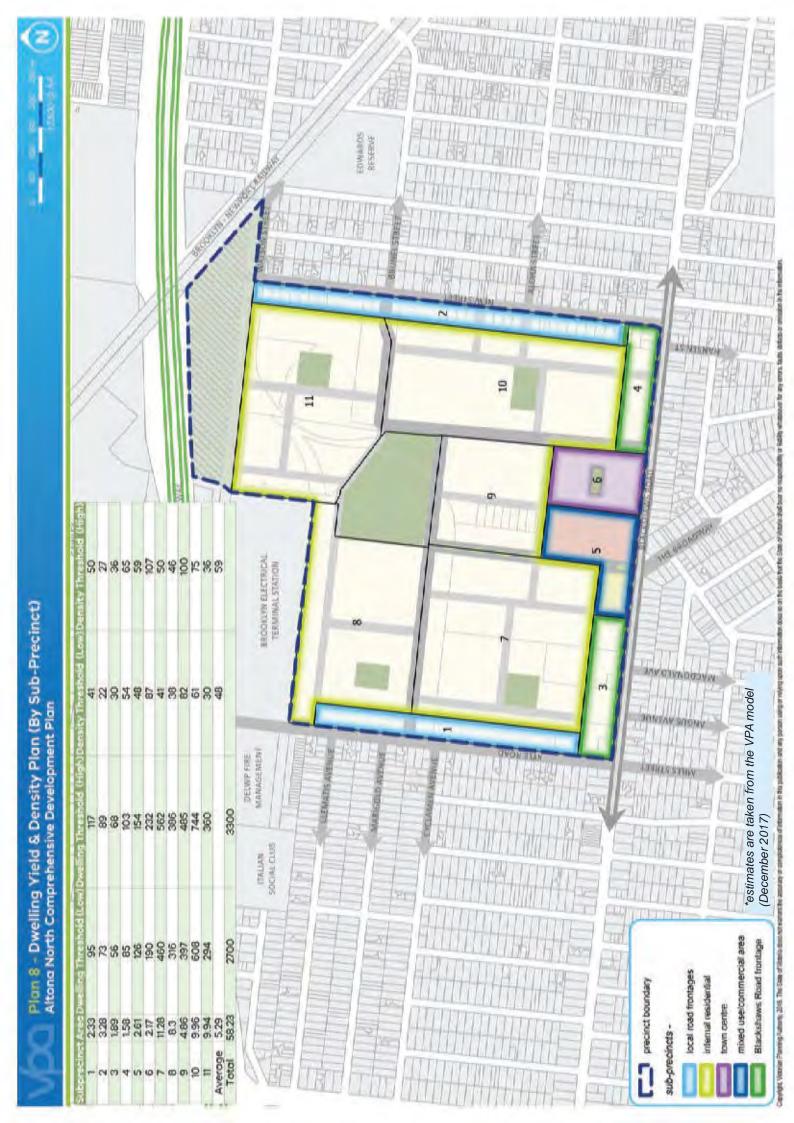








5.0 DWELLING YIELD & DWELLING DENSITY PLAN





6.0 GLOSSARY

Arterial road	A higher order road providing for moderate to high volumes at relatively high speeds typically used for inter-suburban journeys and linking to freeways, and identified under the Road Management Act 2004. All declared arterials are managed by the State Government.
Co-location	Adjoining land uses to enable complementary programs, activities and services and shared use of resources and facilities. For example, the co-location of schools and active open space.
Community infrastructure	Infrastructure provided by government or non-government organisations for accommodating a range of community support services, programs and activities. This includes facilities for education and learning (e.g. government and non-government schools, universities, adult learning centres); early years (e.g. preschool, maternal and child health, childcare); health and community services (e.g. hospitals, aged care, doctors, dentists, family and youth services, specialist health services); community (e.g. civic centres, libraries, neighbourhood houses); arts and culture (e.g. galleries, museums, performance space); sport, recreation and leisure (e.g. swimming pools); justice (e.g. law courts); voluntary and faith (e.g. places of worship) and emergency services (e.g. police, fire and ambulance stations).
Connector street	A lower order street providing for low to moderate volumes and moderate speeds, linking local streets to the arterial network managed by the relevant local council. (See Table C1 in clause 56).
Development Contributions Plan	Document that sets out the contributions expected from each individual landowner to fund infrastructure and services. Refer to Part 3B of the <i>Planning and Environment Act</i> 1987.
Freeway	A high speed and high volume road with the highest level of access control and typically used for longer distance journeys across the Victorian area and country Victoria. All freeways are managed by VicRoads.
High density housing / apartments	Housing with an average density of around 200 dwellings per net developable hectare.
Housing density (net)	The number of houses divided by net developable area.
Linear open space network	Corridors of open space, mainly along waterways that link together, forming a network.
Local parks (credited open space)	Open space that is set aside for parks, gardens, linear corridors, conservation bushlands, nature reserves, public squares and community gardens that are made available for passive recreation, play and unstructured physical activity including walking, cycling, hiking, revitalisation, contemplation and enjoying nature.
Local town centre	Provide the focus for business, services, commercial and retail based employment and social interaction. They are where people shop, work, meet, relax and live. They are well-served by public transport, they range in size and intensity of use.
Lot	A part (consisting of one or more pieces) of any land (except a road, a reserve, or common property) shown on a plan, which can be disposed of separately and includes a unit or accessory unit on a registered plan of strata subdivision and a lot or accessory lot on a registered cluster plan.
Medium density housing	Housing with an average density of around 50 dwellings per net developable hectare.
Native vegetation	Plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses.
Net developable area	Total amount of land within the precinct that is made available for development of housing and employment buildings, including lots and local streets. Total precinct area minus community facilities, schools and educational facilities and open space, arterial roads and encumbered land. Small local parks defined at subdivision stage are included in net developable area.

Paper road Paper roads are narrow road reservations generally located between public open space

and residential dwellings. Paper roads are created on the Plan of Subdivision and are nominally 4.0 metres in width. Paper roads must be illuminated and landscaped to ensure an attractive park interface. Additionally, paper roads must be designed to

prohibit unauthorised vehicular access.

Principal public transport

network

A high-quality public transport network that connects Principal and Major Activity Centres, and comprises the existing radial fixed-rail network, extensions to this radial

network and new cross-town bus routes.

Public open space Land that is set aside in the precinct structure plan for public recreation or public resort,

or as parklands, or for similar purposes. Incorporates active and passive open space.

Sporting reserves Land set aside for the specific purpose of formal/organised club based sports.

Uncredited open space Land that is constrained for development purposes. Includes easements for power/

transmission lines, sewers, gas, waterways, drainage, retarding basins/wetlands, landfill, conservation and heritage areas. This land may be used for a range of activities

(e.g. walking paths, sports fields).



