

DESIGN FRAMEWORK AND CONCEPT PLAN

RINGWOOD GREYFIELD PRECINCT



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1. CONTEXT



WHAT ARE THE GREYFIELDS?

Greyfield sites are residential areas where building stock is near the end of its useful life and land values make redevelopment attractive. Melbourne has many residential areas that qualify as greyfield sites, particularly in established middle and outer suburb. These areas often are low-density, detached housing on suburban-sized allotments that have good access to public transport and services (Plan Melbourne 2017). The City of Maroondah has a large number of areas that qualify as greyfield sites with high redevelopment potential.

WHAT IS THE PROBLEM?

Most redevelopment of suburban residential lots involves landowners demolishing a house and subdividing their block into smaller lots, typically creating between two to four new houses. When this occurs a significant proportion of the land becomes driveways and other hard surfaces. The result is that existing trees get removed and, due to the garden space being fragmented into insignificant areas, there is no new space for significant trees or green-space. This pattern is normally repeated until a neighbourhood has excessive amount of driveway pavement, no diversity in housing and no garden big enough to provide space for a large tree. The effect of this over time is that the area loses its canopy, its capacity to mitigate flooding and it is prone to holding the daytime heat in summer due to having more concrete. It also makes for a space that looks crowded, unwelcoming and largely removes all traces of neighbourhood character. Furthermore, the increase in density is minimal and makes further redevelopment unlikely. Though it is a second-rate outcome for any suburb, this is the current legal, business-as-usual (BAU) scenario.



Figure 1.1: Single lot redevelopments with significant hard surface area



WHAT IS THE SOLUTION?

Across Australia, local governments, universities and the broader community have been working to develop an innovative response to residential development by testing a precinct-wide approach. This approach encourages landowners to work together and redevelop at the same time. This approach has the capacity to maximize profit, improve design outcomes, make the area more sustainable and achieve net community benefit for the precinct. These benefits are all a product of the increased land area for development.

Through the combination of several such super lots, the street layout and orientation of lots and buildings can be properly orientated to the sun and better positioned to optimise ventilation. It also means that more land is available for public open space and canopy trees, both of which reduce flooding, increase cooling and improve the look and feel of an area.



The scale of development means that when larger lots are developed, underground parking is financially feasible. This means that there is more land available for housing and landscaping, and the demand for on-street car parking is reduced significantly. This precinct-wide approach that encourages development of super-lots not only provides financial benefits for landowners but through careful design can transform local neighbourhoods into vibrant, active, healthy, resilient places to live.

Figure 1.2: Business-as-usual developments in greyfield areas

WHAT ARE THE BENEFITS OF APPLYING PRECINCT WIDE APPROACH TO GREENING THE GREYFIELDS?

Super-lot development on precinct level would typically include:

- Increase in the availability and accessibility to open space;
- Increase connectivity through better walking and cycling options;
- Promote diversity in housing;
- Increase the tree canopy coverage, shade and evapotranspiration;
- Reduce flood risk;
- Increase passive surveillance.

Benefits to landowners and developers:

- higher returns;
- greater development certainty;
- improved neighbourhood amenity.

By amalgamating lots, landowners can achieve higher returns. Examples show that property values dramatically increase larger the size of the “super-lot”. Furthermore, two or more amalgamated land parcels can make significant savings by optimising driveways, parking and open space, and therefore increasing the land for development. These benefits are all a product of the increased land area.



Figure 1.4 Greening the Greyfields precinct



The Greening the Greyfields approach encourages developers to achieve maximum return if they comply with specific regulations. As an incentive to design better outcomes, the statutory element of the greyfield precinct offers above normal development options for developers.

Greyfield precincts attempt to address this complexity by ensuring that developers can achieve maximum return if they comply with specific regulations. As an incentive to design better outcomes, the statutory element of the greyfield precinct offers above normal development options to developers. However, it demands that the precinct also directly benefits the area by providing hard or soft infrastructure, thus both benefiting the community.

The scale of financial benefit will vary dependent on the lot-size, the configuration of the site and the availability of capital for development, among other issues. However, to provide an illustration of the benefits, the table below presents a range of financial outcomes. Key assumptions include a regular shaped parcel size of 800 square metre at a land value of \$900,000 and with the developer being able to personally fund 50% of the costs.

Table 1.1: Indicative financial benefit from lot amalgamation*

Typology	No. of lots	No. of dwellings	Profit (\$ 000's)	Potential return on investment (%)
Townhouse	1	4	300	10
Apartments	2	16	1970	28
Townhouses	2	12	2659	46
Apartment & townhouse	3	30	4878	45
Apartments	3	32	4168	55

Source: Swinburne University, 2020

* Based on a parcel size of 800 square meter. The model assumes, 20% capitalisation, no additional premium for lot amalgamation, 10% contingency on construction cost and 5% contingency on the full development. Developer contributions include 5% open space contribution and cost of infrastructure upgrades. All income was assessed as coming at the end of the development cycle, as opposed to off-the-plan, as such interest was calculated over the full cycle, using a typical "buy and develop" model for land assembly.



2. INTRODUCTION

WHY THIS PLAN?

The purpose of the Precinct Design Framework and Concept Plan (The Plan) is to guide the redevelopment of the greyfield precinct in Ringwood. This Plan is expected to encourage renewal through lot amalgamation and to support varying residential densities across the precinct. It will create certainty for developers and help Council make informed planning decisions.

The Plan has been shaped from several inputs including, but not limited to the following:

- Detailed site visits
- Background economic analyses
- A review of relevant local and state planning policy
- A review of Best practices in Water Sensitive Urban Design (WSUD)
- Feedback from multiple community engagement forums and meetings with a wide range of relevant agencies and stakeholders.

The Plan outlines the following for the precinct:

- Preferred built form e.g. setbacks
- Preferred circulation and connectivity
- Recommended streetscapes and landscaping strategy, considering the tree canopy
- Future housing options
- Environmental and Sustainability Design

This Plan has helped inform, and will support, the statutory framework to guide the development of the precinct in the future.

HOW TO READ THIS DOCUMENT?

This document presents the context of, and vision for, the Ringwood Pilot Precinct (Figure 2.1) (the Precinct). The Vision informs a set of Precinct level objectives, followed by strategies and development guidelines.

Given the uncertainty about which property owners will choose to participate in this project, the Plan is proposed at a concept level. There are no established guidelines for greyfield renewal areas and the Plan has been guided by the Planning Practice Note (PPN) 17 Urban Design Frameworks and the Victorian Urban Design Guidelines for Victoria (UVDG).

The Plan is presented in following sections.

- Introduction
- Background analyses
- Engagement
- Vision, Objectives, Strategies and Guidelines
- Implementation Strategy

The Plan has been prepared to support the relevant changes to the Maroondah Planning Scheme. The proposed new statutory controls will be introduced via a Planning Scheme Amendment (PSA) and will introduce the Objectives, Strategies and Guidelines outlined in this Plan through zoning provisions (rezoning) a new Development Plan Overlay (DPO) and Development Contributions Plan (DCP). These controls will be supported by relevant changes and updates to the Local Planning Policy Framework (LPPF). More details are provided in Section 6.

STUDY AREA

The Ringwood Pilot Precinct is located within walking distance to the Ringwood Metropolitan Activity Centre (MAC) in the suburb of Ringwood, 23 kilometers east of the Melbourne CBD. It is bound by Loughman Road to the north, Warrandyte Road to the east, Ringwood Street to the west and Ringwood Bypass to the south.

The Ringwood MAC is one of nine sub-regional centres identified in Plan Melbourne where effort and investment will be provided to concentrate the growth of higher density living, jobs and services near major public transport nodes. Metropolitan Activity Centre provide a focus of activity for their regional hinterland and an alternative to lower density suburban living.

Geographically Ringwood MAC is situated along the Maroondah Highway at the foot of the Dandenong's, operating as a gateway to the Yarra Valley, a popular tourist destination, as well as an important sub-regional goods and services hub. Bounded to the West by the Eastlink Freeway, the North by the Ringwood Bypass, the East by Ringwood Lake and the South by Lilydale/Belgrave rail lines. Logistically Ringwood's location, integrated within the expansive arterial road and railway network of the outer east of Melbourne has enabled it to be established as a strategic transport node.



Figure 2.1: The Pilot Precinct



PRECINCT SELECTION

The chosen pilot precinct was identified through technical research, input from relevant internal Council staff and in consultation with the Greening the Greyfield Community Advisory Group (CAG). The CAG was established to provide advice and support regarding the pilot project.

The background technical research included the use of the ENVISION¹, a spatial tool developed to allow investigation and analysis of the redevelopment potential of Local Government Areas (LGAs), suburbs and specific areas of Melbourne. ENVISION was used to:

- create and map census demographics;
- identify re-developable properties based on a range of property and distance-based indicators;
- assess the financial return of various redevelopment options.

The pilot precinct boundary was defined based on the redevelopment potential, existing and desired future land use and the propensity for change within the precincts. The pilot precinct was identified as having the RPI of greater than 0.7.

Land is considered a possible candidate for redevelopment if it has an Redevelopment Potential Index (RPI) of 0.7 or greater. RPI is calculated based on land value divided by Capital Improved Value (CIV). The CIV is the value of the land plus any improvements, including buildings. When the RPI reaches 0.7 or the equivalent of the land being equal to or greater than 70% of the CIV, market pressures will start to make the subdivision or redevelopment of the site increasingly likely.

The precinct boundaries generally follow existing land use zoning boundaries, as identified in the Maroondah Planning Scheme and considering existing geographic features and site sensitivities, including the related potential responses to these sensitivities (e.g. potential for infrastructure improvement).

¹ ENVISION also enables users to download data for use in Envision Scenario Planner (ESP), a web-based system for sketch planning redevelopment options for an identified renewal precinct. Once cadastral data has been imported into the system, lots can be amalgamated and subdivided, rezoned, and allocated height limits. Users can then drag-and-drop objects from a library over 100 precinct typologies, ranging from single houses to high rise apartment buildings and even shops, schools and street trees. As a virtual neighbourhood is being designed in 3D, reports are generated providing users feedback on over 300 Key Performance Indicators, including embodied and operating carbon, operating energy, water demand, capital and operating costs, transport and a suite of planning metrics.



3. BACKGROUND ANALYSIS

INTRODUCTION

This section provides an overview and brief analyses of the Study Area. The facts and figures presented in this section are derived from analyses undertaken by considering the problems in the greyfields, review of the strategic and physical context, along with the review of relevant technical studies and background documents. These specifically relate to the demographic profile, community infrastructure and the economic feasibility from lot amalgamation.

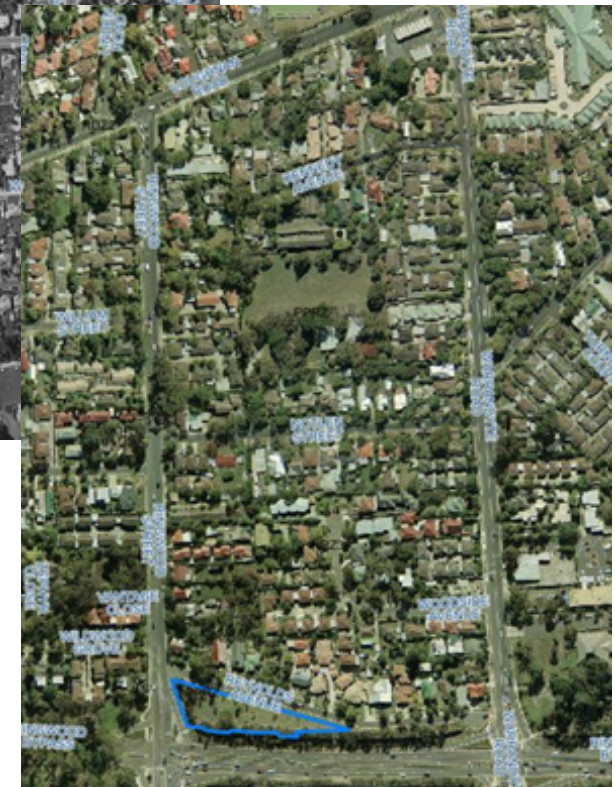
THE PLACE

Ringwood gets its name from a market town in England located on the River Avon. Soon after European settlement of Victoria, the Maroondah district was used by squatters to graze animals and cut firewood. In the second half of the nineteenth century, farming became more organised and orcharding and market gardening commenced, as well as mining and brickmaking¹. Subdivision of land in the district commenced as early as 1886 with the proclamation of the Township of Ringwood.

Ringwood was described as having a minor building boom in 1913 with 50 shops and dwellings constructed and interest in living in the district continued to build following connection of electricity in 1915. The original subdivision of the subject Precinct occurred around this time, and the Precinct contained two original dwellings at 47 and 49 Warrandyte Road², which date from the early 1920s. It is noted that almost 100 years have passed since these original dwellings were constructed in the Pilot Precinct.



1963 aerial image



2003 aerial image

Figure 3.1: Aerial images of the Study Area

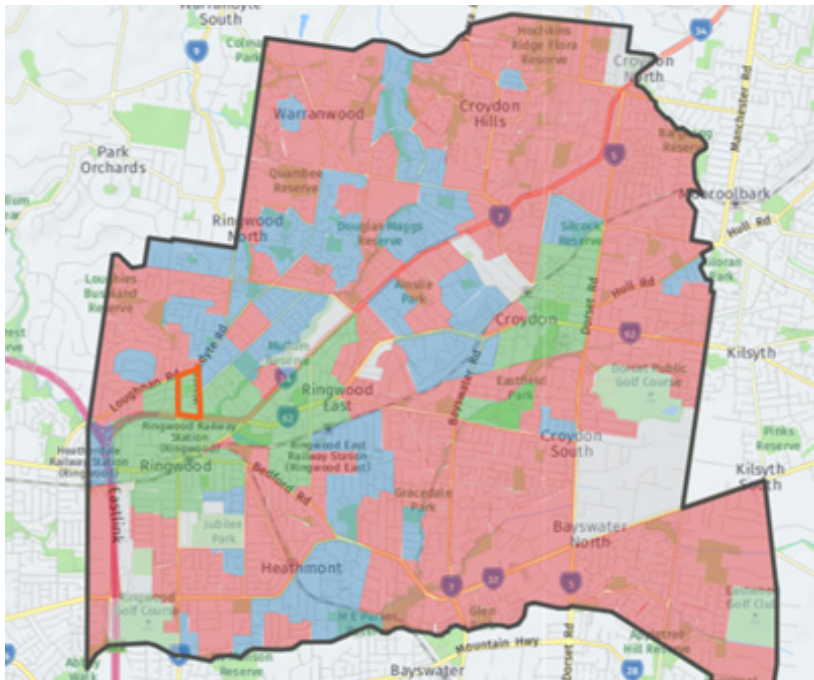
Source: Maroondah City Council, 2019

¹ Richard Peterson Architect & Conservation Consultant. Maroondah Heritage Study, November 2003

² HO 128 (49 Warrandyte Rd) / HO 127 (47 Warrandyte Rd)

THE PEOPLE

The first people that occupied the Melbourne area prior to European colonisation were the Woiwurrung language group, specifically the Wurundjeri people. The territory of the Wurundjeri lies within the inner city of Melbourne and extends north of the Great Dividing Ranges, east to Mt Baw Baw, south to Mordialloc Creek and west to Werribee River. The Yarra River was central to the Wurundjeri people as it provided a variety of foods such as eels and fish. The southern portion of the precinct is designated as having Cultural Sensitivity related to the Mullum Mullum Creek, which was used as a food and tool source by the Wurundjeri people.



DEMOGRAPHY

Across Maroondah, the residential population is forecast to grow from 118,558 people¹ (2020) to 135,400 people over the next 18 years to 2036. The larger Ringwood Precinct is forecast to grow at an annual average of 1.52% with an additional 5,709 people to 2036 and an additional 3000 dwellings².

In comparison to Maroondah, the precinct has a relatively younger population, with a smaller average household size and relatively higher density than Maroondah. Between the 2011 and 2016 census, 57 percent people in the pilot precinct moved address, indicating a transient population which may reflect the higher level of rental housing and increasing rental prices during the period.

About 44 percent of households were owners or mortgage holders while 53 percent were renters, reflecting the pattern of dominant renter profile near major commercial / shopping centres (Ringwood Metropolitan Activity Centre).

About 16 percent of households were suffering ‘housing stress’³ (that is, low income households, paying more than 30% of gross income to housing costs). In the City of Maroondah, 71% of households were purchasing or fully owned their home, 20.4% were renting privately, and 2.5% were in social housing in 2016.

Table 3.1: Demographic Profile in the Precinct

Information	Precinct	Maroondah (2020)*
Population	587	118,558
Population density	33 people per hectare	19.4 people per hectare*
Purchasing or fully owned home	44 percent	71 percent
Estimated renters	53 percent	-

Source: Maroondah City Council, 2020

* ABS 2020.

STRATEGIC PLANNING CONTEXT

Strategic Planning in the Maroondah City Council is undertaken within the context of Victorian State planning policy provisions and legislation and is implemented at the local level by Council.

STATE

Plan Melbourne 2017-2050 (and its addendum 2019) is a long-term strategic plan designed to respond to global, state-wide, regional and local challenges and opportunities as Melbourne grows from 4.8 million (2018) to 8.4 million by 2050. A key strategy of Plan Melbourne is to proactively plan the redevelopment of 'greyfield' residential areas.

The specific outcomes, directions and policy in Plan Melbourne, relevant to the Greening the Greyfields work, are detailed in Table 3.2.

Table 3.2: Plan Melbourne

Outcome 2	Melbourne provides housing choice in locations close to jobs and services	
Action 2.2	Redevelopment of greyfield areas	Support councils to identify greyfield areas suitable for redevelopment for medium-density housing and lot consolidation
Direction 2.2	Deliver more housing closer to jobs and public transport	Locating medium-and higher-density development near services, jobs and public transport supports the objectives of consolidation and housing choice. Opportunities for more medium- and higher-density development in middle suburbs close to jobs and services including...areas identified for greyfield renewal.
Policy 2.2.4	Provide support and guidance for greyfield areas to deliver more housing choice and diversity	Greyfield sites are residential areas where building stock is near the end of its useful life and land values make redevelopment attractive. Melbourne has many residential areas that qualify as greyfield sites, particularly in established middle and outer suburbs. These areas often have low-density, detached housing on suburban-sized allotments that have good access to public transport and services.
		Up until now, the redevelopment of these areas has been generally uncoordinated and unplanned. That must change. Greyfield areas provide an ideal opportunity for land consolidation and need to be supported by a coordinated approach to planning that delivers a greater mix and diversity of housing and provides more choice for people already living in the area as well as for new residents. Methods of identifying and planning for greyfield areas need to be developed. A more structured approach to greyfield areas will help local governments and communities achieve more sustainable outcomes
Direction 5.2	Create neighbourhoods that support safe communities and healthy lifestyles	Urban renewal precincts, greyfield redevelopment areas and transit-oriented development areas (such as railway stations) are enablers in the development of an integrated transport system. Well-designed infrastructure for walking and cycling are critical elements

Source: Plan Melbourne 2017

The Victoria Planning Provisions are implemented by Council through the Maroondah Planning Scheme (the Scheme). Specifically, the Victorian Planning Policy (VPP) expresses the State and community expectation for areas and land uses. It also provides for the implementation of State policies affecting land use and development. Clause 16.01-2R (Housing opportunity areas- Metropolitan Melbourne) of the VPP, as gazetted in July 2018, includes the following strategies.

- 1) Identify areas that offer opportunities for more medium and high-density housing near employment and transport in Metropolitan Melbourne.
- 2) Manage the supply of new housing to meet population growth and create a sustainable city by developing housing and mixed-use development opportunities in locations that are:
 - In and around the Central City.
 - Urban-renewal precincts and sites.
 - Areas for residential growth.
 - Areas for greyfield renewal, particularly through opportunities for land consolidation.
 - Areas designated as National Employment and Innovation Clusters.
 - Metropolitan activity centres and major activity centres.
 - Neighbourhood activity centres especially those with good public transport connections.
 - Areas near existing and proposed railway stations that can support transit-oriented development.
- 3) Facilitate increased housing in established areas to create a city of 20-minute neighbourhoods close to existing services, jobs and public transport. Direct new housing to areas with appropriate infrastructure.

LOCAL

The Council Plan 2017-21 is the Maroondah City Council medium-term strategic document that sets key directions and priority actions to work towards the long-term community vision outlined in Maroondah 2040: Our future together.

A key community vision expressed in the Council plan is for ‘an attractive, thriving and well-built community’ with the Greening the Greyfields project identified as a priority action important to achieving this vision. The specific priority action is to ‘work in partnership to implement the Greening the Greyfields project to facilitate a sustainable approach to urban redevelopment in identified residential precincts.’

Liveability is similarly defined in the Maroondah Health and Wellbeing Plan 2017-21 (MHWP) and the Victorian Public Health and Wellbeing Plan, as follows.

“Liveable refers to the degree to which communities are safe, attractive, environmentally stable and socially cohesive and inclusive. This requires affordable and diverse housing, convenient public transport, walking and cycling infrastructure, access to education and employment, public open space, local shops, health and community services, and leisure and cultural opportunities¹”

The Maroondah Health and Wellbeing Plan (MHWP) 2017-21 is a strategic plan that describes how Council and partners will work towards achieving maximum health and wellbeing for the community. The function of councils, regarding health and wellbeing, is to seek to protect, improve and promote public health and wellbeing within a municipality. Liveability is one of the MHWP outcome areas, with focus areas of environment, climate change and infrastructure. The Safe, Healthy & Active outcome area includes a focus on social and affordable housing. The seven domains of liveability are: employment; food; housing; public open space; transport; walkability; social infrastructure. These lead to the long-term outcomes of healthy, liveable neighbourhoods and communities and population health and wellbeing.

The Plan indicates that sustainability and sustainable development are connected to health and liveability. Priority actions items from the Liveable outcome area include:

5.1.2 Encourage high quality urban design that provides for a healthy, attractive and desirable built form through the implementation of the Greening the Greyfields Project

1 Victorian Government, Victorian Public Health and Wellbeing Plan 2015-19, p46 <https://www2.health.vic.gov.au/about/health-strategies/public-health-wellbeing-plan>

In addition to the above the following strategic documents and key directions and/or targets are relevant to the Greening the Greyfields work:

- Active & Healthy Ageing Initiative 2015-2020;
- Draft Climate Change Risk and Adaptation Strategy;
- Environmentally Sustainable Development Policy;
- Habitat Corridors Strategy 2004;
- Open Space Policy & Strategy 2016;
- Sites of Biological Significance 1997;
- Sustainability Strategy 2016-2020;
- Tree Policy 2017;
- Water Sensitive City Strategy 2015.

Key directions relevant to Greening the Greyfields, include the following:

- Encourage and support the provision of a diverse range of housing across Maroondah, that meets the needs of current and future residents.
- Work in partnership to ensure development considers urban design principles that enhance the connection between the built environment and the natural environment.
- Work in partnership to deliver distinctive and high-quality architecture through the use of urban design guidelines and principles.
- Facilitate, lead and educate the community in the use of environmentally sustainable design across all forms of infrastructure to limit carbon emissions and reduce resource consumption.
- Work in partnership to encourage the use of water sensitive approach in the development and renewal of the built and natural environment.
- Develop and implement an urban form that enhances the desirable attributes of Maroondah to protect and value ridgelines, vegetation, neighbourhood character, local history and cultural heritage.

The Maroondah Housing Strategy (“the strategy”) was adopted by Council at its meeting on 27 June 2016. The Maroondah Council approach to delivering its share of Melbourne’s housing growth is based around the following initiatives.

- Further development of the Ringwood Metropolitan Activity Centre and Croydon Major Activity Centre.
- Increased growth and development in Maroondah’s two neighbourhood centres with train stations (Ringwood East and Heathmont).
- Renewal of greyfield precincts outside of activity centres.

The strategy seeks to create better places and not just better housing and includes Key Direction 2.1 as follows.

Work in partnership with State Government and Swinburne University on the concept of ‘Greening the Greyfields’ in Plan Melbourne Refresh to deliver better development outcomes than existing subdivisions.

Forty per cent (40%) of local community members surveyed as part of the Housing Strategy work identified that greyfield renewal was one of their top three housing priorities. The strategy supports the Greening the Greyfields concept as a method to encourage precinct-wide development. This is viewed as a possible remedy to address outcomes stemming from the uncoordinated, ad hoc, lot-by-lot development currently occurring.

While individual landowners will no doubt continue to develop existing individual blocks in various parts of the municipality, Council’s housing strategy envisages that most development in Maroondah will be delivered through the above initiatives.

PLANNING CONTROLS

MAROONDAH VISION AND STRATEGIC FRAMEWORK

Planning and development across Maroondah are guided by three key principles expressed in the Maroondah Planning Scheme Strategic Framework Plan (Figure 3.3) as follows.

The hierarchy of activity centres as the focus for growth in Maroondah between 2016 and 2040.

Protection of areas of ridge and landscape from significant development.

Protecting and enhancing our environment and neighbourhoods

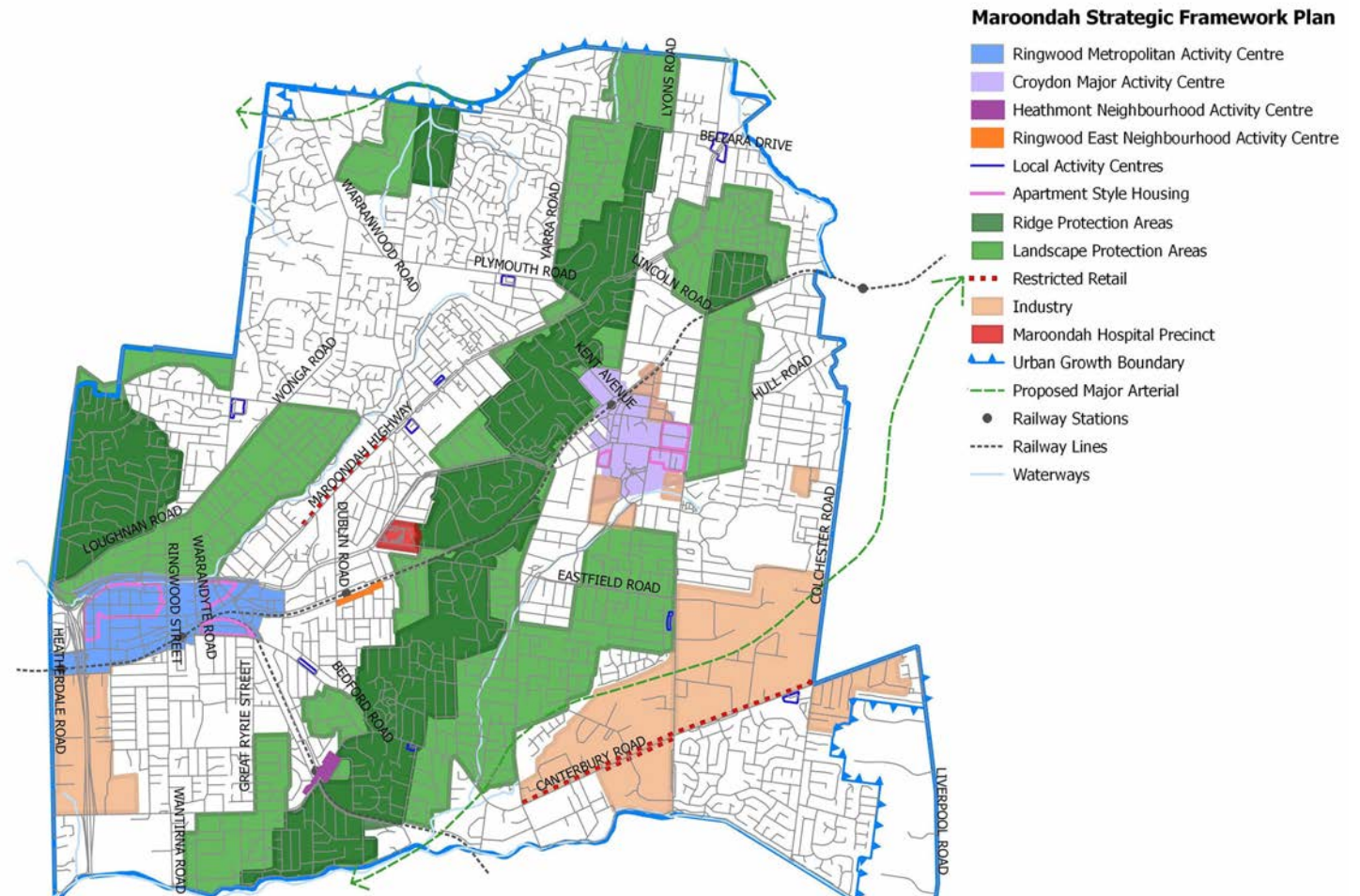


Figure 3.3: Maroondah Strategic Framework Plan

The study area is within the Neighbourhood Residential Zone (NRZ) with some residential development controls varied under Schedule 3 (Canopy Cover Ridgeline Protection) to the zone (NRZ3).

The area is within the following overlays:

- Significant Landscape Overlay, Schedule 3 (SLO3)
- Heritage Overlays (HO)- HO58, HO 127 and HO 128
- Public Parks and Recreation Zone (PPRZ)

More information on the planning controls is provided in the Annex.

The key objectives and planning controls within the Zone and Overlay are as follows:

- The NRZ applies to predominantly single and double storey residential development.
- The NRZ manages development to respect neighbourhood and landscape character.
- The NRZ allows for a limited range of non-residential land uses to serve local community needs.
- Under the NRZ, the maximum Building Height is 9 metres (2 storeys) at any point.
- Under the NRZ, a minimum 'Garden Area' of 25% to 35% per dwelling is required, depending on the lot size. The 'Garden Area' cannot include driveways or parking areas and can be above ground i.e. roof or open balconies.
- There are no specific neighbourhood character objectives under the Schedule to the Zone.
- There is no minimum lot size (or site area per dwelling) under the NRZ or SLO.
- The standard requirements of Clause 54 and Clause 55 of the Scheme as they relate to building height as varied under NRZ3 to increase the minimum rear setbacks to 5 metres (at ground level) and the minimum side setbacks to 1.2 metres (at ground level).
- The standard requirements of Clause 54 and Clause 55 of the Scheme as they relate to private open space as varied under NRZ3 to require a minimum total of 80sqm private open space per dwelling with 60sqm to be secluded private open space (to the side or rear of the dwelling and accessible from living area) and minimum dimension of 5 metres.

THE PRECINCT

To understand the existing physical context of the Precinct, an urban and landscape analysis was undertaken. The analysis reviewed the existing built form and landscape character within the study area. It also reviewed its access to activity centres, public open space, public transport and community facilities. This analysis helped inform the identification of future opportunities for changes to built form, streetscapes and open space connectivity.

Table 3.3: Existing land use in the Precinct

Precinct	Hectares (approx.)	% of gross precinct area
Precinct- gross area (but not including external roads)	14.0	100
Precinct- net residential area (not including all of open space, Right of Way (RoW), internal roads but including commercial land use areas)	11.7	87.2
Commercial land uses	0.6	4.5
Open Space- Gross Area	1.7	12.8
Open Space- Net Area (excluding entry/ car park, walkway, drainage)	1.74	12.4
Right of Way (ROW)	0.004	0.3

Source: Maroondah City Council 2018

TOPOGRAPHY

The Precinct slopes downward from Loughnan Road (135- 136AHD) to Ringwood Bypass (107-109 AHD) with varying degrees of steepness in this direction across the site. The topography forms a slight gully from Notlen Street to Reynolds Avenue. The open space on Reynolds Avenue is the lowest point forming a storm water drainage basin, which is connected to the Mullum Mullum Creek system.

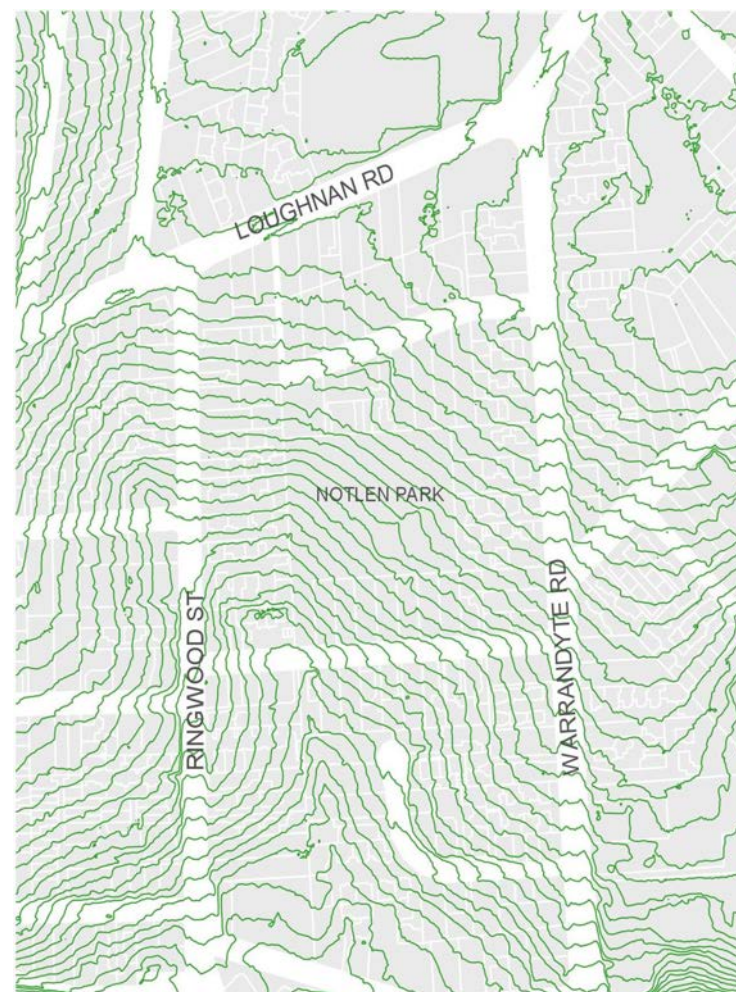


Figure 3.4: Topography - 1 metre contours

STORMWATER AND FLOODING

As indicated in the Council flood modelling work, some areas within the municipality are at risk from flooding stemming from stormwater overland flow. The **Figure 3.5** is an extract from the Council flood modelling layer indicating areas prone to flooding in a 1:100-year event.

The Precinct is serviced with a system of pits in roadways and underground pipes which receive and convey surface stormwater using natural downward slope gradients to the receiving water of Mullum Mullum Creek.

There are two drainage basins within the Precinct, being the Notlen Street Park and Reynolds Avenue. Underground services including communications, gas, power, sewer and water service the Nolen Street Park, namely regarding the childcare centre within. Some historic assets are also located in this general area of the Precinct.

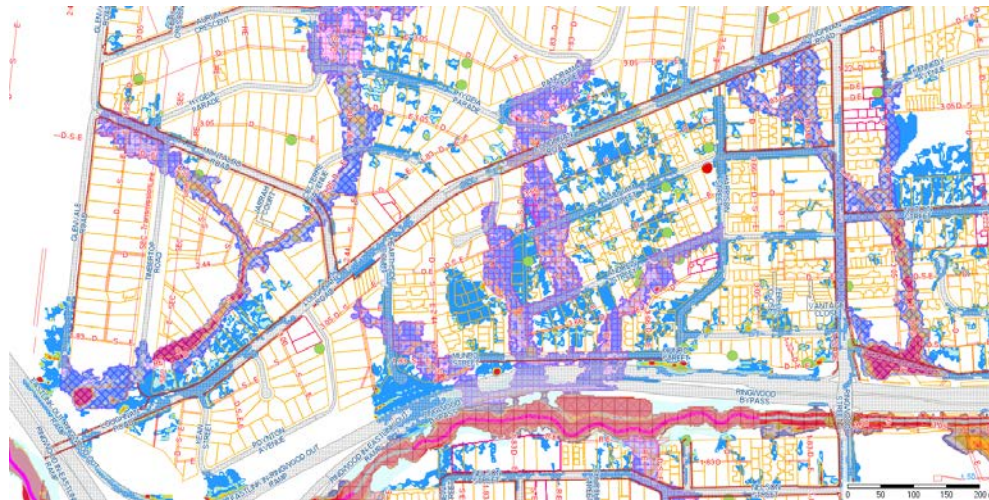


Figure 3.5: Areas prone to flooding

VEGETATION AND LANDSCAPE

The most significant concentration of trees is within the Notlen Street Park, particularly around the periphery of the Park, except for the area used for vehicle accessway from Notlen Street and car park in the south-east portion of the Park. These trees are generally small to large evergreen variety.

Housing in the area is relatively dense in nature, which has over time led to a diminished tree canopy across the private realm. As a result, existing trees within the public realm are of increased value. Still, the supply of street trees has also reduced due to the increase in the number of cross-overs over time. Where canopy trees have been lost on private land, they have generally been replaced by smaller shrubs and trees. Cooling and heat island effect mitigation generally comes from canopy trees and far less so from shrubs.

The main vegetation characteristics of the Precinct are as follows:

- The reserve to the north of the Ringwood Bypass (bounded by Ringwood Street to the east, Warrandyte Road to the west and Reynolds Street to the north) contains several trees which considered together form the most significant asset in this part of the precinct. The area forms a southern boundary to the



Figure 3.6: Food basin at Notlen Street Park

precinct and is currently relatively isolated from the rest of the precinct could be incorporated into a connected open space amenity. The area contains some indigenous trees to the west.

- Most streets in the area have planting that is typical of the time of planting in the 70s/80s consisting of Paperbarks, Melaleucas species, and Queensland box. Given the age of the trees, they are in the latter portion of their useful lives.
- The area to the east of Ringwood Street close to Kennedy Avenue contains some good quality trees on private property. The tree canopy on private land in this area links to the canopy associated with Notlen Park.
- The tree canopy between Notlen Street and Reynolds Avenue (and containing Woodside Avenue) is quite limited. The reinstatement of a reasonable tree canopy in this area could be an objective of a future development plan.
- Warrandyte Road as well as the northern side of Loughnan Road accommodates some heavy duty electrical infrastructure which limits the potential for street planting.
- Additional planting on the western side of Warrandyte Road would require widening of the nature strip.
- Both Ringwood Street and Warrandyte Road have relatively sparse street tree planting and limited opportunities for additional planting.
- The open space area at Notlen Park has several large canopy trees and is a significant asset in the area.



Figure 3.7: Significant concentration of trees within Notlen Street Park

STREETSCAPE AND PUBLIC INTERFACES

The Precinct interfaces with major roads on three boundaries, being to the immediate north, east and west. Setbacks and dwelling types along these interfaces are generally consistent except for some multi-dwelling developments, which present a more intense residential character to these major roads. Access points to these interfaces are predominately vehicular with limited pedestrian access via walkways (one walkway to each interface). Sites along the opposite sides of the adjoining major roads are generally characterised by low density residential development.

To the south, the public open space to the immediate south of Reynolds street interfaces with the Ringwood Bypass. The acoustic barrier fence in this location provides a visual divide between the Precinct and other development further to the south, including Ringwood Bypass.

In terms of potential urban design outcomes, the most significant internal interface is that between the Notlen Street Park and surrounding residential development. The dwellings adjoining the Park are predominately orientated away from the Park towards surrounding streets. A number of multi-dwelling developments are located on sites adjoining the Park with most of these developments oriented to the 'front'/nearest street and incorporating a 'battle-axe arrangement'. As a result, the rear dwellings within these developments are placed within relatively proximity to the Park.

Fencing at the Interface of the Park and adjoining sites is characterised generally by heights of 1.5 to 2.0 metres, depending on the slope of the land. From within the Park, there is a sense of the surrounding residential development 'turning its back on' the Park.

COMMUNITY PLACES / PUBLIC REALM

Public open spaces within the surrounding area include the following:

- Ringwood Bowls Club located directly to the north of the Precinct on Loughnan Road providing formal and informal bowling and social club.
- Mullum Mullum Reserve located approximately 600 metres on Mullum Mullum Road (to the east of the Precinct) and incorporating two ovals, a new pavilion, playground and connections to the Mullum Mullum Creek Trail, and is home to cricket and football clubs.

Ringwood Lake Park located approximately 4 kilometres to the east and incorporating a playground, bushland reserve and network of shared pathways. Public open spaces within the Precinct include the following:

- Notlen Street Reserve located central to the Precinct and incorporating seats, lights, play equipment etc.
- Two parcels of land within the south portion of the Precinct incorporating a drainage function for the remainder of the Precinct.



Figure 3.8: Absence of visual interface and no access from the residential developments to Notlen Park

ACCESS AND MOVEMENT

The Precinct currently enjoys access to many places and facilities within a short distance, which meet 'daily' needs, such as those identified on Ringwood MAC - major shopping, supermarkets, commercial and community services, and entertainment.

- Ringwood train station and bus interchange, Regional bike trails, regional highways
- Key open space and sporting facilities
- Education and learning, library

In comparison to the Maroondah average, the residents of the Precinct have less reliance on car for travelling to work. The proximity to the train station and bus services has resulted in significantly more people travelling to work by public transport. The precinct has a walkability score of 0.7 to 1 indicating relatively good levels of walkability. However, the west of the precinct is less walkable and improving walkability could be an objective of redevelopment in that area.

Table 3.4 Modal split (%)

Mode of transport	Pilot Precinct (%)	Maroondah (%)
Car	68.0	71.6
Public Transport	20.8	11.9
Walking	2.8	1.2
Cycling	0.0	0.4
No car ownership	9.5	4.7
Two or more car ownership	35.7	57.2

Source: ABS, 2016

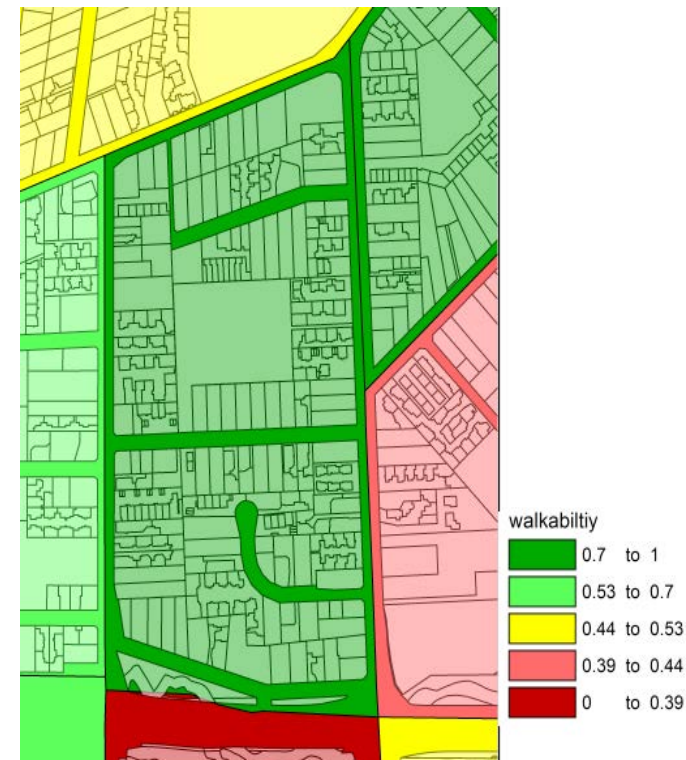


Figure 3.9: Walkability score of the study area

STREET LIGHTING

Existing street lighting within the Precinct is located along all internal streets and the pedestrian accessway between Nolan Park and the Warrandyte Road interface. There is no lighting of the pedestrian accessway between Loughman Road and Kennedy Avenue. Limited lighting exists to the public open space to the south of Reynolds Road (two street lights).

Maroondah City Council has started the last phase of a street light project on residential streets that aims to save money and reduce energy use. As part of Phase 4 of this lighting project, approximately 2,097 high-performance and energy efficient LED street lights will be replaced across the municipality.

RESIDENTIAL DWELLING AND DENSITY

The figure 3.10 shows the age of the existing housing stock in the precinct. Dwellings less than twenty years old are not considered candidates for development, with the likelihood of demolition and redevelopment of a property increasing with its age. As demonstrated in the figure, dwelling age is mixed within the precinct, however, there exists pockets of contiguous older dwellings that could be incorporated into a development site.

As relevant to the Precinct, at the 2016 Census, housing in the Precinct had the following characteristics.

- 59% of total dwellings were single dwellings on a lot (168 dwellings).
- 11% were high density apartments (32 dwellings).
- 29% were medium density (85 dwellings).
- 65% of dwellings with two-bedrooms or less.
- 8% of dwellings with four or more bedrooms.
- 13.3% vacant dwellings.

The development at the corner of Ringwood Street and Reynolds Avenue had the highest dwelling density, while the rest of the precinct had low or medium density.

Density classification - high (above 75 dwellings per hectare), Medium (25-75 dwellings per hectare), low density (less than 25 dwellings per hectare). Source: Managing Residential Development Taskforce - Central Subregion - Residential Zones State of Play, 29 January 2016.



Figure 3.10: Estimated age of the dwellings

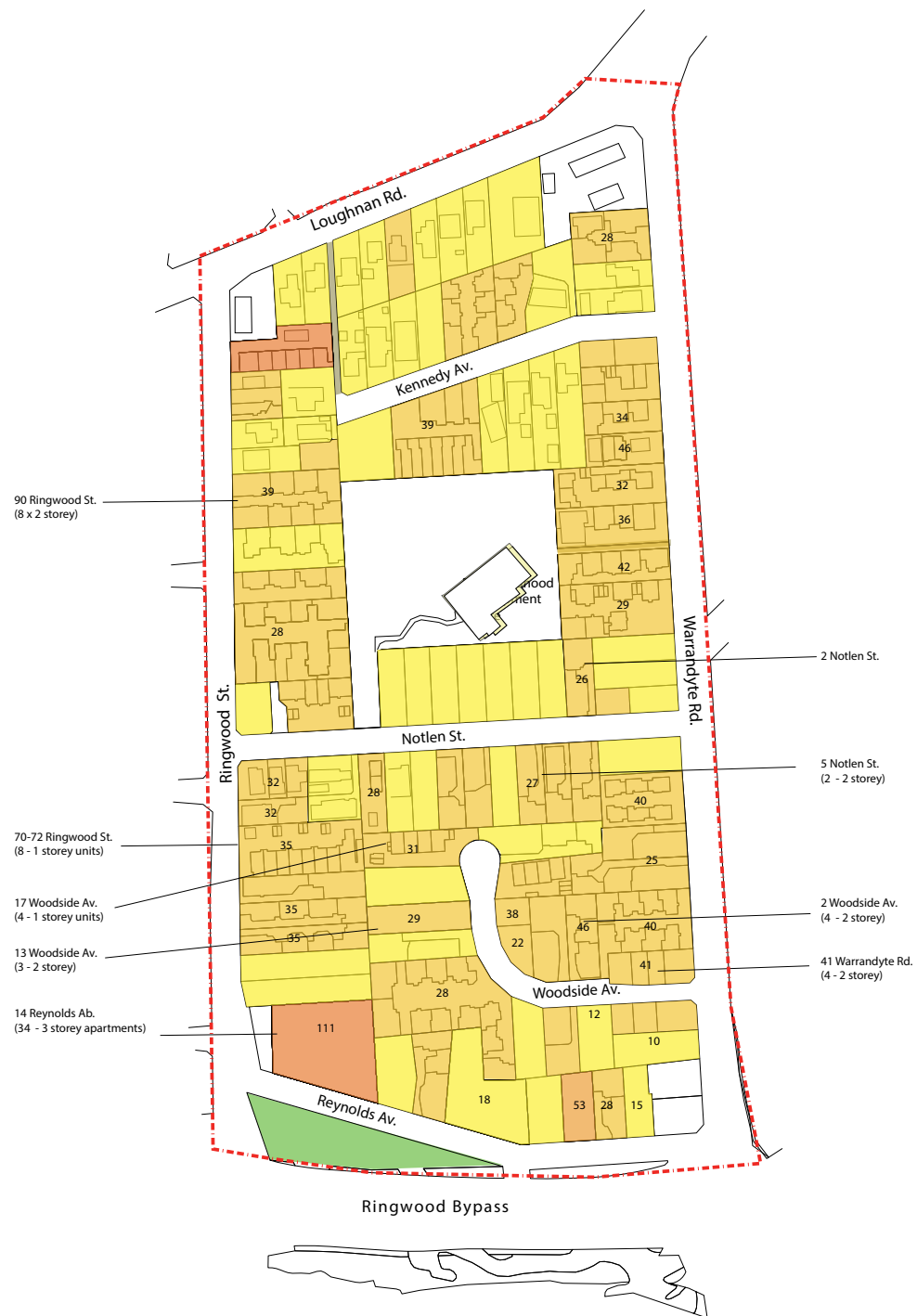


Figure 3.11: Dwelling density at different locations in the precinct (dwellings/Ha)

NEIGHBOURHOOD CHARACTER

The Ringwood precinct is characterised by low-scale housing stock set in established garden settings with an abundance of canopy trees in most streets. The natural landscape and tree canopy cover is the defining character element of the area in which the precinct is located. The area, including the Ringwood precinct, has the following characteristics.

- The architectural character is mixed with many dwellings constructed in the 1950s to 1970s.
- The topography is gently undulating to hilly, with views to the vegetated creek-line found in parts.
- There are substantial areas of native vegetation in the open space areas around the creek.
- Front setbacks are consistently 6 to 7 metres and side setbacks are generally 1 metre / 3 to 4 metres, except in a few newer developments.
- Front fences vary from medium to low and some sites have no front fence.
- The street layout is regular and structured with some curvilinear / cul-de-sacs infill.
- Roads are sealed, commonly with upstanding curbs and wide grassy nature strips and there are footpaths on the major roads only.
- Street trees are of mixed species and irregularly spaced.

Under the existing neighbourhood character designations, as reflected in the Maroondah Planning Scheme, the precinct is within the character area known as Neighbourhood Area 1 (Mullum Mullum Creek- Garden Suburban). The Maroondah Draft Neighbourhood Character Study Review includes this area within the 'Neighbourhood Residential Zone 7 ('Warranwood Ridgeline & Slopes')' and notes that, within this area, vegetation should predominate visually and built form should be sited and designed to be responsible to the topography.

The Study also highlights the natural landscape and tree canopy cover as defining elements of this area despite some redevelopment, renovation and canopy tree removal. While these comments relate to 'Neighbourhood

Residential Zone 7' in general, it is further noted that an exception to this is the southernmost part of this neighbourhood, located above the Ringwood Bypass. This southern portion of the character area is highly visible from the centre of Ringwood and some lot consolidation has already occurred within this area, with associated multi-dwelling development and vegetation removal.

The Study recommends application of a varied set of development controls under a new schedule to the Neighbourhood Residential Zone (NRZ), including reduced site coverage, increased site permeability and additional canopy tree planting including a minimum of one canopy tree per 175 square metres of site area. It is recommended that this canopy tree be required to reach a minimum mature height that equals the height of the proposed development including one canopy tree within each secluded private open space area and a minimum of one canopy tree within the front setback per 5 metres of width of the site. In addition, it is recommended that each tree should be surrounded by 20 square metres of permeable site area with a minimum radius of 3 metres and that up to 50 per cent of the permeable surface may be shared with another tree.

These recommended new development controls for 'Neighbourhood Residential Zone 7' are intended to meet the following objectives.

- Protect the neighbourhood and landscape character of the highly visible Warranwood Ridgeline and adjacent slopes.
- Ensure that a continuous, predominately native, tree canopy cover defines the character of the ridgeline and slopes, including views towards them, and that dwellings are not a visually dominant element in the landscape.
- Ensure that development demonstrates a high standard of design and responds to its topographic context with appropriate siting and size, and minimal cut and fill.
- Encourage low scale and site responsive development that sits unobtrusively within the landscape and utilises natural materials and muted tones that best immerse the building within its setting.
- Maintain the visual dominance of the tree canopy cover by requiring an adequate amount of permeable land for protecting and planting native, permeable indigenous, vegetation.

While the above objectives highlight the key existing character strengths of the area and the importance of improving this character, the proposed 'Neighbourhood Residential Zone 7' covers a wider area than that affected by the Ringwood precinct Greyfield Renewal designation. The proposed new character area takes in the majority of former Neighbourhood Area 1 together with the east facing slopes of former Neighbourhood Area 4- Quambee Gardens. The southern and eastern parts of the former Neighbourhood Area 6- Jumping Creek Valley are also included.

The Ringwood greyfields renewal precinct will be excluded from any future neighbourhood character area designations based on a recognition that a new character is intended to be created within the precinct as part of the greyfields work.



4. KEY ISSUES AND OPPORTUNITIES

KEY ISSUES

Based on the completed background analysis and engagement activities, several key issues and opportunities have been identified for the Precinct.

Reduced tree canopy

Significant tree loss has occurred in streets and within private land holdings across the Precinct. As a result, the Precinct has a relatively limited tree canopy cover. Generally, there has also been poor canopy tree provision within multi-dwelling developments. The resultant level of canopy tree cover in the Precinct overall is limited compared with that of the surrounding area, particularly to the north of Loughnan Road and in the vicinity of Mullum Mullum Creek to the south.

Flood Risk

Portions of the Precinct are prone to flooding with waters flowing generally in a north to south direction through the west portions of the precinct. The portion of the land most affected includes the area to the south of Kennedy Avenue along the west side of Notlen Park Reserve and southward over Notlen Street and into Notlen Street Park and Reynolds Avenue Reserve. This flooding compromises the aesthetic and environmental value of these portions of the Precinct.

Poor Pedestrian and Vehicle Connectivity

There is poor pedestrian access within the Precinct to public open space, namely Notlen Street Park. Through the central portions of the Precinct, pedestrian access is generally limited to peripheral streets, including Loughnan Road, Ringwood Street and Warrandyte Road. While a pedestrian accessway runs north-south between Kennedy Avenue and Notlen Street Park and another accessway runs east-west between Warrandyte Road and this park, these accessways are somewhat run-down and could benefit from renewal.

Vehicle connectivity within the Precinct is reduced by the use of dead-ends at the west and east extents of Kennedy and Reynolds Avenue respectively. In addition, Woodside Avenue ends in a cul-de-sac, thereby prohibiting through-traffic movements. Notlen Street is the only through road providing direct vehicle access between the Precinct and the surrounding road network. Traffic on this street can be heavy relative to levels in surrounds streets (within the Precinct).

Housing Supply Characteristics

Much of the existing multi-dwelling development in the Precinct is older and makes poor use of land, particularly in terms of site layout. These older developments are characterised by an excessive amount of hard surface area, minimal separation between built form elements, poorly located on-site car parking and limited landscaping. Some of these older multi-dwelling developments are located on previously amalgamated lots. This is particularly the case along Ringwood Street, Warrandyte Road and Kennedy Street.

OPPORTUNITIES

Most lots within the Precinct (87%) have been developed for residential purposes with the majority (59%) of total dwellings being one dwelling on a lot. The majority of dwellings within the Precinct (53%) are rented.

It is likely that these figures indicate a high level of property speculation / investment and an increased likelihood that land owners will eventually seek to develop, either directly or via on-sale.

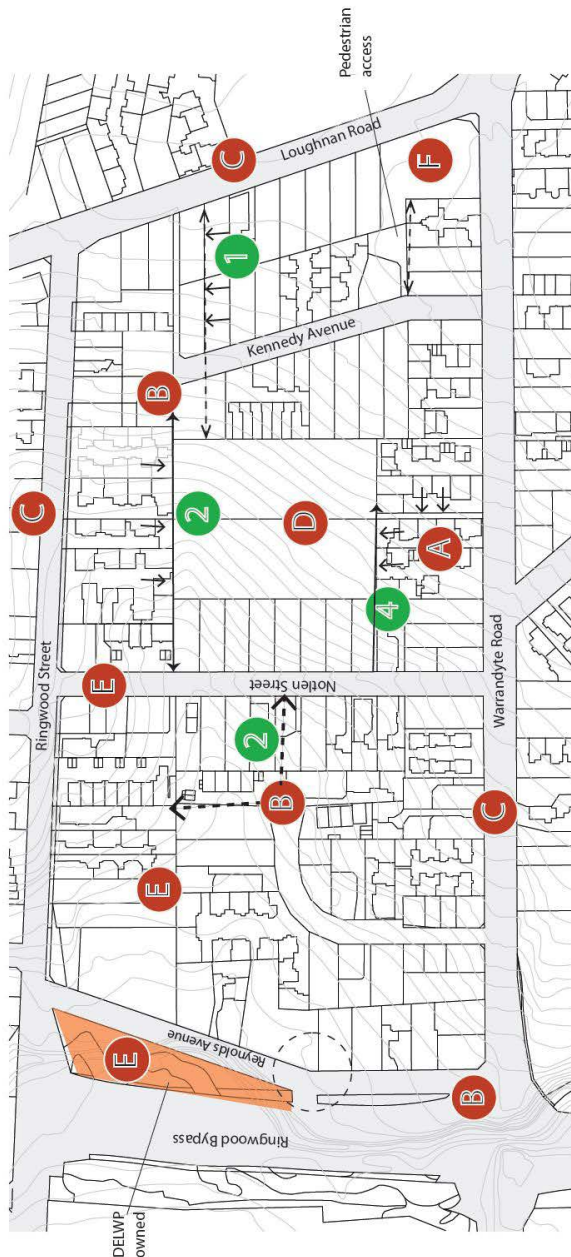
Redevelopment potential

Spatial analyses reflects a Redevelopment Potential Index (RPI) of 0.7 or greater for the Precinct. This relatively high RPI reflects the low capital improved value of land within the Precinct relative to the value of the land itself indicating significant development pressure on the Precinct Maroondah valuations (2017) data was used to calculate the RPI.

Urban design outcomes

The prospect of redeveloping existing residential areas provides opportunities to improve the current built form, streetscape and public realm for better design outcomes.

The key issues and opportunities for the Precinct are summarised in Figure 4.1.



Constraints

- A Pedestrian Access Ways (PAWs)**
Potentially perceived as unsafe and uninviting
Adjacent development does not 'address' the space, high side fences. Consider lighting with controls on a metered supply (lighting policy)
- B Cul-de-sacs**
Limits pedestrian access and circulation. Consider providing opportunities for pedestrian i.e. laneways
- C Busy perimeter roads**
Potentially less safe access from development - drive-ways and backing out onto road, especially as traffic will slowly increase as Ringwood Activity Centre grows

Noise and pollution from traffic, esp as traffic increases

Play an important role in perceptions of character as they take lots of 'thru' traffic, often less amenity from landscaping perspective.

Provide mid block crossing opportunitie
- D Northern POS Area**
Limited access, lack of permeable access

Adjacent development does not 'address' the POS, rear fences, as such potentially perceived / actual unsafe

Potentially perceived single use by the community group, may lack broader functionality required of POS to service wider diversity of community needs
- E Water Sensitive Urban Design (WSUD) Flooding**
- F Commercial / Local Shops (service station)**
Lacks connectivity from within the precinct

Opportunities

- 1 Improve / integrate adjacent redevelopment:**

Building 'frontages' to address the PAW eg windows overlooking, lower fences, front doors
Widen access way through land ceded to Maroondah Council to ensure minimum width of 6-8 metres
Landscape and seating design to make interesting small spaces that are quiet and for contemplation (make sure access ways are shaded, could include water fountain, aboriginal heritage interpretation etc etc)

OR ALTERNATIVELY - re-design and widen to turn into vehicle / pedestrian shared spaces (could be one-way for vehicles depending on which PAW we're looking at) which would need to be around 10m wide, permeable paving and landscaping.
- 2 New road Kennedy Av to Notlen Street to improve vehicle and ped circulation**
Provides access to lots along Ringwood Av to encourage rear loaded parking access to development
Reduced negative streetscape impact of additional driveways along the main perimeter roads
Increase activity / overlooking to isolated central POS
Development to address rear laneway access also and sensitive design of rear open space
Woodside extended access would integrate with preferred drainage solution / new POS area
- 3 Encourage rear acces where possible from new rear laneways**
Larger front setbacks to reduced visual bulk / impact of higher development and larger canopy trees
Require / encourage shared driveways between redeveloping properties and rear parking areas for apartments (townhouses parking arrangements might be different)
- 4 Water Sensitive Urban Design (WSUD)**
New development to address / front POS and sensitive design of low fences to promote interaction and overlooking
Open up / improve access ways
Punch 6 m laneway from Notlen Street to provide rear laneway access for properties along Warandye Road

Figure 4.1: Issues and opportunities map

5. ENGAGEMENT



COMMUNITY ENGAGEMENT

Community engagement included extensive consultation at the municipal and precinct level. The key objectives of the consultation were:

- To educate the community and residents on the project concept, and the importance of a new form of development.
- To understand community's views regarding liveability and future aspirations for the precinct.

Table 5.1: List of municipal level engagement activities

Event	Objective
20 Minute City Consultation Event	To inform and educate public on the key issues in the neighbourhood, present the Greening the Greyfields concept and associated community benefits. To understand public aspirations for their neighbourhood.
Website- Your Say Engagement	To inform the residents regarding the project objectives, associated benefits and seek inputs on priorities for future neighbourhood.
Café Consult (Maroondah Festival)	To inform and educate public on the key issues in the neighbourhood, present the Greening the Greyfields concept and associated community benefits. To understand public aspirations for their neighbourhood.
Information Session with Croydon Conservation Society	To provide information on the benefits of the project and seek feedback on the key challenges for project implementation.
Drop-in session at the Ringwood Rotary Club	To promote the concept at the municipal level and to gain insight from the residents of Ringwood and surrounding suburbs.
Maroondah Focus	To inform the residents regarding the project objectives, benefits and status.
Community Well-Being and Health Committee	To inform the key issues in the neighbourhood, present the Greening the Greyfields concept and associated community benefits.

Engagement at the Precinct was undertaken through two drop-in sessions that were located within or close to the Precinct. The drop-in session for the Ringwood was aimed to:

- understand key issues facing the neighbourhood through participatory place audit.
- provide an overview of the pilot project, its benefits, and assess interest of residents and landowners to participate in the project



Figure 5.1: Community engagement during Cafe Consultant 2018

Within the International Association of Public Participation (IAP2) Engagement Spectrum, the engagement focussed to “Inform” the public with information to help them understand the problem, alternatives and solution. The engagement also focussed to “Consult” with the public to obtain feedback to understand public aspirations, specifically in relation to the future of neighbourhoods.

Table 5.2: Community engagement medium

Medium	Objectives	Nature
Posters	Illustrate key issues arising from the typical residential development, i.e. increase in hard surface, decrease in tree canopy, open spaces, walkability etc. Illustrate how a neighbourhood would look if similar nature of residential redevelopment continues (Business as Usual). Illustrated how a neighbourhood would look like if Greening the Greyfields approach is applied for residential redevelopment.	Municipal and Precinct Level
Voting Pods	To understand community aspirations- top three priorities for future neighbourhood by the participants. Tree canopy, open spaces, public parks, walking and cycling tracks, diverse housing stock, resilient infrastructure and climate change were listed as priorities and participants had to identify the top three priorities they consider are most critical for the future neighbourhood.	Municipal and Precinct Level
Precinct map model	To understand participants key liveability issues in the neighbourhood	Precinct level

Community consultation undertaken to develop the Maroondah Housing Strategy identified liveability as the most important factor for housing in Maroondah. To create a highly liveable place three components that need to be addressed and balanced were identified – affordability, diversity and infrastructure. Some of the priority housing issues identified by the community are: balancing development and the natural environment; need for more sustainable homes; ageing population; ageing infrastructure.

To date, the Plan has incorporated the aspirations of the Maroondah community and their desire to improve liveability, increase the quality of public spaces, increase tree canopy cover and increased walking and cycling tracks. The vision and strategic objectives of the Plan have also been developed in close consultation with the Greening the Greyfields Community Advisory Group (CAG).

Community disquiet about perceived poor design outcomes was a feature of consultation on the Maroondah Housing Strategy. The response of the community currently has informed the preparation of the Plan for the Ringwood Pilot Precinct.

Precinct-level community engagement undertaken to-date has occurred concurrently with further precinct-level planning, including economic viability assessment, dwelling typology preparation and review of desirable additionalities, such as improved and new pedestrian laneways and increased canopy tree cover.

Precinct level engagement was undertaken during March 2019 to gather feedback on the concept, the willingness of residents to participate and whether they will be interested to work with their neighbours on the project. The participants were also asked to map the key issues they perceive to be most important for them in the neighbourhood. Some of the key issues identified in the area included traffic improvements, safety in certain parts, underutilized paths, potential for adding new laneways to create better street permeability in the precinct and flooding in certain low-lying areas.

In addition, a workshop with the developer industry was undertaken to provide an overview of the project, its benefits, receive feedback and assess interest of the developer community to contribute to the design and implementation of the project.



Figure 5.2: Precinct Level engagement at Notlen Pre-School

ENGAGEMENT FINDINGS

The participants supported the project concept and were very interested to know more about how to participate. The proposed concept plan has considered the recommendations from the participants.

This engagement has informed owners/tenants of the project and has significantly contributed to starting to build rapport and support. This consultation has built off prior engagements at the municipal level (over the last 3 years undertaken to inform the Maroondah Housing Strategy) and provided a more intense, precinct-level focus, including in terms of the specific objectives of the project.

In addition to better informing affected residents, the engagement has helped to determine the level of community interest in participating in the pilot project and initiated communications with interested community members. It is intended that further discussions with interested parties be held as part of likely future engagement required as part of the Planning Scheme Amendment process.

In keeping with the standard Planning Scheme Amendment (PSA) process, further engagement will be undertaken during the exhibition stage. At that time, a more detailed Plan will be available for discussions with interested residents and property owners



Figure 5.3: Workshop with Development Industry, 2019

6. THE PLAN



PURPOSE

The purpose of the Precinct Design Framework and Concept Plan (The Plan) is to guide the urban redevelopment of the Precinct. This Plan is expected to encourage urban renewal through lot amalgamation and to support varying residential densities across the Precinct. It will create certainty for developers and help Council make informed planning decisions.

This section of The Plan (Section 6) includes the following.

Vision

A summary of the future vision for the Precinct, including a summary of the policy basis for this concept.

Precinct Objectives

The precinct-level objectives for the redevelopment of the area.

Strategies

The actions required to meet the precinct objectives.

Development Guidelines

Specifications of preferred responses for each key design and development themes, including site layout and urban design, building design, water sensitive urban design, streetscape, connectivity and urban ecology. Each design and development theme is provided with an objective, strategies and guidelines specific to the outcomes sought for the related theme.

VISION

The Maroondah Housing Strategy supports the delivery of the Maroondah 2040 Community Vision. It outlines a vision for housing in Maroondah that supports key directions within Maroondah 2040.

In 2040, Maroondah will have high quality housing environments in appropriate locations that meet the community's diverse and changing needs. There will be a wider range of living options and housing will increasingly be revitalised in affordable, sustainable, and well-designed ways. In partnership with the community, Council will continue to plan for housing growth strategically backed by a strong evidence base.

The vision for the future of the Precinct was articulated based on discussions with the residents during the engagement. The vision reflects the priorities and aspirations of the residents.

Ringwood Pilot Precinct will be a model to demonstrate the community benefit of urban residential development through lot amalgamation.

It is envisaged that a coordinated, precinct-based approach to design and development in the Precinct will result in improvements to the existing residential building stock, streetscape and the landscape quality of the area. Circulation/connectivity and ESD outcomes will also improve. In combination, these enhancements are aimed to improve the housing, environmental and visual quality of the Precinct.

PRECINCT OBJECTIVES

The Plan aims to encourage lot amalgamation to transform the area incrementally in keeping with community aspirations for improved liveability. The Precinct-wide objectives have been prepared considering specific existing character elements and opportunities.

EXISTING PRECINCT CHARACTER

In summary, the Precinct has the following characteristics:

- Sites are predominately residential in nature, except for single-purpose commercial uses at the corners of Loughnan Road and Ringwood Street (dentist) and Loughnan Road and Warrandyte Road (7-eleven Ringwood), and further south along Warrandyte Road (osteopath and orthodontist at 35 and 37 Warrandyte Road, respectively).
- Norwood Community Pre-school is located within Notlen Street Park.
- Notlen Street Park and an associated car parking area is located central to the Precinct between Kennedy Avenue and Notlen Street.
- Vehicle access to Notlen Street Park is available directly from Notlen Street.
- Pedestrian access to and from Notlen Street Park and the surrounding residential area is available from Warrandyte Road and Notlen Street via a pedestrian accessway and shared vehicle/pedestrian accessway, respectively. An existing, narrow lane (Right of Way) runs between Warrandyte Road and the Notlen Park area to the west.
- An unused lane runs between Loughnan Road and Kennedy Avenue.
- Notlen Street Park is under-utilised, potentially due to inadequate pedestrian connectivity to and from the surrounding residential area.
- Sites fronting Loughnan Road, Reynolds Avenue and streets central to the Precincts, are predominately orientated north-south.
- Sites fronting Ringwood Street and Warrandyte Road are predominately orientated east-west.
- Residential development throughout the Precinct is predominantly single-storey and detached however, more recently constructed multi-dwelling development is generally two storey, with the exception of the development at the southeast corner of Ringwood Street and Reynolds Ave, which is three-storey attached, apartment style.
- A number of multi-dwelling developments front Warrandyte Road.
- The northern portion of the Precinct is characterised by higher natural ground levels relative to the remainder of the Precinct.

- A Department of Health and Human Services (DHHS) landholding is located within the Precinct on the north side of Reynolds Avenue.
- There is limited pedestrian connectivity between the north portion of the Precinct (north of Notlen Street Park) and the south portion of the Precinct. There is also limited pedestrian access between Woodside Avenue and the southwest portion of the Precinct with no direct access available.
- A state-owned reserve ('Reynolds Avenue Reserve') is located to the south of Reynolds Avenue with a bio-retention basin proposed in this area.

PREFERRED PRECINCT CHARACTER STATEMENT

The Precinct will include amalgamated sites enabling the preferred dwelling scale and diversity outcomes, along with improved open space and built form outcomes. Streetscape character and pedestrian safety will be improved by reducing detrimental visual impacts, including those related to built form and vehicle access, and by improving landscape outcomes. High quality dwelling design will respond to local attributes and landscape opportunities. Improved pedestrian and cycling links will be available within the Precinct and with the surrounding area. Developments within the Precinct will utilise on-site water retention and use. In general, the ways residents and nature coexist in the Precinct will improve.

The core Precinct objectives guiding the Plan are as follows. The core precinct character objectives guiding the Plan are as follows.

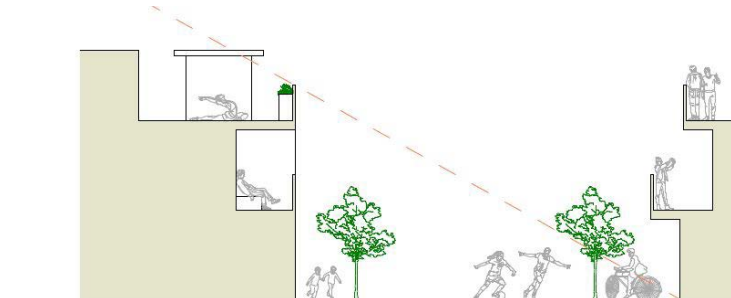
- To help promote site amalgamation to enable preferred dwelling scale and diversity outcomes and improved open space and built form outcomes.
- To improve streetscape character and pedestrian safety by reducing visual impacts and improving landscaping outcomes.
- To encourage high quality dwelling design that responds to local attributes and landscape opportunities.
- To encourage improved pedestrian and cycling links within the Precinct and to and from the surrounding area.
- To encourage on-site water retention and use.
- To improve the ways residents and nature coexist in the Precinct, from individual organisms through to the broader ecological system.

STRATEGIES

This Plan draws upon the key principles that promote best practices in design (urban design and environmentally sustainable design) and help create a sense of place through optimising public and private realm interface, built form, pedestrian connections, landscaping and public open spaces.

The following design strategies are central to the urban design framework, streetscape design and building design guides.

- Encourage consolidation of lots to facilitate high-quality built environment, considering the intended scale of residential development.
- Use street width, building height and landscape design to create a sense of place in the Precinct.
- Encourage continuous pedestrian paths through the public spaces with direct, logical routes.
- Encourage creation of new streets and the extension of existing streets, where possible, to facilitate a permeable and functional structure for the Precinct.
- Encourage creation of the new pedestrian linkages across the development site to connect with the surrounding neighbourhood and public spaces.
- Arrange higher density residential lots with rear or side lane access for resident car parking and services.
- Require upper level side setbacks, encouraging lot consolidation to allow for greater height in the centre of sites while reducing any 'wedding cake' effect.
- Enable provision of green zone around the private development to allow for the retention of existing trees and enable planting of substantial, new canopy trees.
- Enable building designs and fences that promote visual interaction between the private and public realms.
- Encourage breaks between the front façades of buildings to maximise site permeability.
- Ensure medium-higher density residential precincts provide a high level of amenity and functionality for residents and incorporate communal open space with good access to winter sun.
- Revitalise public spaces where the local catchment has an adequate number of potential uses to activate the space.



Encourage massing that enables visual permeability and provides adequate space for substantial tree planting



Encourage breaks in long buildings along public interface



Figure 6.1: Indicative Precinct Concept Plan

DEVELOPMENT GUIDELINES

THEME 1: SITE LAYOUT AND URBAN DESIGN

OBJECTIVE

To help promote site amalgamation to enable preferred dwelling scale and, diversity outcomes, along with improved open space and built form outcomes.

STRATEGY

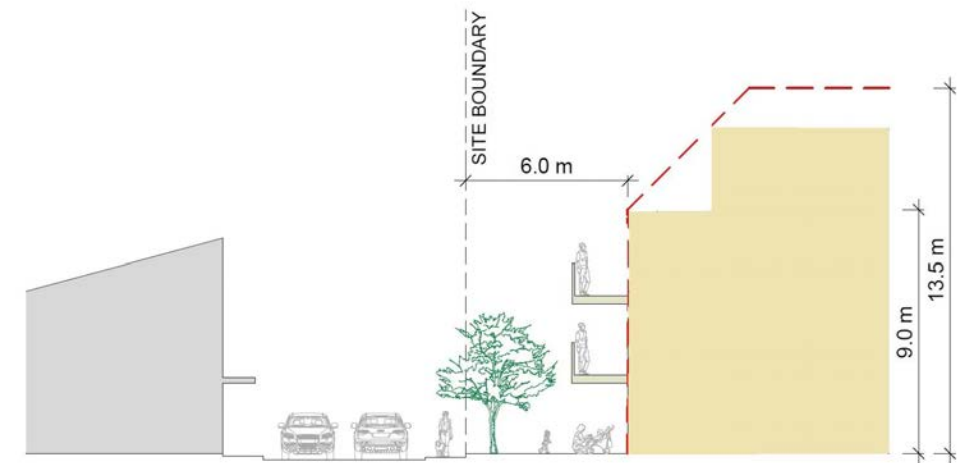
- To reduce site coverage allowing for improved landscape outcomes, including canopy tree planting, and open space around buildings.
- To site dwellings appropriately considering lot orientation and site-specific conditions.
- To have dwellings appear as separate buildings, even where connected, in keeping with the scale and form of surrounding development.
- To reduce the area required for vehicular access and movements on site.
- To ensure buildings have active frontages at footpath level and provide outlooks from dwellings towards public and private open space areas taking into account community safety.
- To provide well-designed private open spaces.

DEVELOPMENT GUIDELINES

- A maximum site coverage of 50 per cent is preferred for improved open space outcomes.
- Provide front, side and rear setbacks as per **Table 6.1**.
- For lots under 1000 square metres, provide front setbacks consistent with those preferred for lots over 1000 square metres for streetscape consistency.
- Basement car parking areas should be setback from site boundaries a preferred minimum of 1.2 metres, excluding vehicle accessways/ramps to allow for landscaping.
- Wherever possible, orientated dwellings in an east-west direction to maximise solar access

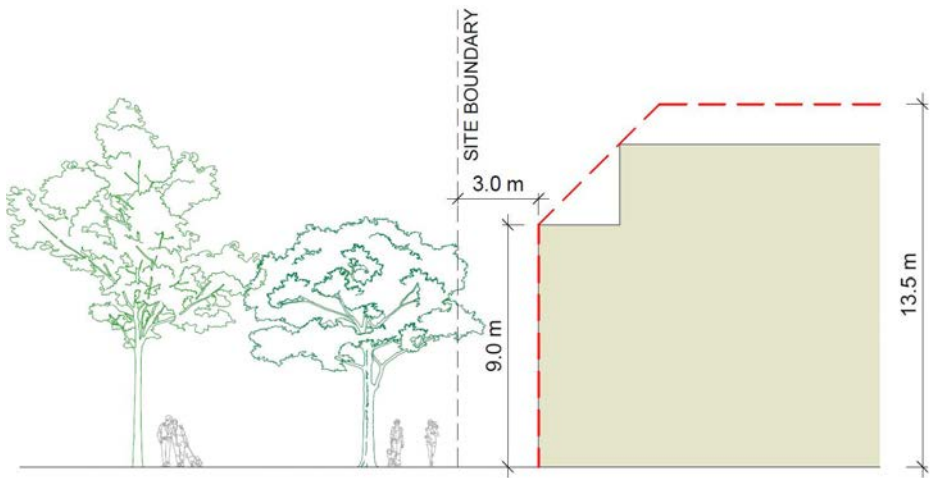
Table 6.1: Preferred setbacks for lots of 1000 square meter or more

Preferred Minimum Front Street Setback	Preferred Minimum Rear Setback	Preferred Minimum Side Setbacks
6 metres	6 metres where a building does not share a boundary with a park, plus 1 metre for every metre of height over 9 metres. 3 metres where a building shares a rear boundary with Notlen Park, plus 1 metre for every metres of height over 9 metres	4 metres plus 1 metre for each metre of height above 9 metres in height. 1.4 metres for 40 per cent of the boundary length if adjoining a building of 9 metres in height

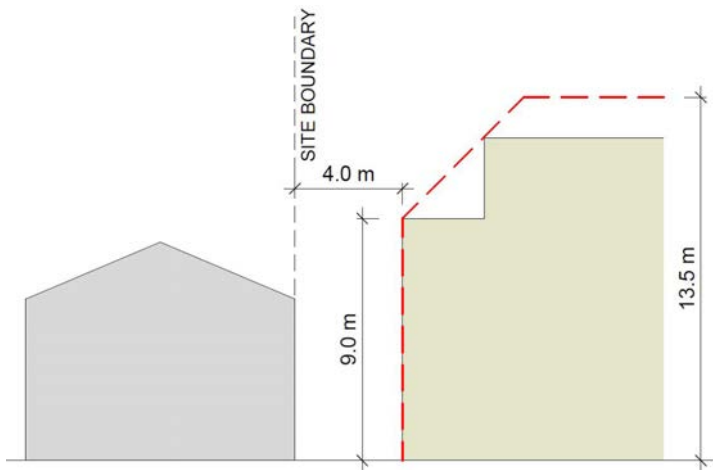


Front setback where buildings do not share a boundary with a park

- Locate dwellings doors and windows to overlook adjacent laneways and/or streets.
- Where a dwelling abuts a communal open space or public open space area, including the park in the southwest corner of the Precinct, provide an active frontage towards the area to maximise casual surveillance opportunities.
- Balconies may encroach into the upper level setbacks provided they are lightweight and discontinuous.
- Minimise setbacks to public open space interfaces to improve amenity outcomes.
- Reduce size of hard surface area required for car access and egress.
- Any above ground vehicle parking should be placed to the rear of dwellings out of view from the public realm.
- Where a basement car parking area sits above the finished floor level of the building in which it is located, the protruding portion of the basement should be screened and concealed with landscaping.
- Where dwellings open onto public open space areas, utilise rear loaded vehicle access.
- Where a garage faces a site frontage, it is preferred that a minimum setback of 1 metre is provided behind the minimum front setback provided by the associated dwelling.
- Use siting and landscape treatments that strongly enhance common open spaces on the site, maximizing opportunities for interaction and shared use.
- Provide communal open space areas to maximise access to open space in larger developments.
- Lay out communal open space to create informal surveillance opportunities within the space and from adjacent buildings.
- Provide communal open space areas with seats and shelter.
- Develop communal open spaces to a standard acceptable for ongoing maintenance and management.



Minimum rear setback of 3 m overlooking Notlen Park



Minimum side setback of 4 m plus metre for each metre of height above 9 metres

Table 6.2: Preferred Communal Open Space Area Provision

Number of Dwellings	Preferred allocation of open space
Up to 10	Not required
11 to 20	10%
21 to 30	15%
31 or more	20%

THEME 2: STREETSCAPE

OBJECTIVE

To improve streetscape character and pedestrian safety by reducing visual impacts and improving landscaping outcomes.

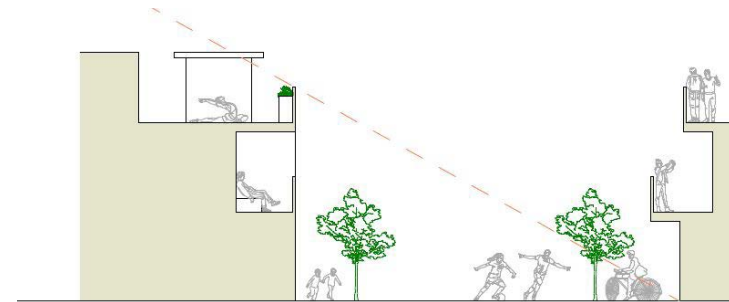
STRATEGY

- To reduce visual impacts of vehicle access and encourage active frontages that address street frontages for improved streetscape character.
- To retain and protect existing trees within the public realm.
- To ensure landscape design enhances the new proposed character and integrates well with existing surrounding development.
- To encourage and integrate canopy tree planting within all types of private open space.
- To protect and enhance canopy tree cover and replace any removed trees with new native canopy trees or other species suited to a changing climate.

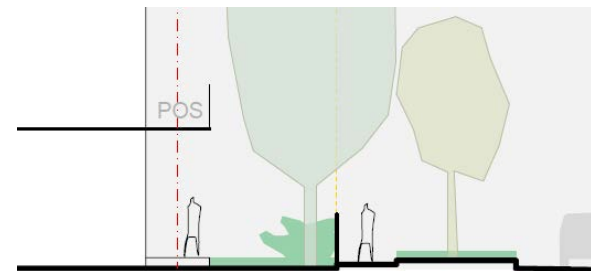
DEVELOPMENT GUIDELINES

- Minimise the number of vehicle crossovers to each development (preferably to one crossover).
- A maximum of 30 per cent of the width of the site frontage should be taken up by garages and carports.
- Consider the location of existing, and the potential for new additional, street trees when deciding on vehicle crossover locations. Preferably, a minimum setback of 1.5 metres will be provided to any street tree.
- Provide for a level of active frontage and lot access appropriate the street, incorporating rear vehicle access to sites, where possible.
- Locate essential vehicle crossovers in areas of high visibility to approaching pedestrians and cyclists.
- Locate dwelling entries and balconies to overlook adjacent streets, laneways and public spaces.
- Where window/door coverings are needed at street frontages, use semi-transparent materials.
- Where fencing is proposed, use low and open fencing with the following preferred maximum passive surveillance opportunities.

- Preferred maximum fence heights:
 - For streets in a Road Zone Category 1 - 1.2 metres
 - For other streets, including laneways - 0.9 metres
- For planting adjacent to streets, and/or laneways, use tree species with minimal overhang.



Locate dwelling balconies to overlook adjacent streets, laneways and parks



Low and open fencing of 0.9 metres facing laneways and parks

THEME 3: BUILDING DESIGN

OBJECTIVE

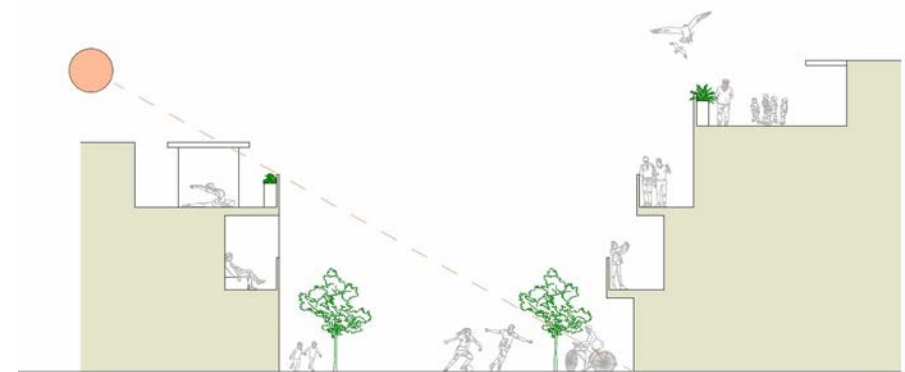
To encourage high-quality dwelling design that responds to local attributes and landscape opportunities.

STRATEGY

- To support well-scaled and articulated buildings that strengthen the residential character of the Precinct.
- To improve outlook from dwellings towards and from surrounding private open space areas.
- To allow increased rear setbacks to maximise the extent of canopy tree planting.

DEVELOPMENT GUIDELINES

- Locate and arrange the building to allow daylight and winter sun access to private, and communal open space areas. A minimum of 45 per cent direct sunlight to communal open space areas is preferred for a minimum of 2 hours between 9am and 3pm on 21 June.
- Allow adequate space between buildings to allow access to daylight for windows.
- Utilise materials and colours with muted tones that blend in with the surrounding environment.
- Arrange building elements such as roofs, balconies, windows, doorways and cladding materials to contribute to the preferred future character of the area.
- Locate the main pedestrian entry to be clearly visible and accessible from the street.
- Where possible, share the car parking facility amongst residents.
- Provide and locate bicycle parking close to vehicle entry points, with easy access to the public area of the car parking structure.
- Locate visitor and disabled parking close to the vehicle entry and with easy access to pedestrian paths and the public area of the car parking structure.



Informal surveillance opportunities to communal open space and direct winter sun access to open spaces

THEME 4: CONNECTIVITY

OBJECTIVE

To encourage improved pedestrian and cycling links within the Precinct and with the surrounding area.

STRATEGY

- To encourage active living that is less reliant on private car travel, through precinct and development design and layout.
- To integrated surrounding development and to promote clear, direct and accessible connections to walking and cycling routes.
- To provide safe pedestrian and vehicle infrastructure.

DEVELOPMENT GUIDELINES

- Co-locate pedestrian, cycling and vehicle paths in 'shared zones' within developments.
- Connect any proposed pedestrian and cycling network to the existing movement network in the surrounding area.
- Provide pedestrian and cycling links from Kennedy Avenue to Notlen Reserve, preferably by extending the existing laneway that runs north-south between Loughnan Road and Kennedy Avenue.
- Provide pedestrian and cycling links from Woodside Avenue towards the southwest corner of the Precinct.
- Where bordered by fences, arrange internal pedestrian and bicycle paths to maximise informal surveillance opportunities from/to adjacent properties.

THEME 5: WATER SENSITIVE URBAN DESIGN

OBJECTIVE

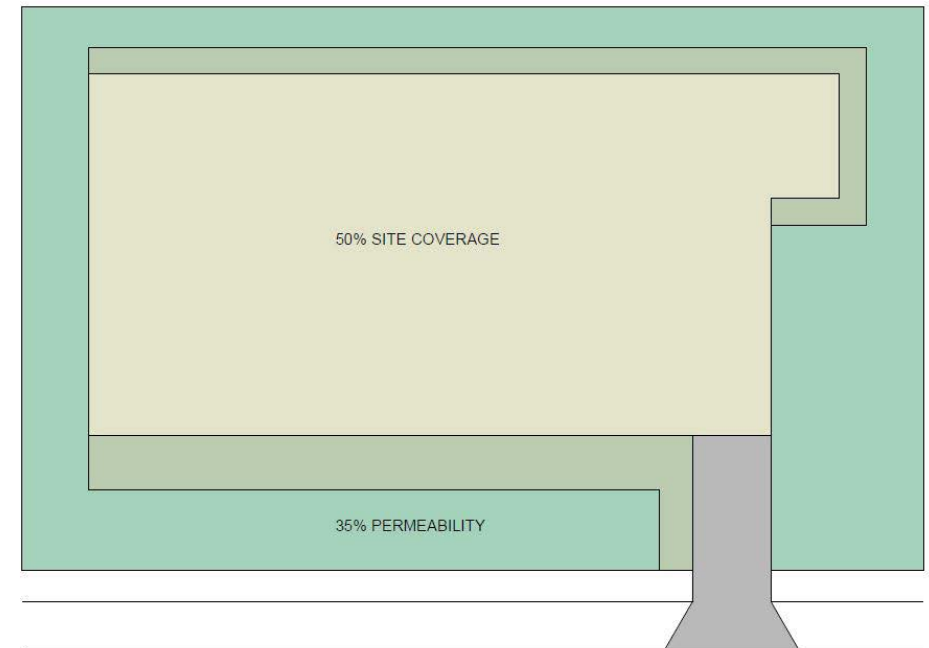
To encourage on-site water retention and use.

STRATEGY

- To ensure capacity of rainwater tanks on private land is adequate for landscaping and toilet flushing needs.
- To ensure that apartment style development maximise rainwater capture and combine individual dwelling retention requirements.
- To reduce potable water demand and reduce pollutants to Mullum Mullum Creek.
- To enhance flood mitigation by reducing storm-water flows.

DEVELOPMENT GUIDELINES

- Collect and use stormwater and recycled water for landscape irrigation, toilet flushing and cleaning.
- Provide permeable ground surfaces, where possible, for absorption of rainwater and reduction of stormwater run-off.
- Provide a preferred minimum of 35 per cent permeable site area with at least 30 per cent being grassed or landscaped.
- Minimise hard surface treatments and maximise pervious surfaces for cooling and soaking of stormwater directly into soil.
- A minimum BESS (or equivalent) rating of 50 per cent is preferred.



Provide a minimum 35% permeable site area with 30% being grassed or landscaped

THEME 6: URBAN ECOLOGY

OBJECTIVE

To improve the ways residents and nature coexist in the Precinct, from individual organisms through to the broader ecological system.

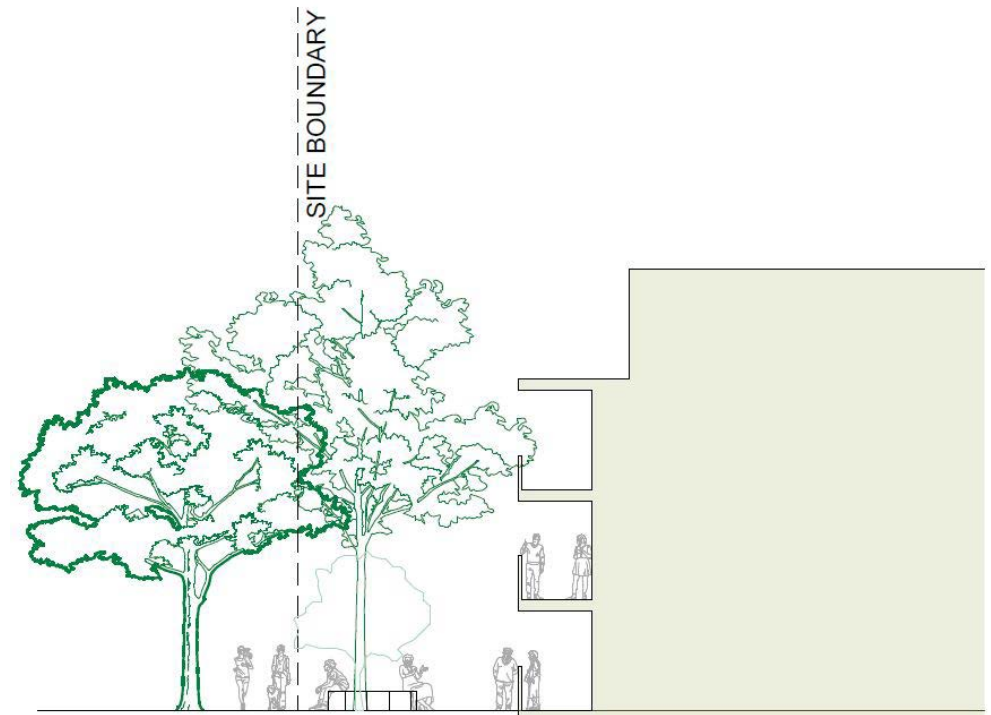
STRATEGY

- To enhance cooling and shading to reduce the urban heat island effect.
- To encourage canopy trees (both existing and new) to be well-integrated into the planning of both private and communal open space.
- To provide habitat for small native birds and small fauna through multi-storey planting of shrubs and lower plants.
- To ensure that landscaping is managed and maintained.
- To reduce pollution to waterways to support habitat.

DEVELOPMENT GUIDELINES

- Where possible, retain existing canopy trees with a height of 4 metres or higher and remnant vegetation to the maximum extent practicable and incorporate this vegetation into proposed areas of landscaping.
- A landscape plan should include canopy trees with a minimum height of 4 metres within front setbacks, private open space areas and common garden areas using native species that can reach a minimum mature height of 12 to 14 metres.
- Select plant species that are consistent with local habitat need and appropriate to the available root space.
- Plant shade trees on the north-west and west boundaries of sites.
- Incorporate vertical walls, green walls and green roofs where landscaping space is limited.
- Allow adequate space for the planting of substantial size trees.
- Select deciduous tree species where winter sun is desired.
- Select dense, canopied tree species where summer shade is desired.
- Select evergreen species with dense foliage where wind protection or screening is needed.

- Select trees in keeping with the scale of the street or public space.
- Provide for efficient storage, separation and removal of waste and recycled materials from buildings.
- A minimum BESS (or equivalent) rating of 50 per cent is preferred.
- Maintain vegetation clear of lighting to allow direct illumination of paths.
- Manage street planting to maintain clear sightlines along paths and streets.
- Create green corridors in the front and rear setbacks as significant habitat.
- Manage ongoing maintenance and replacement of trees and planting according to a site-wide plan.



PROVIDE SPACE WITHIN FRONT SETBACKS, PRIVATE OPEN SPACE AND COMMON GARDEN AREAS TO PROVIDE CANOPY TREES WITH A MINIMUM HEIGHT OF 4M AND MAXIMUM MATURE HEIGHT OF 12-14M.

7. IMPLEMENTATION



FRAMEWORK FOR IMPLEMENTING THE APPROACH

This precinct-based approach requires not the cooperation of several landowners, but requires commitment from all levels of government to come up with a model that works for everyone, including the community, landowners and investors. The four pillars of the approach are:

Engagement: Clearly articulated neighbourhood planning process and tools to effectively engage the landowners, community and developers.

Strategic Planning: Clearly articulated planning scheme that encourages lot-amalgamation and facilitates mechanism for effective engagement with the landowners and developers.

Design: Clearly articulated design objectives for streets, public open space and dwellings.

Governance and Implementation: An innovative and efficient governance structure that facilitates third party arrangements, multi-agency collaboration and project management

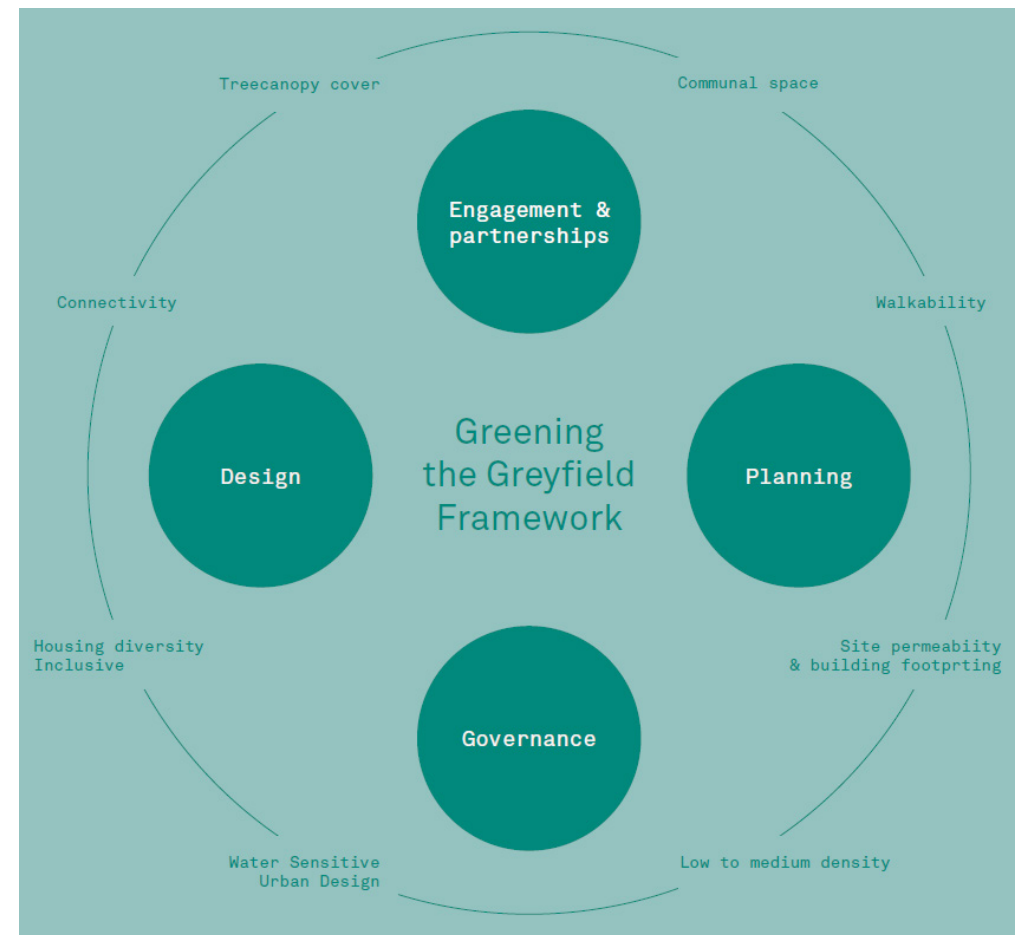


Figure 7.1: Proposed Greening the Greyfields Framework

The implementation framework establishes an outline for the following.

- The application of new Planning Scheme provisions, including Developer Contribution requirements.
- The introduction of a Playbook.
- The required further studies.

Planning Scheme Implementation

A new and/or revised set of planning controls are required to facilitate delivery of the vision for the Precinct consistent with the objectives and design strategies of the Precinct Design Framework and Concept Plan. Changes to the Maroondah Planning Scheme are expected to include the following.

Local Planning Policy Framework

Modifications are required to the LPPF, including the Municipal Strategic Statement (MSS), to articulate the strategic vision for the Pilot Precinct, as detailed in this plan, and to ensure consistency with other key Council planning strategies, including the Housing Strategy.

Specifically, changes are required to the following parts of the LPPF.

- Clause 21.02-2- Maroondah Visions and Strategic Framework
- Clause 21.06-2- Built Form and Urban Design
- Clause 21.07-2- Housing and Residential Land Use
- Clause 21.10-2- Natural Resources
- Clause 22.02- Residential Neighbourhood Character

The above clauses will be modified to introduce new objectives, strategies and/or objectives in keeping with this plan. In addition, this Plan will be listed as a background document in Clause 72.08 of the Scheme.

Rezoning

The Ringwood Pilot Precinct is within a Neighbourhood Residential Zone (NRZ) (Schedule 3- Canopy Cover Ridgeline Protection) with a related maximum dwelling height of 9 metres and two storey. Under this zone a building may exceed this maximum height by up to 1 metres if the slope of the natural ground

level measured at any cross section of the site wider than 8 metres is greater than 2.5 degrees. None of the existing NRZ schedules vary this maximum height requirement.

Retention of the NRZ zone in the Ringwood Pilot Precinct would limit the potential to deliver the core objectives of the subject work, including proposed neighbourhood improvements, whereas the introduction of a General Residential Zone (GRZ) is considered key to addressing these objectives in a manner that values the existing character of the area. A fundamental difference between the NRZ and GRZ zones is the maximum building height requirement of 9 metres (NRZ) versus 11 metres (GRZ). Within Maroondah, one GRZ schedule (Schedule 2- Croydon Major Activity Centre) includes a variation to this requirement to provide for a maximum building height of 13.5 metres and 4 storeys for a building used as a dwelling or a residential building, with the same 1 metre allowable variation as the NRZ subject to slope.

To help achieve the project vision, it will be proposed that the Ringwood Pilot Precinct be rezoned to General Residential Zone (GRZ) via the introduction of a new project specific schedule to this zone. This schedule will not seek to vary the maximum building height typical of a GRZ, as outlined above (11 metres).

New Schedule to Development Plan Overlay

A new Development Plan Overlay (DPO) schedule is required to introduce statutory requirements consistent with this Precinct Design Framework and Concept Plan. A DPO is an appropriate tool for site specific guidance and statutory control on the desired future development outcomes for the subject site. The DPO will outline the referred character, objectives and design requirements for the Precinct.

To avoid duplication of other applicable Planning Scheme provisions, the DPO schedule will not outline 'generic' preferred design outcomes, such as relating to building articulation and internal amenity but focus on encouraging and/or mandating key design outcomes, where applicable.

New Schedule to Development Contributions Plan Overlay

A new Development Contributions Plan Overlay (DPO) schedule based on a Development Contributions Plan (DCP) is required to introduce statutory requirements relating to the provision of key improvements to the Ringwood Pilot Precinct, as identified for each sub-precinct. This control will establish the basis for private sector contributions that will help fund infrastructure and open

space improvements to the Precinct, including streetscape works, pedestrian pathways, drainage and road works. Based on the housing capacity analysis undertaken as part of the preparation of this plan, it is expected that greyfield renewal could generate a yield of up to approximately 280 additional dwellings (up to 2035) under a low development scenario.

To ensure the Precinct is positively transformed alongside this anticipation growth, a development contribution, levied via a DCP, will be directed to development infrastructure within the pilot area. It is intended this infrastructure will help to create a pedestrian-friendly environment, improve streetscapes, interconnect multi-use paths and public open spaces, provide a dense canopy tree cover, interweave landscaped areas and address a range of environmental sustainability goals.

Public Open Space Contribution

For the Ringwood Pilot Precinct, in keeping with Clause 53.01 (Public Open Space Contribution and Subdivision), specifically the schedule to this clause, a public open space contribution of 5 per cent of the land or the value of the land intended to be used for residential, industrial or commercial purposes is required. This contribution is required

in addition to the infrastructure contributions that will be required under the DCP noted above.

Playbook for Local Government, Developers and Landowners

Three separate playbooks have been developed in relation to the Greening the Greyfields Pilot Project that are relevant for the Precinct; one for each key stakeholder being local government, developers and landowners.

It is intended that each playbook will provide a project background, including an outline of the project goals, along with step-by-step guidance specific to the applicable stakeholder in relation to, for example, key preparatory steps (such as assessing political support), project organisation (such as governance and project team considerations), project scope/precinct selection, due diligence, engagement, statutory framework and implementation.

The playbook is considered important to maximizing the potential to replicate the Ringwood Pilot Precinct project in other identified areas.

Fast-Track Planning Permit Application Process

As part of the implementation of Greening the Greyfields approach, consideration

will be given to the application of a fast-track planning permit application process. A more streamlined, faster, development assessment timeframe is likely to further incentivise lot consolidation and the application of the Greening the Greyfields approach.

Monitoring and Review

The Maroondah Greening the Greyfields project will be subject to continual monitoring and review over a maximum period of three to five years to access project outcomes.

The monitoring and review process will determine whether the objectives, strategies and guidelines included in the Precinct Design Framework and Concept Plan, and the associated planning provisions, are achieving the outcomes sought for Greyfields redevelopment and renewal.

The process will also include a review of work that may be undertaken by the Victorian Government with Greyfields redevelopment and renewal. Consideration will be given to potential adaptations to the locally applied planning tools based on the development of any state-wide planning tool, if developed.

Further Studies

Based on the potential increase in dwelling yield for the Precinct, further studies will be required on additional community infrastructure. As part of this analysis, further investigation will be required into streetscape and public open space upgrades. Priority will be given to pedestrian and cycle infrastructure; as well as other infrastructure that supports public transport use, such as shelters at bus stops.

REFERENCES

Urban Design Guidelines for Victorian, 2017, The State of Victoria Department of Environment, Land, Water and Planning

Statutory Planning Options Report, 17 June 2019, Plan2Place Consulting.

Greening the Greyfields, Notlen Street Catchment Discussion Report, Engeny Maroondah City Council, 2018

ANNEX



PLANNING CONTROLS

Zones

The study area is within the Neighbourhood Residential Zone (NRZ) with some residential development controls varied under Schedule 3 (Canopy Cover Ridgeline Protection) to the zone (NRZ3). The varied controls include those relating to side and rear setbacks, private open space and front fence height.

The purpose of NRZ3 is as follows.

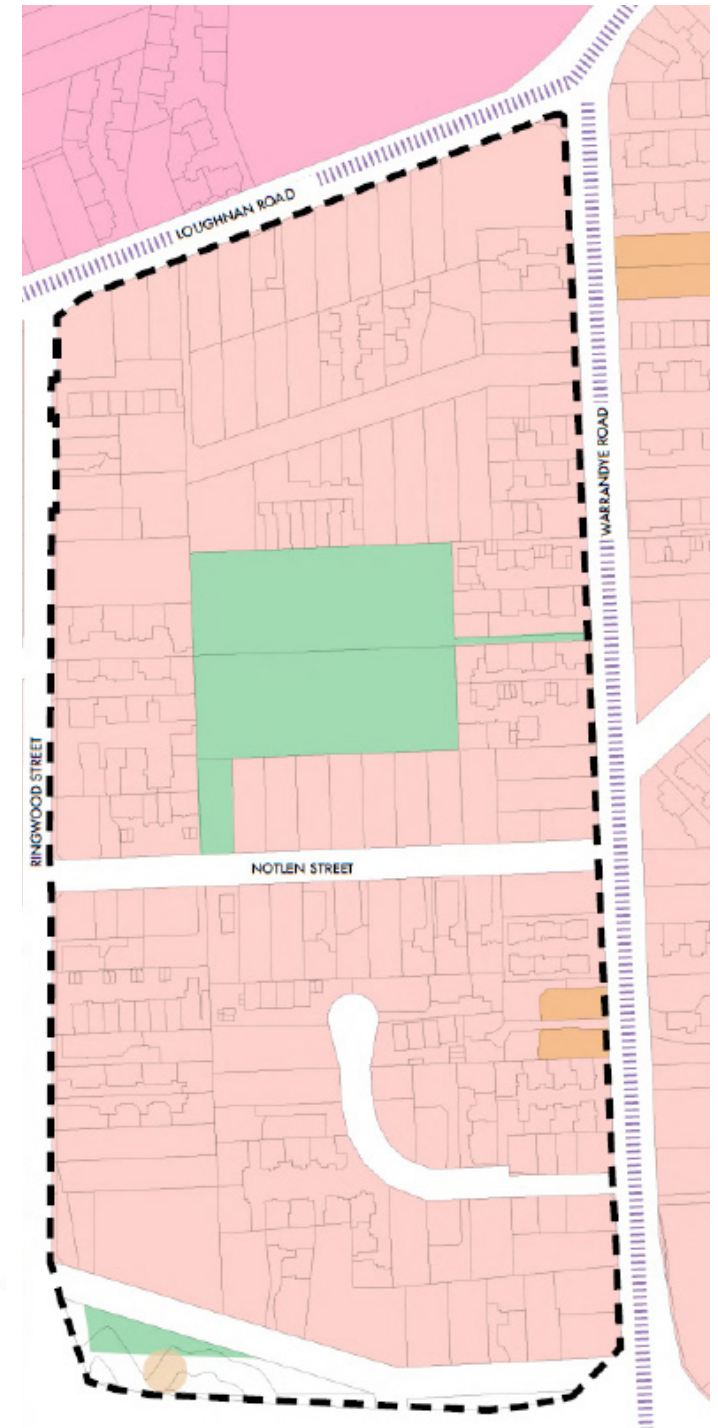
- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To recognise areas of predominantly single and double storey residential development.
- To manage and ensure that development respects the identified neighbourhood character, heritage, environmental or landscape characteristics.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

The Notlen Street Park is zoned Public Parks and Recreation Zone. The Reynolds Avenue Reserve is partly zoned Public Parks and Recreation Zone, and partly Road Zone 1. The Road Zone is now redundant, and a request should be made to Vic Roads to rezone to Park via the Government Planning Service.

Figure 1: Planning Control in the Precinct

CURRENT ZONING

- PPRZ - Public Park & Recreation
- NRZ - Neighbourhood Residential Zone
- GRZ - General Residential Zone
- C1Z - Commercial 1 Zone
- HO1 - Heritage Overlay



Significant Landscape Overlay

The applicable Significant Landscape Overlay, Schedule 3 (SLO3)- Wicklow Hills Ridge and Loughnan Warranwood Ridge Landscape Protection Area contains further development controls relating the following purpose of the schedule.

- To conserve the existing pattern of vegetation, landscape quality and ecosystems within the area and encourage the re-generation of vegetation.
- To maintain a dense vegetation canopy that contributes to the environmental significance of the area.
- To control or minimise the effect of future development upon natural features, particularly canopy trees and ridgelines.
- To ensure that the development, use and management of land is compatible with the existing character and landscape protection of the area.
- To maintain the overall scenic beauty of the municipality.

Heritage Overlays

There are three Heritage Overlays in the Precinct.

- HO 58- Manna Gum *Eucalyptus viminalis*- Reynolds Avenue Reserve- tree controls apply
- HO 127- House (Coolangatta) 47 Warrandyte Road, Ringwood- An unusual timber attic Bungalow built in c1923. It is historically significant in embodying family life in Ringwood before the Great Depression and architecturally as an unusual variant of this domestic style¹.
- HO 128 House- 49 Warrandyte Road, Ringwood- A characteristic timber Edwardian house built in the 1920s. It is historically significant in embodying the family life in Ringwood before the Great depression and architecturally as a characteristic intact example of this domestic style, with some contextual elements, including a rare vehicular gate.

¹ Richard Peterson Architect & Conservation Consultant, with Peter Barrett, Maroondah Heritage Study Stage Two, 2003

Cultural Sensitivity

The southern portion of the precinct is identified as an area of potential cultural sensitivity under the Aboriginal Heritage Act 2006 given its proximity to the Mullum Mullum Creek, albeit now dissected by the Ringwood Bypass.

Large developments (including development of 3 or more dwellings on lots over 1100sqm) and other high impact activities may need to prepare a Cultural Heritage Management Plan (CHMP) prior to application for a planning permit¹.

A Cultural Heritage Management Plan (CHMP) is a written report prepared by a specialist Aboriginal Heritage Advisory which assesses the potential impact of development and may outline measures to be taken before, during and after development to manage and protect Aboriginal cultural heritage².

Smaller developments (i.e. development of one or two dwellings) are exempt, although landowner can take up voluntary investigations to determine if there is any Aboriginal heritage present.

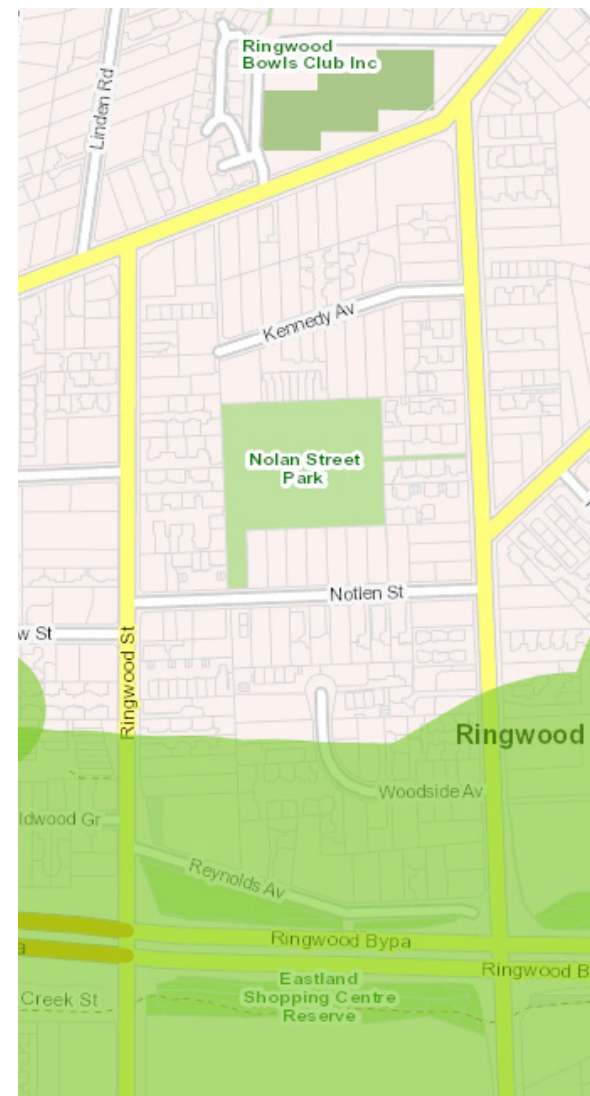


Figure 2: Area of cultural sensitivity

Source: <https://achris.vic.gov.au/#/onlinemap>

¹ <https://www.vic.gov.au/aboriginalvictoria/heritage/planning-and-heritage-management-processes/planning-and-development-of-land.html>

² <https://www.vic.gov.au/aboriginalvictoria/heritage/planning-and-heritage-management-processes/cultural-heritage-management-plans.html>

STUDY AREA



Nowood Child Care Centre



Notlen Street



Notlen Park



Figure 4: Indicative canopy cover in Ringwood

(based from interpretation of aerial images using a vector-based CAD program)



Figure 3: Limited tree canopy at Nottlen Street



Figure 5: Reduction of tree canopy at Woodside Avenue

NEIGHBOURHOOD AREA BOUNDARIES

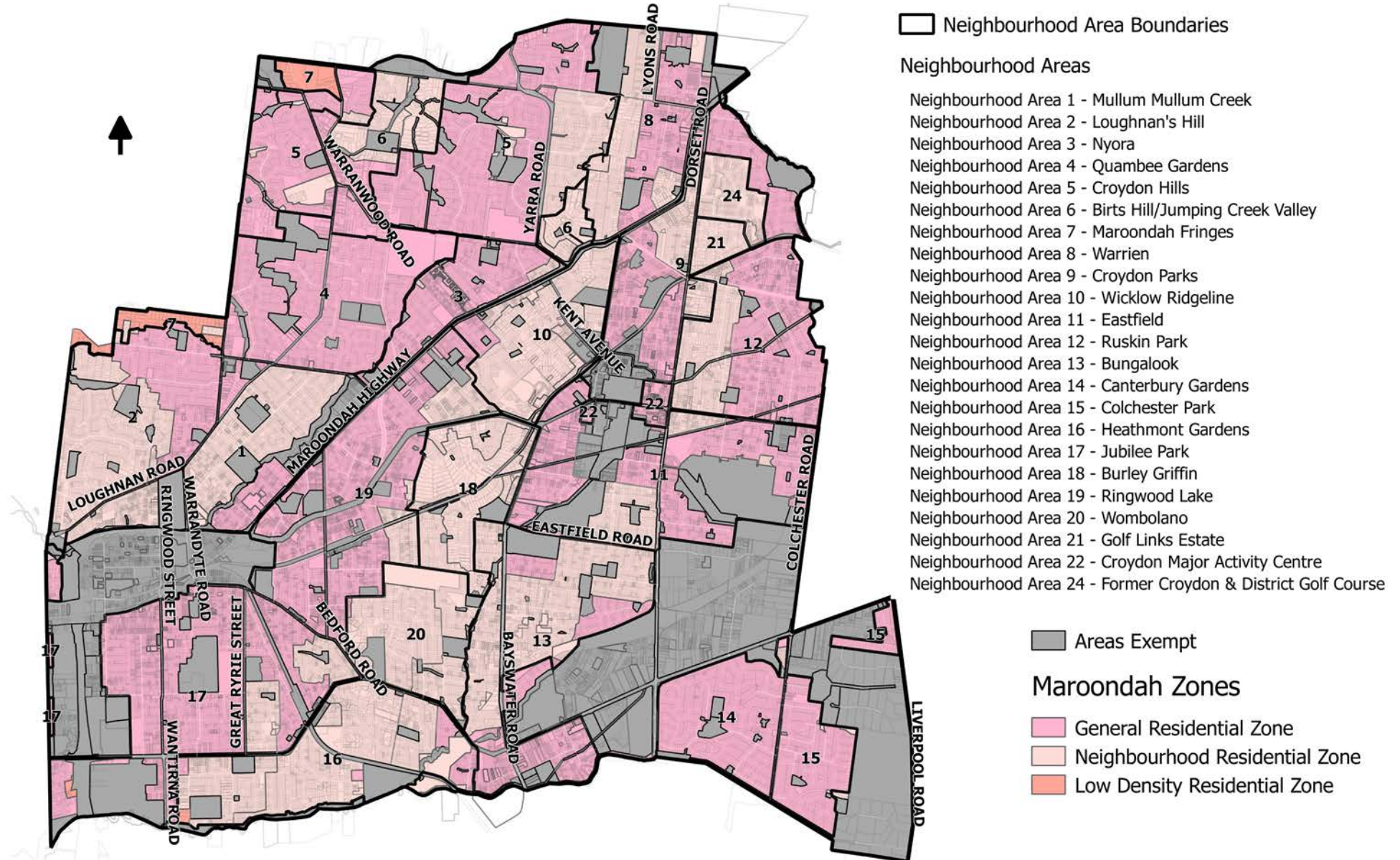


Figure 6: Neighbourhood Areas