

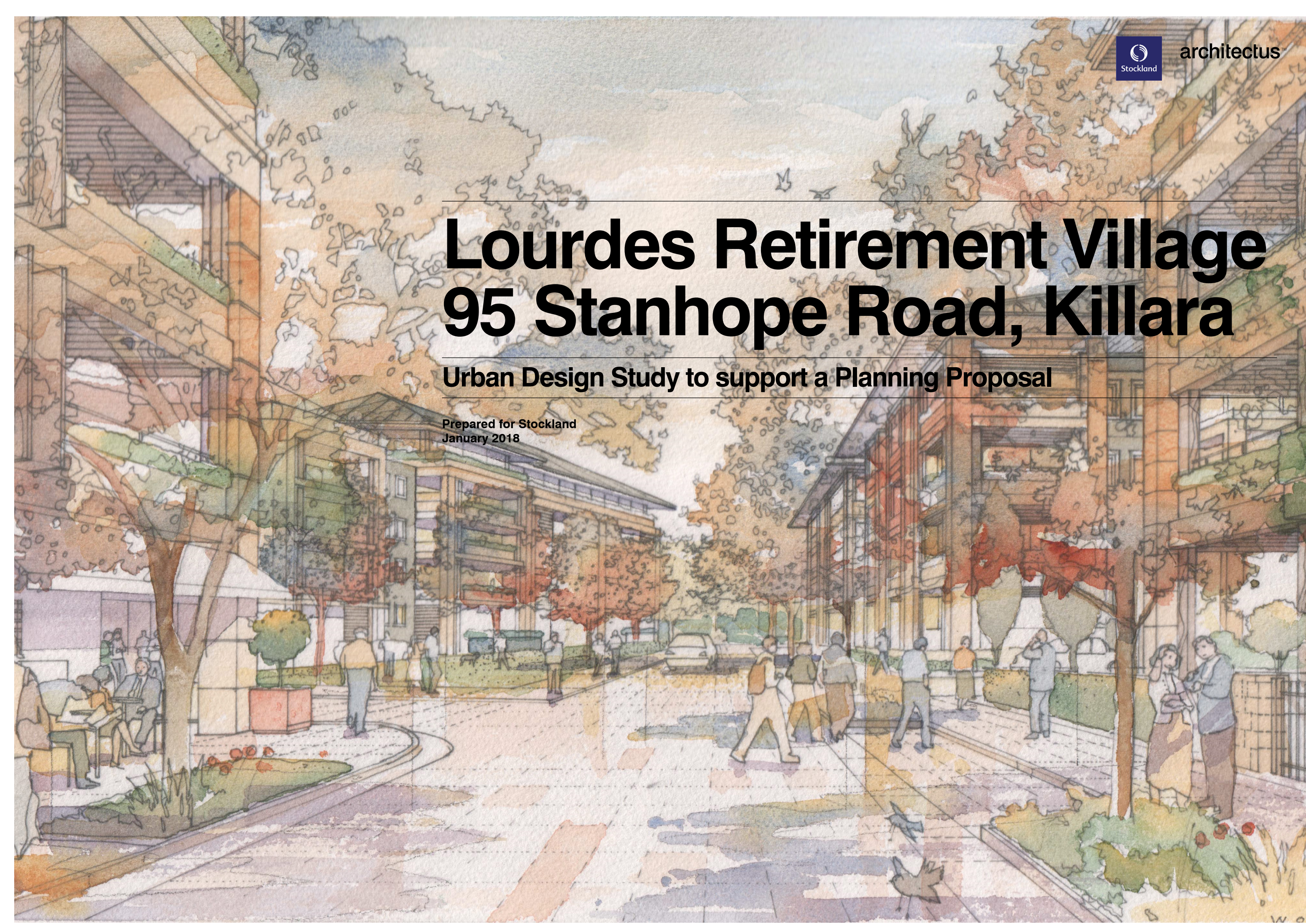


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Lourdes Retirement Village 95 Stanhope Road, Killara

Urban Design Study to support a Planning Proposal

Prepared for Stockland
January 2018





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Executive Summary

Architectus has been commissioned by Stockland to prepare a master plan for the staged renewal of the Lourdes Retirement Village in Killara to support a Planning Proposal to amend the land use, height and floor space ratio controls for the site.

The Purpose of this Report

The Village was initially constructed in 1983, and now requires significant renewal. Since opening, the village has been developed on a piecemeal basis, without the benefit of a whole of site master plan. The housing does not meet current standards and the accessibility is poor and not legible.

The proposed master plan provides solutions to the site's existing issues, whilst maintaining the Village's landscaped character and minimizing impacts on surrounding neighbours.

This report provides an analysis of the site, its opportunities and constraints, the preferred master plan for the site and recommended new planning controls that allow for realization of the master plan, subject to design and consent.

The Site and its Context

The subject site is located in Killara. The Sydney Metropolitan Strategy, 'A Plan for Growing Sydney' identifies the need for seniors' housing in all parts of Sydney. Under utilised and well-serviced sites like Lourdes are an ideal location for intensification of these uses where land supply is otherwise limited.

The site is located 1.2km from Killara train station on the border between the suburbs of Killara and Lindfield. The predominant surrounding land-use is low density residential consisting of high value established detached dwellings.

The nearest commercial activity is along the Pacific Highway at Lindfield.

There are large areas of open space and bushland to the south and east of the site.

The subject site is serviced by a regular bus service between Lindfield and East Killara.

The site currently comprises 108 independent living units, 49 serviced apartments and an 83 bed aged care facility, as well as communal facilities such as a chapel, administration centre, a pool and gymnasium and a croquet lawn.

The built form on the site comprises mostly 1-2 storey brick buildings, with larger footprint buildings such as the administration centre and aged care facility.

The site is not a heritage item, but adjoins two local heritage items and areas, including the Seven Little Australian Park (to the south and east) and the Crown Blocks Conservation Area to the west, south and east of the site.

The existing Headfort House has been identified as a building of historical significance and is proposed to be retained.

Due to the site's topography and natural bushland surrounding the site, much of the site is classified as bush fire prone area within Council's LEP. Future development will be required to meet suitable standards to ensure appropriate levels of bush fire safety and management. Bush fire risk is the primary reason that the southern part of the site is not proposed to be renewed at this stage. A proposed plan for the southern part of the site is presented in this report for information purposes only.

The site is currently zoned R2 Low Density Residential. This

zone permits low density housing (dwelling houses), but prohibits residential flat buildings. The Housing for Seniors SEPP allows for residential accommodation for seniors housing, but limits the development to approximately 2 storeys in height. The maximum height for development on the site is 9.5 metres, which allows for development of 2-3 storeys. The maximum floor space ratio for the site is 0.3:1.

Proposed Master Plan

The proposed master plan is based on the following principles:

- Connection to village life: Creation of a new main street within the Lourdes Village, where residents and visitors can experience an element of village life and feel part of their community.
- Connections to each other through design: Providing opportunities for residents to interact and control interaction with others through pathway/ circulation design and private planting near communal areas.
- Private and common open space: The redevelopment of the site presents the opportunity to create green roofs for communal and private open space. There should also be a clear hierarchy and delineation between private, village-wide communal and building communal open space.
- Spaces for events: The master plan could provide for green, flexible spaces to allow for a range of events, outdoor dining, markets and the like. This would help create a variety of activities and offerings to the Village community.
- Sensitive integration with the streetscape and neighbourhood: using sight lines and articulation to minimise the impact.

The proposed Master Plan includes:

- Reinvigorate and support the seniors community through delivery of new modern buildings including community facilities;
- Retention of existing entrance with an improved landscape setting, with the chapel to also be retained with new community facilities.
- Retention of Headfort House.
- New village 'main street' which will form the central spine of activity.
- New 'village green' which will form the focal point for events and flexible open space. This will be adjacent to a new community centre , with a range of village-wide facilities.
- Retention of existing trees along Stanhope Road.
- A new residential aged care facility (RACF).
- A terraced garden from First Avenue leading southward toward the bushland.

Heights of buildings will range from 3 to 6 storeys, with the tallest building located in the centre of the site, and not visible from surrounding areas.

Proposed Planning Controls

To realise this master plan, the following amendments will be required to be made to the Ku-ring-gai LEP 2015:

- Land Use: The zoning will need to be changed to an R3 Medium Density Residential Zone to allow for taller seniors' housing development to occur.
- Height: Maximum building heights ranging between 9.5 and 24 metres across the site.
- Floor Space Ratio: A maximum floor space ratio of 0.8:1.

This Master Plan presents an exciting opportunity to renew the Lourdes Retirement Village to create a contemporary style of development that meets current market expectations and maintains viability into the future.



1 Introduction

1.1 Preliminary

1.1.1 The Purpose of the Report

Architectus has been commissioned by Stockland to prepare a master plan for the staged renewal of the Lourdes Retirement Village in Killara. This master plan is in support of a Planning Proposal to amend the land use, height and FSR controls for the site, under the Ku-ring-gai Local Environmental Plan 2015.

Lourdes Village was initially constructed in 1983, and now requires significant renewal. Since opening, the village has been developed on a piecemeal basis without the benefit of a whole of site master plan. The housing is dated and does not have lift access to many of the apartments. Vehicular and pedestrian access is not legible, and in many instances the streets are too steep to walk. The village's ageing dwellings and infrastructure require a major redevelopment to ensure the long term viability of the village and attract the forthcoming baby boomer market whose expectations far exceed the current retirees market.

The proposed master plan presented in this report provides solutions to these existing issues, whilst maintaining the village's established landscaped character and minimising impacts on surrounding neighbours.

The purpose of this report is to present information about the site, its opportunities and constraints, the preferred master plan for the site, and recommended new planning controls that allow for the development of the preferred master plan for the site, subject to design and consent.

1.1.2 The Team

Owner and applicant: **Stockland**

Urban design, landscape and planning: **Architectus**

Traffic consultant: **Arup**

Heritage consultant: **GML Heritage**

Arboriculturalist and ecologist: **Naturally Trees**

Seniors Living Demand Study: **Elton Consulting**

Bushfire consultant: **EcoLogical**



Artist's impression of the proposed new 'Main Street'.

1.1.3 Area subject to this Planning Proposal

Initially, Architectus developed a Master Plan for the renewal of the entirety of Lourdes Retirement Village (see plan overleaf).

Investigations and consultation with Council and the Rural Fire Service revealed that renewal of the southern part of the site may not be supportable from a bushfire risk perspective under the current legislation. As such, the proposed Master Plan retains the existing independent living units in the southern part of the site. These will be subject to further investigation and future proposals.

The Master Plan envisages significant redevelopment on the northern part of the site. The proposed master plan delivers a robust and versatile structure plan which will allow redevelopment of the southern part of the site at a later date.

Any future proposals in the southern areas would be justified and supported independently through the appropriate planning pathways at a later stage. The proposed controls recognise that the existing independent living units will be retained on site, with this existing Gross Floor Area of 6,168m² included in the calculation of the proposed FSR control of 0.8:1.



Existing site and area to be redeveloped under this Planning Proposal



Proposed indicative master plan

An indicative plan demonstrating the whole of site development has been provided at right. This is subject to further design resolution and discussions with Council and Rural Fire Service and may form the basis for a future Planning Proposal.



Indicative future proposal for the development of the southern portion of site



2 The Site & Context

2.1 Strategic Context

2.1.1 A Plan for Growing Sydney

The NSW Government's Plan for Growing Sydney provides planning and transport strategies for Metropolitan Sydney. The Government's vision for Sydney is: 'a strong global city, a great place to live.'

To achieve this vision, the Government has set down goals for Sydney to be:

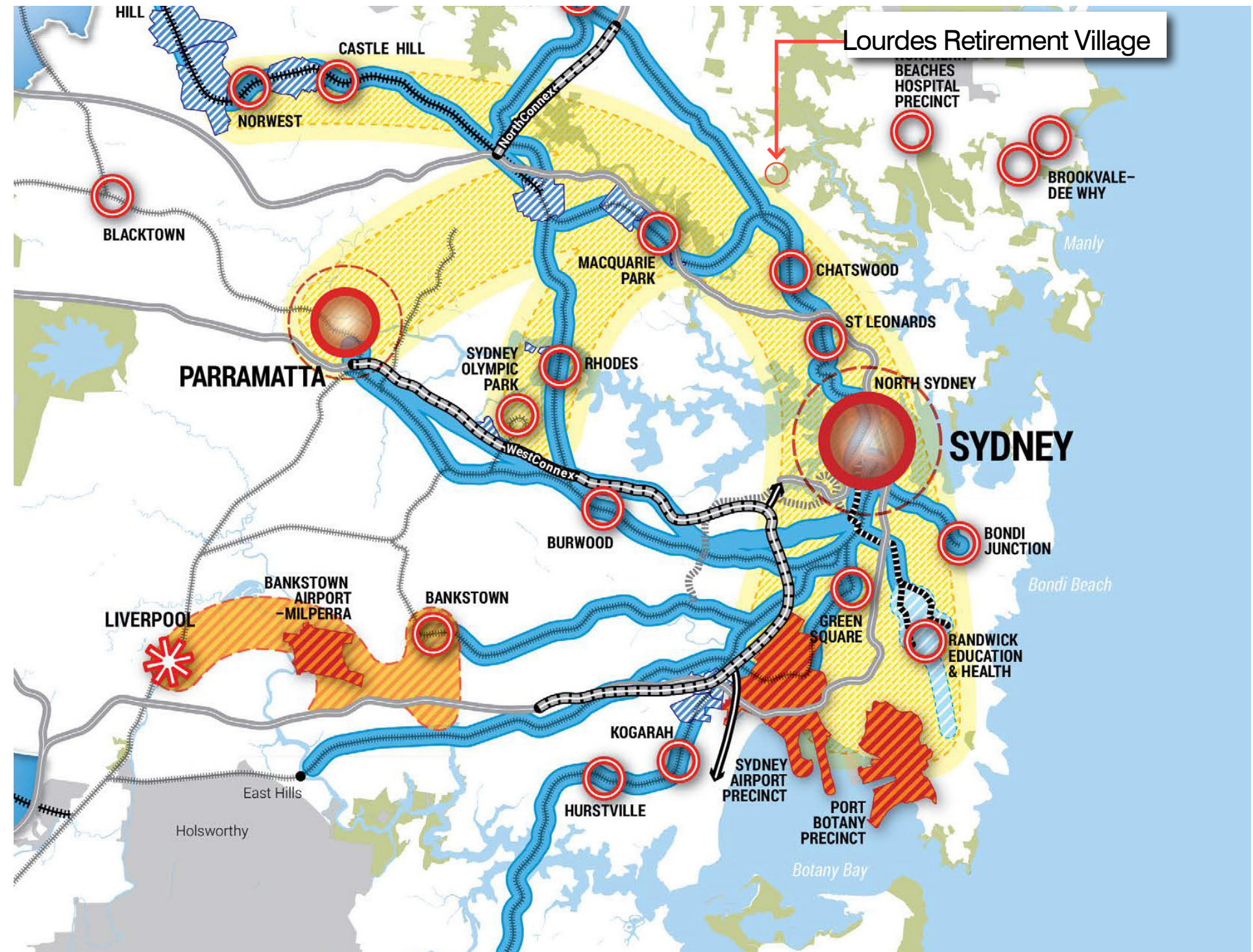
- A city of housing choice with homes that meet our needs and lifestyles;
- A great place to live with communities that are strong, healthy and well connected;
- A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources; and
- Of particular relevance to proposed redevelopment of the Lourdes Retirement Village is "Goal 2: A city of housing choice with homes that meet our needs and lifestyles".

Directions include:

- Accelerate housing supply across Sydney; and
- Improve housing choice to suit different needs and lifestyles.

The Plan estimates that Sydney's population will grow by 1.6 million people over the next 20 years, and the percentage of the population over 55 years old will also increase. As the population ages, many people will choose to downsize their homes. Most people will prefer to remain in their communities – around 50 per cent of people looking to purchase a new house stay within their current Local Government Area (Bureau of Transport Statistics, Small Area Employment Forecasting Model, NSW Government, Sydney, 2014).

The key message for the subject site is that more seniors housing is required in every LGA, and underutilised, well-served sites like Lourdes Retirement Village are an ideal location for the intensification of these uses where land supply is limited in an LGA.



2.1.2 Draft Greater Sydney Regional Plan 2056

Recently, the Greater Sydney Commission released the draft Greater Sydney Region Plan 2056 'A metropolis of three cities – connecting people', on 22 October 2017. The draft plan is intended to supersede A Plan for Growing Sydney when community consultation is finalised, and the plan is formalised by the Greater Sydney Commission.

The draft plan is a broad vision for the next 40 years, based on a global metropolis of three-cities: an Eastern Harbour City, a Central River City and a Western Sydney Aerotropolis. Key objectives relevant to the subject site are as follows:

- Objective 10. Greater housing supply;
- Objective 11. Housing is more diverse and affordable;
- Objective 27. Biodiversity is protected, urban bushland and remnant vegetation is enhanced; and
- Objective 30. Urban tree canopy cover is increased.

The key message for the subject site is that more seniors housing is required in every LGA. Over the next 20 years there will be a need for an additional 725,000 new homes. Renewing and increasing seniors housing is of critical importance, that will provide a diversity of housing outcomes across Greater Sydney.

Importantly, people have strong neighbourhood preference, with over 80% of people moving locally and less than 15 kilometres. This means there is a need for increased housing in established areas, such as Killara, to meet demand for housing within existing neighbourhoods and allow the community to age in place.



2.1.3 Draft North District Plan, 2017

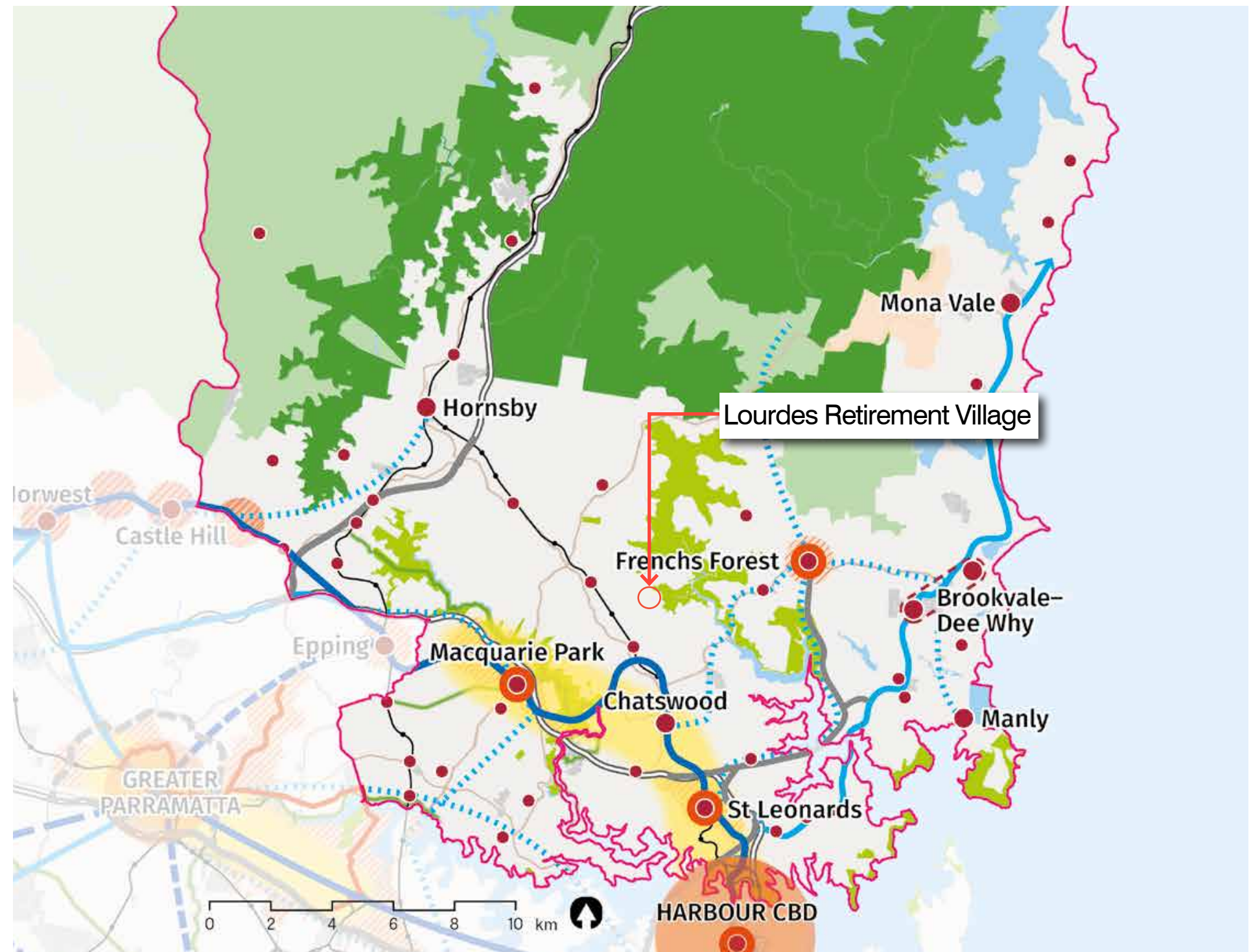
The revised draft North District Plan, released by the Greater Sydney Commission in October 2017, sets out planning priorities and actions for the growth and development of the North District.

The draft Plan recognises that new housing must be in the right places to meet locational demand, and to respond to demand for different housing types, tenure, price points, preferred locations and design. Importantly, new housing supply must be coordinated with local infrastructure to create liveable, walkable and cycle friendly neighbourhoods with shops, services and public transport. The subject site, being accessible to the neighbourhood centre Killara and local centre Lindfield, centre can achieve all of these outcomes.

A key planning priority of the draft Plan is to provide services and social infrastructure to meet District residents' changing needs (Planning Priority N3). These changing needs have been influenced by an aging population in the area, with the Ku-ring-gai local government area projected to have the largest growth in the 65 to 84 age groups. By 2036, 20% of the District's population will be aged 65 or over. The draft Plan responds to these trends by prioritising the provision of additional health, social and aged care services throughout the North District.

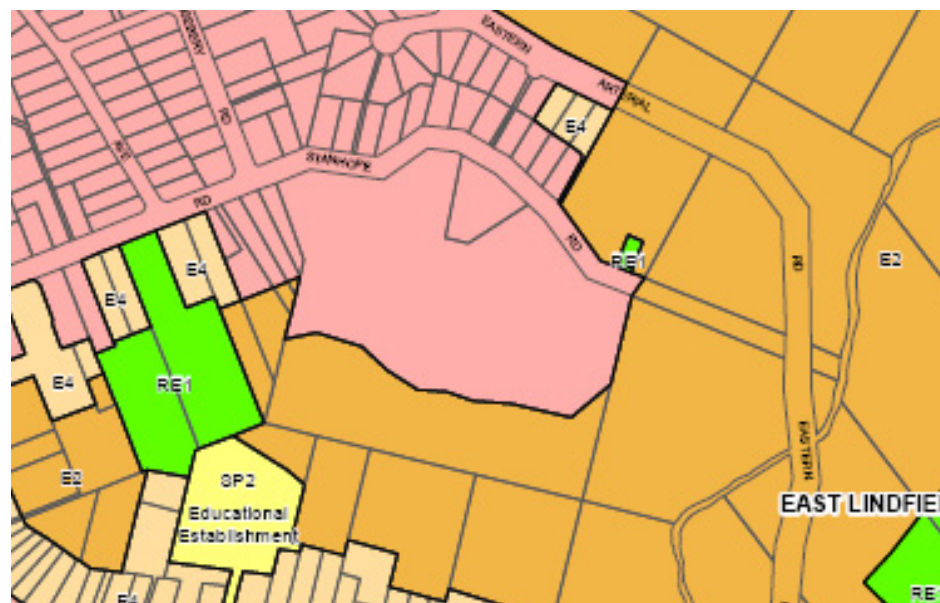
The provision of housing supply, choice and affordability, with access to jobs and services is also a key priority identified in the draft Plan (Planning Priority N5). Over the next 20 years, the population of the North District is expected to grow by an additional 196,000 people, generating demand for an additional 92,000 homes. The draft Plan also identifies that the population of Greater Sydney generally prefer to remain within their local area, with 82 per cent of residents moving into a new home within 15 kilometres of their former residence.

The planning proposal directly addresses these priorities as it delivers more diverse housing types in a medium density setting within Ku-ring-gai, as well as creating opportunities for older people to continue living within their community. The concept master plan appended at Attachment A, illustrates how a residential aged care facility, community centre and communal open spaces can be delivered on the site to strengthen health and support networks within the community, and allow local residents to age in place.



2.2 Planning Controls

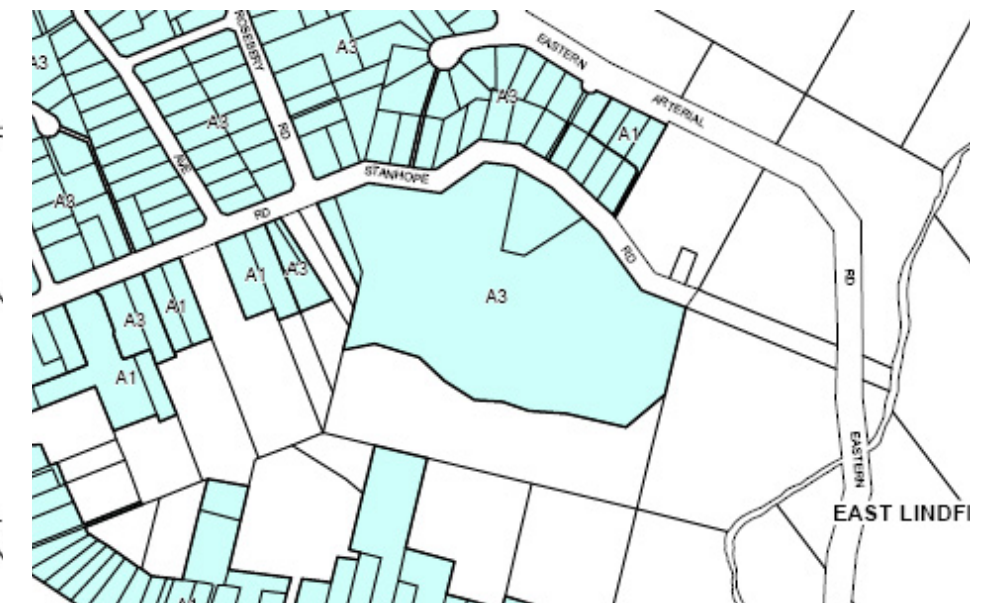
2.2.1 Ku-ring-gai LEP 2015 Key Controls



B1	Neighbourhood Centre	E4	Environmental Living
B2	Local Centre	R1	General Residential
B4	Mixed Use	R2	Low Density Residential
B7	Business Park	R3	Medium Density Residential
E1	National Parks & Nature Reserves	R4	High Density Residential
E2	Environmental Conservation	R5	Large Lot Residential
E3	Environmental Management	RE1	Public Recreation



J1	9	Q1	20
J2	9.5	Q2	20.5
L	11.5	T	26.5
N	14.5	U	32.5
O	16	V	39.5
P	17.5		



A1	0.2	J	0.8
A2	0.24	K	0.85
A3	0.3	N	1.0
A4	0.37	Q	1.3
B	0.4	U	2.5
D	0.5	W	3.5
G	0.65		
I	0.75		

Zoning

- The existing zoning for the site is R2, Low Density Residential.
- Seniors housing is prohibited in the zone, which includes residential care facilities and self contained seniors dwellings
- Group homes, Health consulting rooms, Neighbourhood shops, Places of public worship, Recreation areas, Respite day care centres are permissible with consent.
- In some cases, the SEPP (Housing for Seniors or People with a Disability) 2004 permits retired living uses in residential zones, but limits development to approximately 2 storeys (8 metres) in height.

Maximum Building Height

- The existing zoning for building height is J2 at a 9.5m, which allows for development of up to 2-3 storeys.
- Clause 4.6 Exceptions to development standards of Ku-ring-gai LEP 2015 may be used to vary this development standard.

Maximum Floor Space Ratio (FSR)

- The zoning for this site is A3 with a maximum permissible FSR of 0.3:1.
- Clause 4.6 Exceptions to development standards of Ku-ring-gai LEP 2015 may be used to vary this development standard.

2.3 Development Control Plan and supporting documents

2.2.2 Ku-ring-gai Development Control Plan

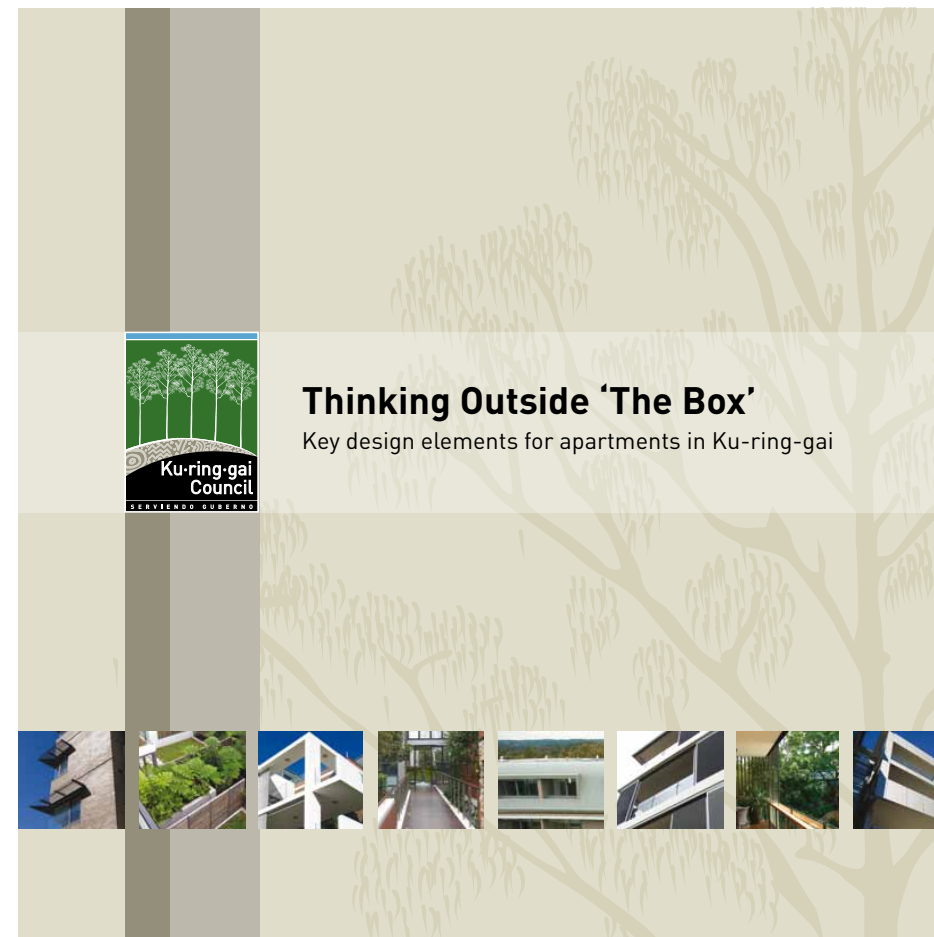
The Ku-ring-gai Development Control Plan (KDCP) 2015 applies to all sites within the Local Government Area (LGA). The KDCP 2015 was adopted by Ku-ring-gai Council on 9 December 2014 and came into effect on 2 April 2015.

The KDCP 2015 applies to the wider Ku-ring-gai LGA and provides for a range of controls relating to site suitability, built form, site density and other matters. The DCP provides controls that ensure site planning and design contributes to the landscape character of Ku-ring-gai. Developments should retain and enhance indigenous vegetation, biodiversity corridors, habitat and existing natural features on the site. The proposed master plan for the site considers the existing bushland environment of the site and surrounding area and proposes development which connects residents and visitors with the natural environment.

2.2.3 Ku-ring-gai Council Design Guide

The Design Guide for Ku-ring-gai LGA is known as 'Thinking Outside the Box', and is intended to "promote awareness of well-designed buildings that are responsive to community expectations and local character". Thinking Outside the Box provides guidelines for three key aspects of planning and design for residential flat development, including site planning, building design and site and building amenity.

The master plan for Lourdes is a plan for the delivery of high quality seniors housing which will meet the needs of the existing and future community within the Ku-ring-gai LGA. The plan will replace the aging building stock on the site and provide improved built form and amenity, improved streetscape and management of the site's steep topography, contemporary service infrastructure for seniors housing that is competitive with market standards, and landscaping that maximises the site's interface with the bushland fringe. Further detail regarding site planning and design is provided in the proposed master plan in Chapter 4.

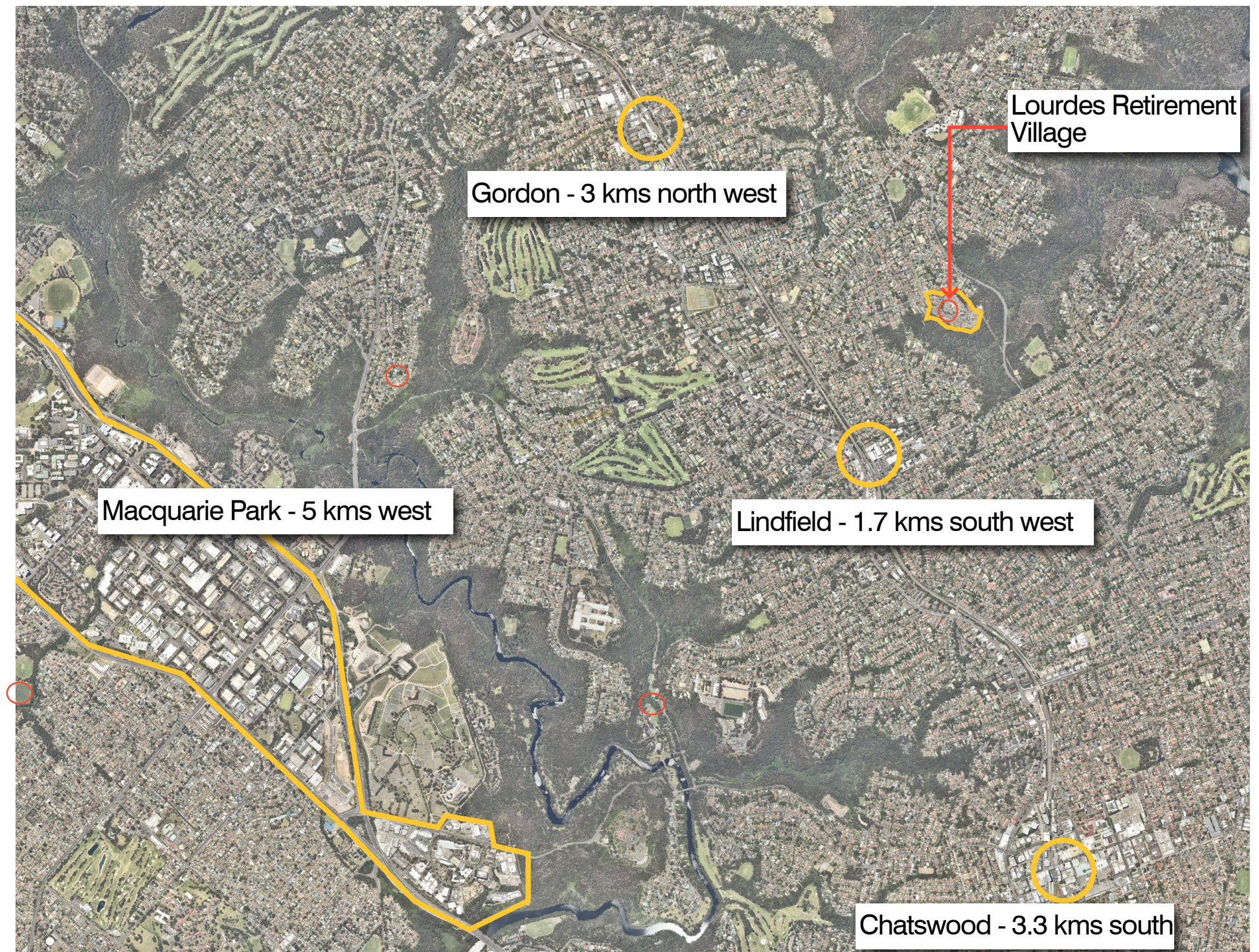


2.4 Regional Context

The site is located 1.2 kilometers by road from Killara train station and 1.7 kilometers from Lindfield Local Centre on the Pacific Highway. The Local Centres of Roseville, Gordon and Pymble are located within 3 kilometers of the subject site and are accessible by train and bus services. Local bus route 556, operates daily from Lindfield Station to East Killara. It services the site directly via the first avenue loop and three -bus stops within the site. The site is approximately 12 kilometers north of Sydney's city centre.

The site is located in close proximity to the Strategic Centres of Chatswood (approximately 3.3 kilometers) and Macquarie Park (approximately 5 kilometers) which are both identified in Sydney's metropolitan strategy, A Plan for Growing Sydney, as priority precincts for increased mixed-use development.

The site's proximity to the above centres, and good public transport connections, make it an ideal location for increased seniors housing. It is noted that in addition, the master plan for Lourdes Retirement Village proposes to improve the community's access to facilities on the site with the development of a new 'community hub'. This will allow residents to experience village life, encourage social interaction and stimulate everyday wellbeing. Resident's reliance on the road and transport network will therefore be significantly less than a comparable sized residential project.



2.5 Local Context

The site is located in the suburb of Killara in the Ku-ring-gai LGA. It is located in a suburban low density residential area consisting of large lot single detached one and two storey dwellings. Stanhope Road is a collector road which is located off the Pacific Highway. Denser residential apartment developments are located along the Pacific Highway corridor, with commercial / retail development typically located around local centres adjacent to railway stations.

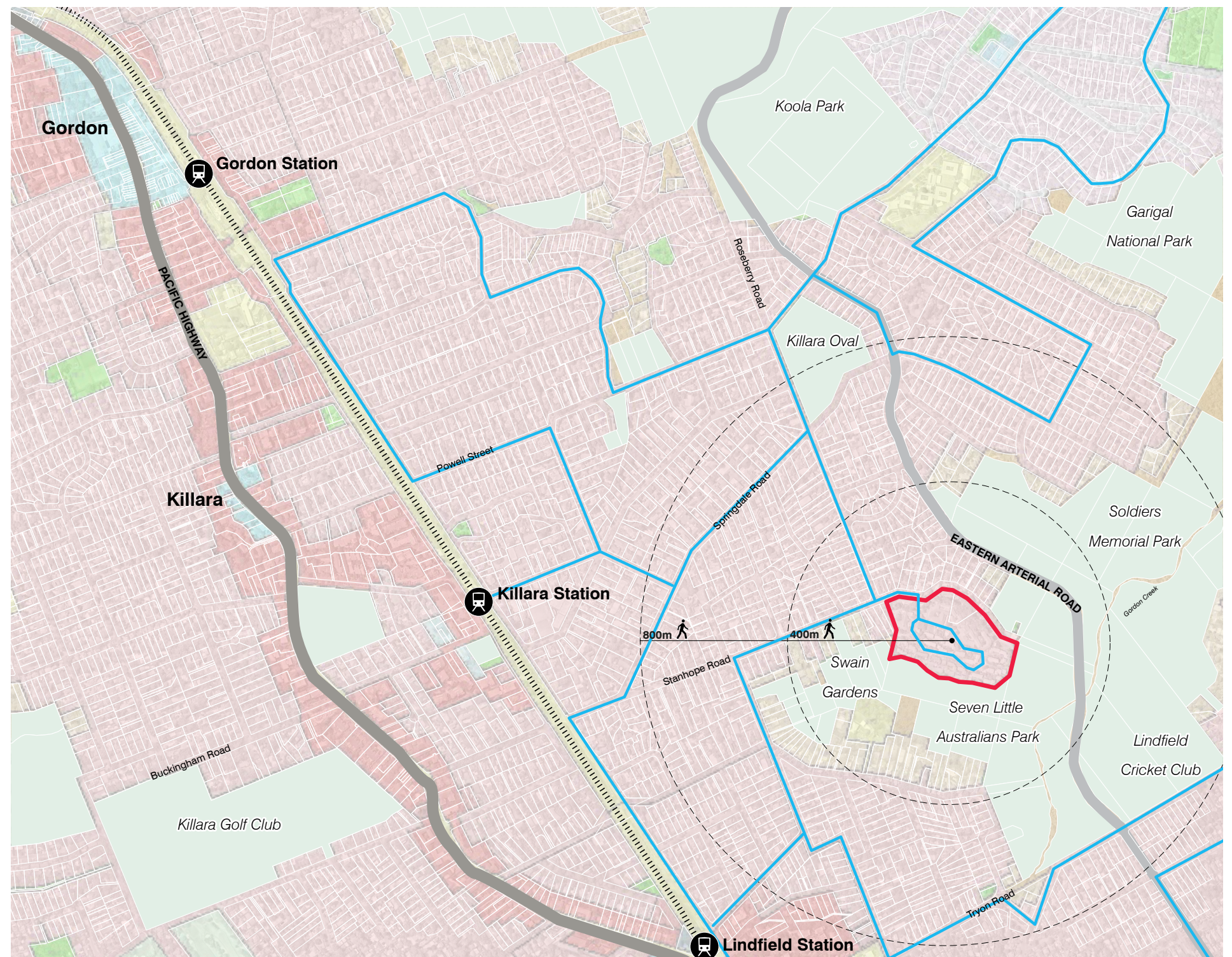
The local area is characterised by tree-lined streets and pockets of remnant bushland. Located on the southern boundary of the site, are several large open spaces and bushland parks, including Soldiers Memorial Park and Seven Little Australians Park. Bushland walking trails through these places link the suburb of Lindfield to Middle Harbour.

The land falls steeply away from Stanhope Road towards the bushland to the south and east on the other side of Lourdes Avenue. Further to the north-east is Eastern Arterial Road, a regional classified road. Further to the south is two-storey detached residential dwellings and Newington College Preparatory School.

The site is in relatively close proximity to Killara railway station, approximately 1.2km away, and public transport provided from Route 556 connecting the site from East Killara to Lindfield Railway station.

Legend

- Subject site
- Open space
- Major Arterial road
- Motorway
- ||||| Train line
- 🚂 Train station
- Distance from centre
- Local bus route 556



2.6 Seniors Living Context in NSW

By 2025, demand for retirement living accommodation is forecast to double, however present rates of development will not be able to keep up and will potentially lead to a shortage of housing built to specifically meet the needs of older people. This is of particular concern for the north subregion of Sydney, in which the fastest growing age groups will be those aged 65 and older. The average annual population growth rate for people aged 65 years and over is forecast to be 2.5% as opposed to a 1.2% average annual population growth rate for the north subregion.

The retirement living sector has found it difficult to compete with mainstream property developers for land and faced a range of costs that other developers do not, namely accessible and adaptable design, and compliance with the requirements of the Retirement Living Act and Housing for Seniors SEPP.

The issue is exacerbated for redevelopment of existing retirement villages, where a developer may own the site but not individual units. Additional to the development costs are the costs of relocating existing residents, associated legal fees, and operational subsidies for the period in which the village is only partially tenanted. This often poses a significant challenge to creating a financially feasible development.

Developers are therefore priced out of the market for potential new sites, particularly in suburbs within 20-30km of the city centre, because they are competing with residential developers who focus on delivering general purpose dwellings with minimum standards for access and mobility.

Generally, most Australians want to downsize within their own community. Most people want to live within 10km of their current home, close to family and friends and their favourite restaurants, shops, clubs and service providers, such as doctors.

Retirement villages specifically respond to this need by providing onsite facilities for recreation and socialising and by providing (or organising access to) services. Contemporary villages face demand from baby boomers who demand sport and recreation facilities, eating and drinking options, lifestyle facilities like onsite gyms and swimming pools, and treatment rooms.

Larger villages also offer greater social opportunities and choice. The demand from retirees is therefore strongly in favour of larger scale villages over smaller ones.

Age appropriate facilities, coupled with additional health and wellbeing

services, allow retirement village residents to remain in their home for longer, even if they are living alone. This enables them to delay entry into residential aged care. The Australian Institute of Health and Welfare, Patterns in Aged Care Program Use 2002-03 to 2010-11 report (Property Council of Australia, National overview of the retirement village sector, 2014) determined that residents in retirement villages enter aged care on average five years later than those going from a family home.

Many developers are now thinking in terms of retirement hubs rather than retirement villages, where there are integrated, mix-use environments with a diverse range of housing options, resident conveniences and multiphase options for health and aged care. The intent is to build capability within a location, so that as residents and community members age, they do not need to relocate fracturing important community ties.

By developing retirement living products within health precincts, developers can provide local, accessible, community-based services to keep people healthy and reduce the pressure on our busy public hospitals. There is growing evidence which suggests that comprehensive and well-coordinated community-based health services can improve the health status of the general population and reduce health inequalities by improving access to cost-effective and high-quality care (Keast, Jackie, Retirement living development will not meet future demand. s.l.: Australian Ageing Agenda, 2015).

This highlights the importance of the retirement housing sector within Ku-ring-gai. It also identifies how the redevelopment of the Lourdes Retirement Village represents a unique opportunity to not only renew and existing seniors housing stock but to also address a significant anticipated shortfall in seniors housing.



3 Site Analysis

3.1 The Site

3.1.1 Site and its streetscape character

The site is located on a ridge at the eastern edge of Killara on the fringes of a residential subdivision adjacent to the Eastern Arterial Road.

It is adjoined by bushland park on two sides - to the south Seven Little Australians Park and Swain Gardens to the south-west. These parks are heavily vegetated and form part of a greater network of remnant bushland, which connects to Middle Harbour.

The northern portion of the site is defined by its suburban interface along Stanhope Road. The surrounding area can be characterised by large lot residential dwellings with generous garden set backs, and leafy tree-lined streets.

By contrast, the southern portion of the development is defined by its location on a ridge and the views it is afforded of the surrounding bushland parks.

Stanhope Road is typical of the wider locality, with pockets of mature trees located on both sides of the street. The significance of the site's interface with Stanhope Road is further underlined by the presence of Headfort House, located in the north-west corner of the site. Although not heritage listed, the building is noted as having local historical value and is an important part of the streetscape.

Legend

- Site boundary
- Existing residential buildings
- Historically significant building and grounds (Headfort House)
- Community gardens
- Croquet lawn
- Grotto
- Trees and vegetation
- ↔ Pedestrian crossing
- Bush parkland





The Stanhope Road streetscape looking south west which consists of large lot single and double storey houses



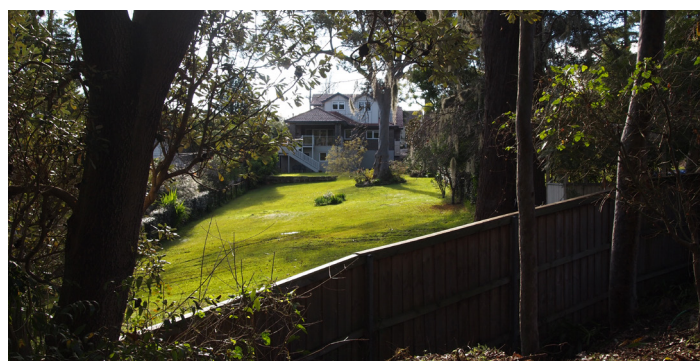
Properties along Stanhope Road opposite the northern boundary of the site.



Existing vegetation along the northern boundary on Stanhope Road



Streetscape view looking west down Stanhope Road



Residential lots along the Western boundary



Existing site entry off Stanhope Road into Lourdes Avenue



A view of council run Swain Gardens located on the south-west boundary of the site

3.1.2 Existing Land Uses and Built Form

The village is made up of independent living units (ILUs) which are a combination of detached and semi-detached dwellings spread across the site and serviced apartments (SA's) which are located to the north of the site adjacent to the residential aged care facility.

The ILUs are orientated east-west to capture the bush views afforded by the site. Many ILUs feature private gardens or balcony spaces to the front or rear of the dwellings with a mix of garage and on-street car parking distributed across the site.

In addition to the above seniors housing, the site also contains ancillary supporting facilities including the following:

- Administration centre including cafe, community centre and pool facilities
- Residential aged care facility and hospice (83 beds)
- Croquet lawn and BBQ facilities
- Prayer chapel (Headfort House)

Legend

--- Site boundary	Lourdes
 Residential area	 Independent living units
 Open space	 Administration and community centre
 Scout hall	 Residential aged care facility (RACF)
	 Serviced apartments
	 The Lodge
	 Headfort House (Chapel)





The existing Community Centre is an important focal point for the existing residents.



Existing croquet green located adjacent independent living units



External view of the existing residential aged care facility.



Typical independent living unit Type.



View from the start of First Avenue looking east with the croquet green featured on the left.



Our Lady of Lourdes Grotto is an important place for reflection and prayer for residents.



Independent living units and adjoining garages on Forth Avenue.



Independent living units on Third Avenue.

Existing On-Site Facilities

The village comprises a total of 108 independent living units (ILUs) which are a combination of detached and semi-detached dwellings spread across the site. An additional 49 serviced apartments (SA's) are located to the north of the site adjacent to the residential aged care facility. All buildings on site are generally 2-4 storeys in height and are of a brick masonry character.

The site also houses a Residential Aged Care Facility and hospice containing 83 beds. This building is aging and includes rooms shared by up to three residents which does not meet modern standards for similar facilities.

Pedestrian access across the village are via a network of narrow walkways, ramps and stairs between the dwellings. These paths, although well maintained, are difficult to traverse due to the steep sloping nature of the southern portion of the site. Dwellings do not have lift access and vehicular / pedestrian access is not legible, with some areas too steep to walk. Access to many ILUs are exposed to the elements and via stairs, increasing risk of slippage for residents.

This considerably restricts residents movement through the village and their ability to participate in village life. Many of the community and care facilities are located on the northern portion of the site adjacent Stanhope Road which is flatter and closer to the village entry.



Rooms in the retired aged care facility are multi-occupancy, housing up to three residents per room.



Legibility and wayfinding within the buildings is challenging.



Recreation areas allow for gathering of residents.



Circulation areas in the serviced apartments are generally non compliant with current accessibility standards.



Dining spaces and facilities provide only a basic level of service.



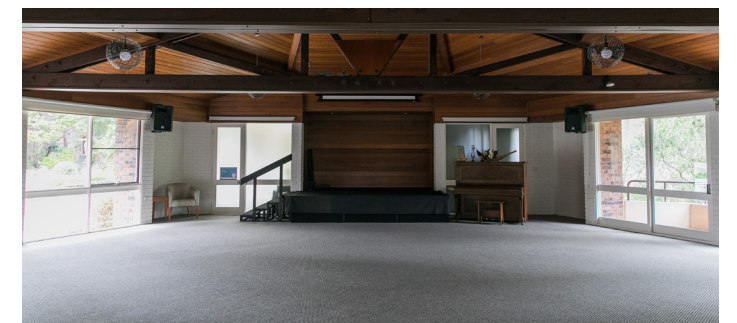
The salon area is small and poses access challenges for residents.



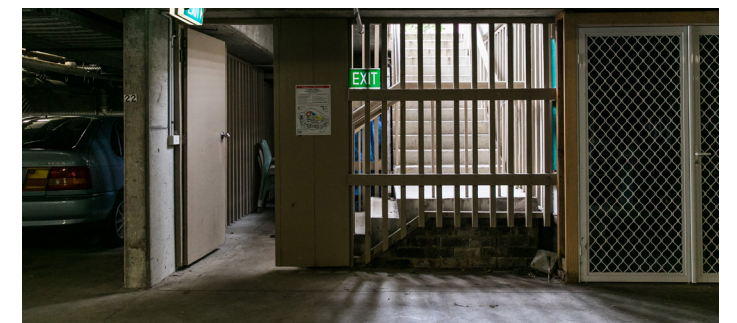
The majority of independent living units are built on the steep hillside making them difficult to access.



In the absence of lifts in buildings, stair lifts are used to move residents between levels.



The existing hall is dated.



Basement car parks require stair access.



Many of the unit entries at ground level are narrow and difficult to navigate.



Independent living unit entries are generally open to the elements and stepped.



The communal spaces lack good connection to outdoor spaces.

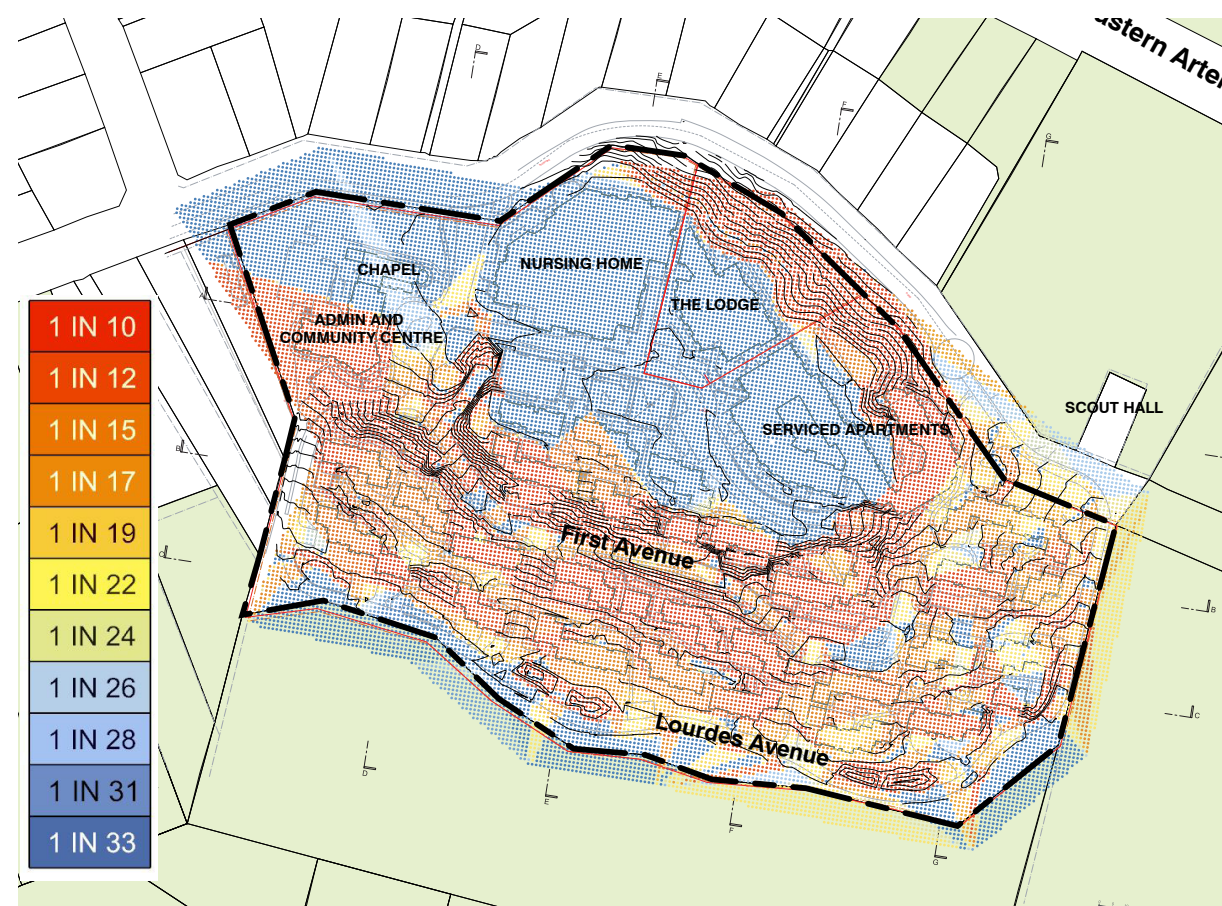


The existing gym is not built for purpose.

3.1.3 Gradients and Accessibility

Site Gradients

The analysis below illustrates level changes across the site. The graphic clearly shows the flatter areas of the site (in blue) are located at the northern portion of the site, on higher ground. These areas are generally used for buildings require larger building envelopes such as the Retired Aged Care Facility, village centre and community facilities. The areas with the greatest changes in grades, in excess of 1:12 are where the Independent Living Units around the site are located.



Pedestrian Accessibility

The site topography results in gradients which make pedestrian movement difficult, especially when considering accessibility for the elderly. The diagram below shows how accessible grades (1:20+) are mainly across the slope (east-west) whilst movement through the village north-south is much steeper and problematic.

The roads running east-west across the site are relatively flat and give the site a sense of terraces stepping down towards the bushland edge.

The dwellings are accessed via a network of narrow internal paths and stairways making pedestrian movement between houses difficult for residents who often are required to traverse multiple flights of stairs to reach their homes. In addition, dwellings do not have lift access and in many instances the streets are too steep to walk. The building stock is aging and does not provide services and facilities that are competitive with market demand. Refer to the site images overleaf.





Stair access across the site is common.



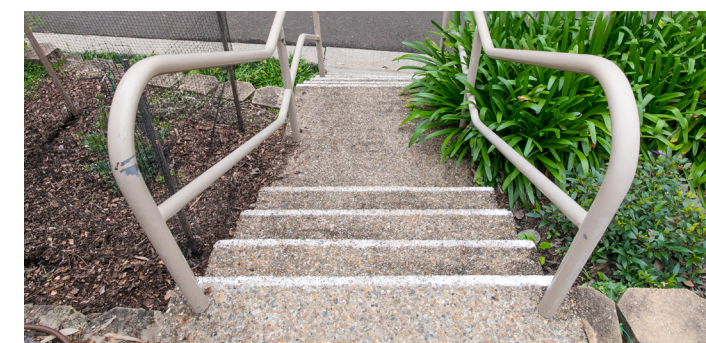
The view from Fourth Avenue illustrates the nature of the steep grades across the site.



Pathways are narrow and not compliant with modern standards.



Some access paths have single sided hand rails and several steps.



Many stairs on site are not compliant with modern access standards.



Access to secondary spaces such as drying areas can be challenging.

3.1.4 Topography and Views

A defining characteristic of the site is its topography which falls approximately 13 metres from the northern boundary with Stanhope Road to the southern boundary along Lourdes Avenue and the bushland edge.

This level change and the relative elevation of the site provides valuable regional views across Seven Little Australians Park to the south and to the Chatswood and Sydney city skylines beyond.

The site topography also has some a number of steep gradients across the site which makes movement difficult for elderly residents, especially when considering their level of mobility (refer to section 3.1.3). Many of the existing street and access paths are steep and do not allow for easy use and access by residents. In some instances the streets are too steep for residents to walk. This considerably restricts residents movement through the village and their ability to participate in village life.



Legend

- Site boundary
- Regional views to Chatswood + City
- Local bushland views
- Contours



View of bushland to southern site boundary



View from First Avenue



View of embankment along Stanhope Avenue



Access road along eastern site boundary



Native Gumtree Forests

3.1.5 Existing Building Heights

The buildings on site are generally low rise buildings ranging from one to two storeys in height. The residential aged care facility located on the northern portion of the site is the largest building on the site and consists of a single storey.

The majority of the existing independent living units are no more than two storeys in height in a terraced arrangement in the southern portion of the site. It is noted that the majority of these units are proposed to be retained at this stage and the maximum building height for the southern part of the site (9.5 metres) is not proposed to change.



3.1.6 Access and Servicing

Site Access

The road network consists primarily of two concentric loop roads that serve the upper and lower portions of the site and are connected via secondary roads.

The main entry to the village is via an intersection on Stanhope Road. Two secondary entries are located further along Stanhope Road on the eastern boundary of the site. These secondary roads are used for emergency and resident parking access.

First Avenue is a one-way internal loop road which provides access to the upper portion of the site and vehicular entries to the existing residential aged care facility, chapel and administration buildings. The road also serves the existing independent living units and is connected to the lower ring road (Lourdes Avenue) via two smaller connector roads.

Lourdes Avenue is the secondary road south of First Avenue providing access to the lower portion of the site.

Parking and Drop-off

Resident parking is located within secure garages below or adjacent to buildings. On-street parking spaces for residents and visitors are located at various points around the site. A drop off area is also located on site at the front of the administration centre.

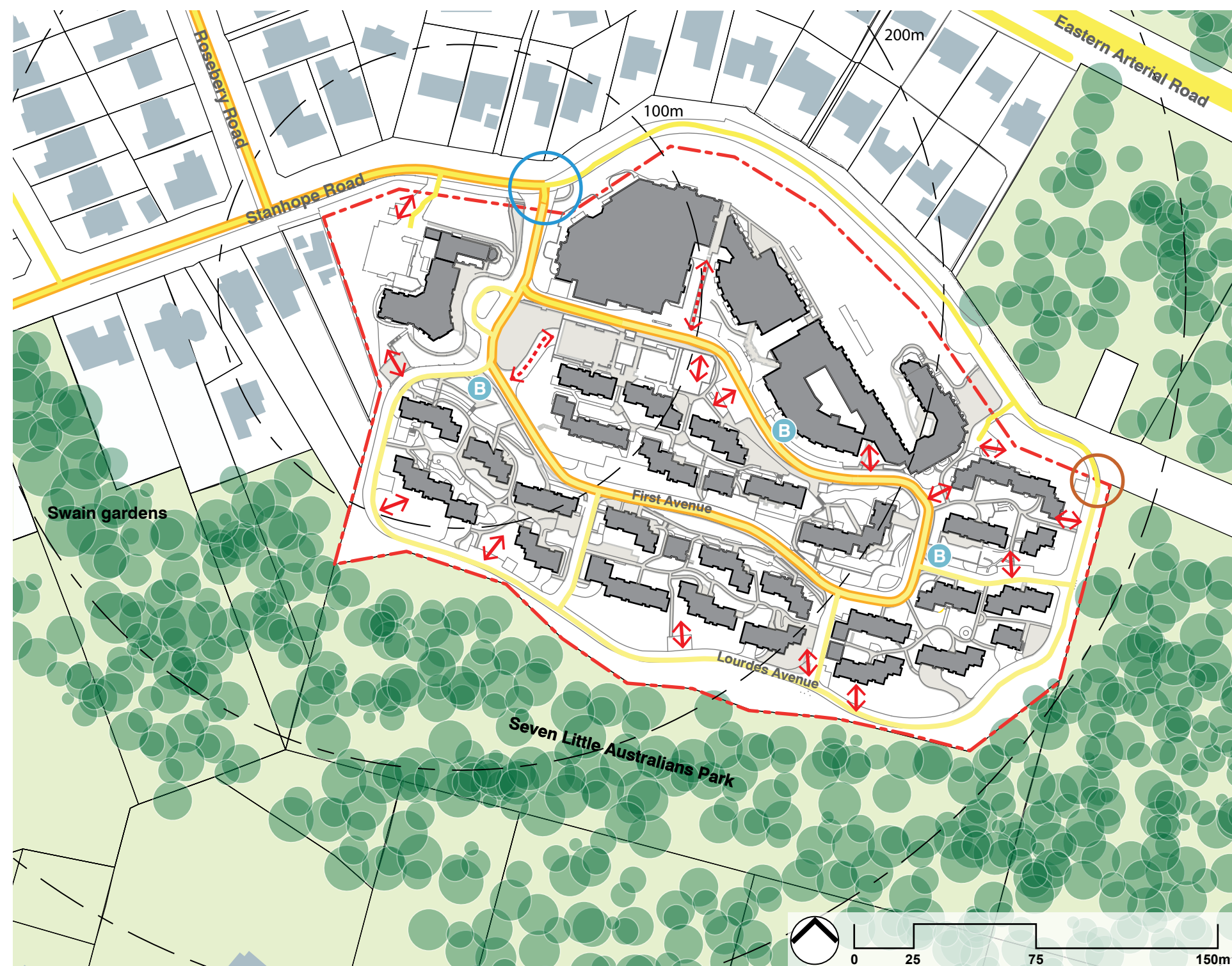
Servicing and waste

Green waste is stored in centralised areas throughout the site and collected. Other waste, such as street bins are collected from points along the village roads by garbage trucks.

A separate dedicated service access bay to the residential aged care facility is located off First Avenue.

Legend

- | | |
|---|--|
| --- Site boundary | --- Internal road |
| ○ Primary vehicular entry | --- New internal road |
| ○ Secondary vehicular entry | B Bus stop |
| --- Bus route | ← Basement car park entry |
| | - - - Basement services entry |



3.1.7 Heritage

Site History

The site's history has been traced back to 1899 when the Clarke's Dairy operated in the area. In 1917 a number of lots were purchased to establish the Headfort School (established 1918) which operated until 1927 and after which until 1934 as Milton Grammar and then Lochiel Grammar in 1940. The original school building known as Headfort House still stands with later additions which include the existing village chapel.

From 1942-44 the site was requisitioned by the Australian Army and used for training women. After this the land was purchased by the Missionary Sisters of the Society of Mary and the Catholic Church Trust and in 1946 the Lourdes Hospital opened as a tuberculosis hospital until c1967 when it was operated as an acute after-care facility for patients from Mater Misericordia Hospital, North Sydney.

In 1980 the site was sold to the Hibernian Australian Catholic Benefit Society and in 1984 the Lourdes Retirement Village opened and continued to develop with the addition of the Village Centre which opened in 1987. A range of works were undertaken the most recent significant work being the approval of 18 self-contained units in 2011.

Statutory Listing

The Lourdes Retirement Village site is not a statutory listed heritage item.

It does, however adjoin two areas listed on the LEP including:

- The Seven Little Australian Park (to the south and east of the site).
- The Crown Blocks Conservation Area (HCA) (to the west south and east).

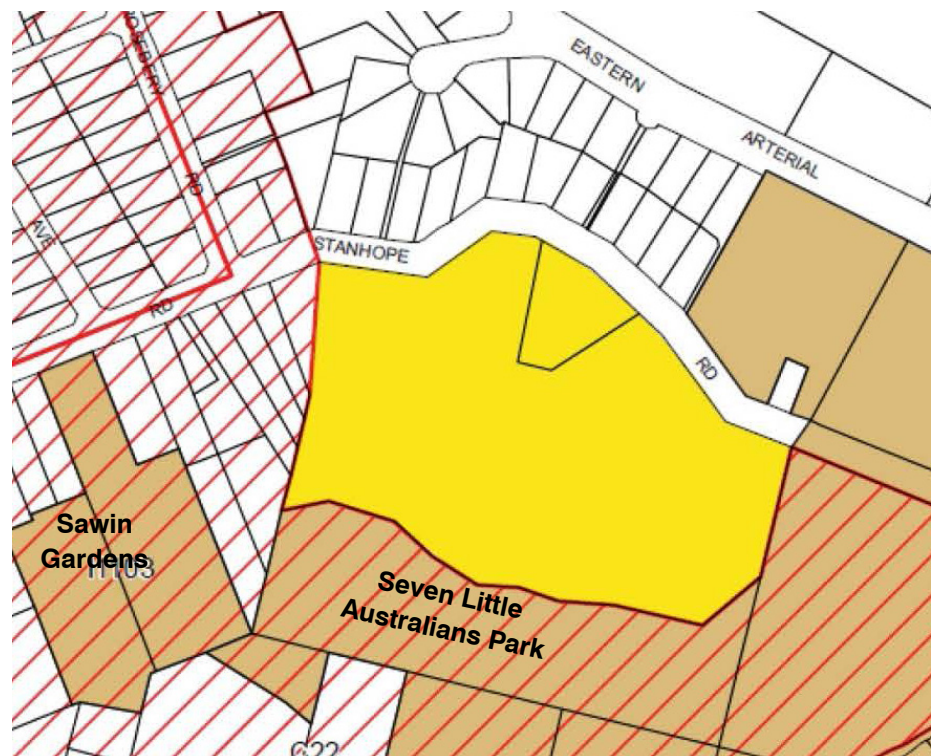
Significant areas of the LGA are affected by heritage listings and conservation area protection. The site is one of few sites large sites in the area that is not affected by heritage listings, and therefore should be tested for its capacity to accommodate more density on the site.

Legend

- Site boundary
- Subject site
- Local heritage item
- Heritage conservation area



Prize giving - possibly taken from the existing grotto location



View of Headfort House today from the front garden.

Significance

Headfort House has been considered by GML Heritage against the NSW Heritage Manual guidelines. Headfort House has significance at a local level however it *does not* reach the threshold for heritage listing at a local level under the following criterion:

- Demonstrates aesthetic characteristics and/or high degree of creative or technical achievement in NSW (Criterion C);
- Potential to yield information that will contribute to an understanding of NSW's cultural or natural history (Criterion E);
- Possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (Criterion F); and
- Demonstrates the principal characteristics of a class of NSW's cultural or natural places or environments (Criterion G).

This assessment by GML Heritage has identified that Headfort House is significant for the following reasons:

- An item is important in the course of NSW's cultural or natural history (or of the local area) (Criterion A):
 - It is evidence of the growth of Killara, and its development from rural area to residential suburb; and
 - It shows the effect of World War II on the local area with the building used by Australian Women's Army Service (AWAS) in the 1940s and for its later use as a tuberculosis hospital.
- An item has strong or special association with the life or works of a person, or group of persons, of importance in the cultural or natural history of NSW (or of the local area) (Criterion B):
 - It has significance for its association with the Reverend Thomas Wade, who was the original headmaster of the Headfort School and a prominent educator, ichthyologist and palaeontologist.
- An item has strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons (Criterion D):
 - The property has social significance related to the use of the site by AWAS and former staff and patients of Lourdes Hospital.



Headfort School, taken in c1921. (Source: *The Headfort Chronicle: The Magazine of Headfort School, Killara*, p. 3)



Headfort House, c1950s. (Source: Ku-ring-gai Historical Society photographic collection)



AWAS erecting tents while wearing helmets and gas respirators, c1944. (Source: Australian War Memorial <<http://www.awm.gov.au/collection/064733>>)



1943 aerial of the subject site and grounds, showing series of tents similar to those left (Source: SIX Maps, LPI NSW)

3.1.8 Bushfire

The site has been identified by Ku-ring-gai Council as a bush fire prone area. Accordingly, EcoLogical have been engaged to provide advice on the application of *Planning for Bushfire Protection 2006* on the site. EcoLogical have identified that the locality has not had widespread wildfire and is unlikely to experience this as the vegetation is confined to relatively narrow pathways in directions that are not exposed to widespread and major bushfires.

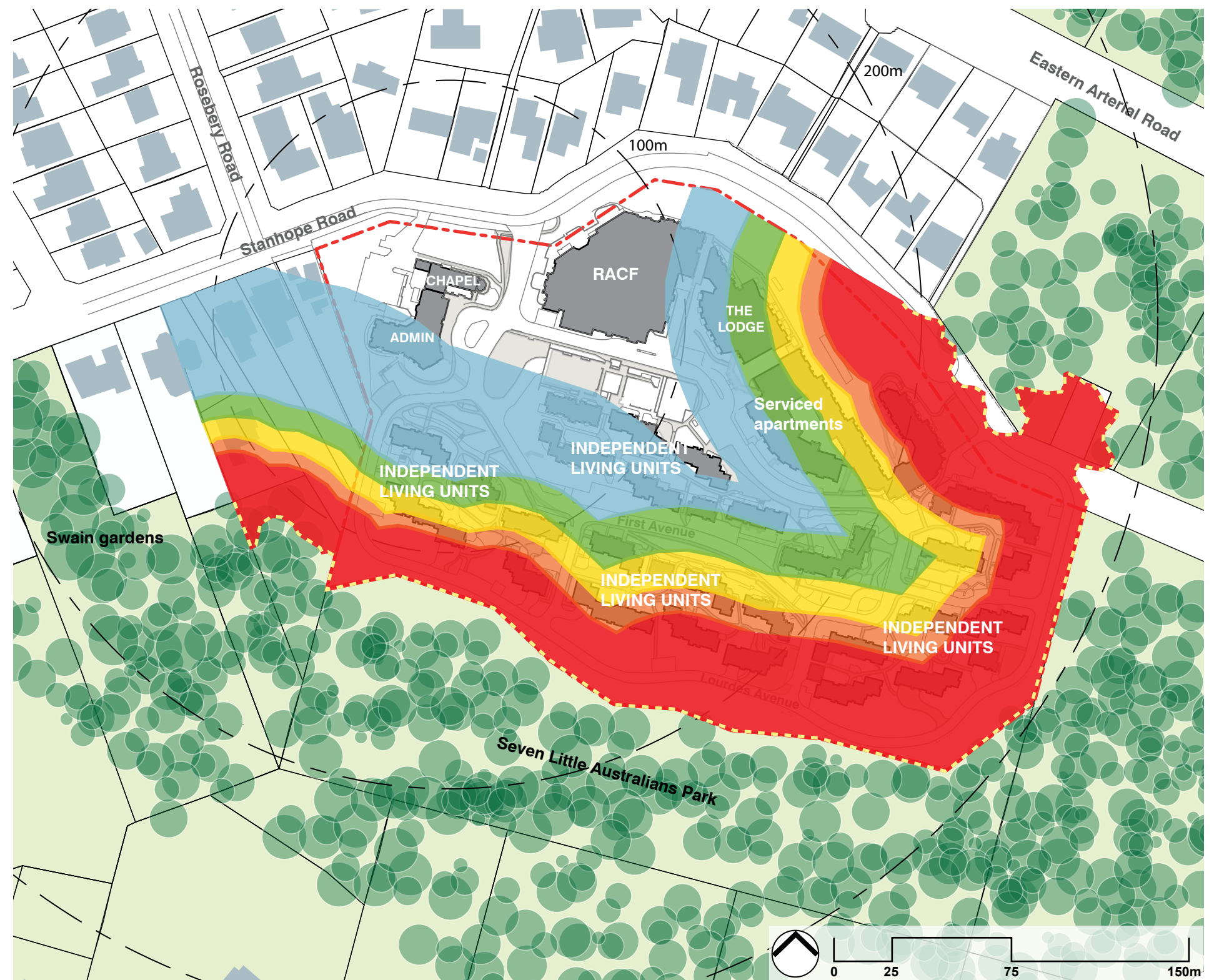
EcoLogical undertook a bushfire threat assessment of the site which considers the existing vegetation and the slope of the site. This results in the identified Bushfire Attack Levels (BAL) shown right. This assessment was discussed and agreed by the NSW Rural Fire Service. A detailed map has been prepared showing the slopes and other pertinent information and is provided overleaf.

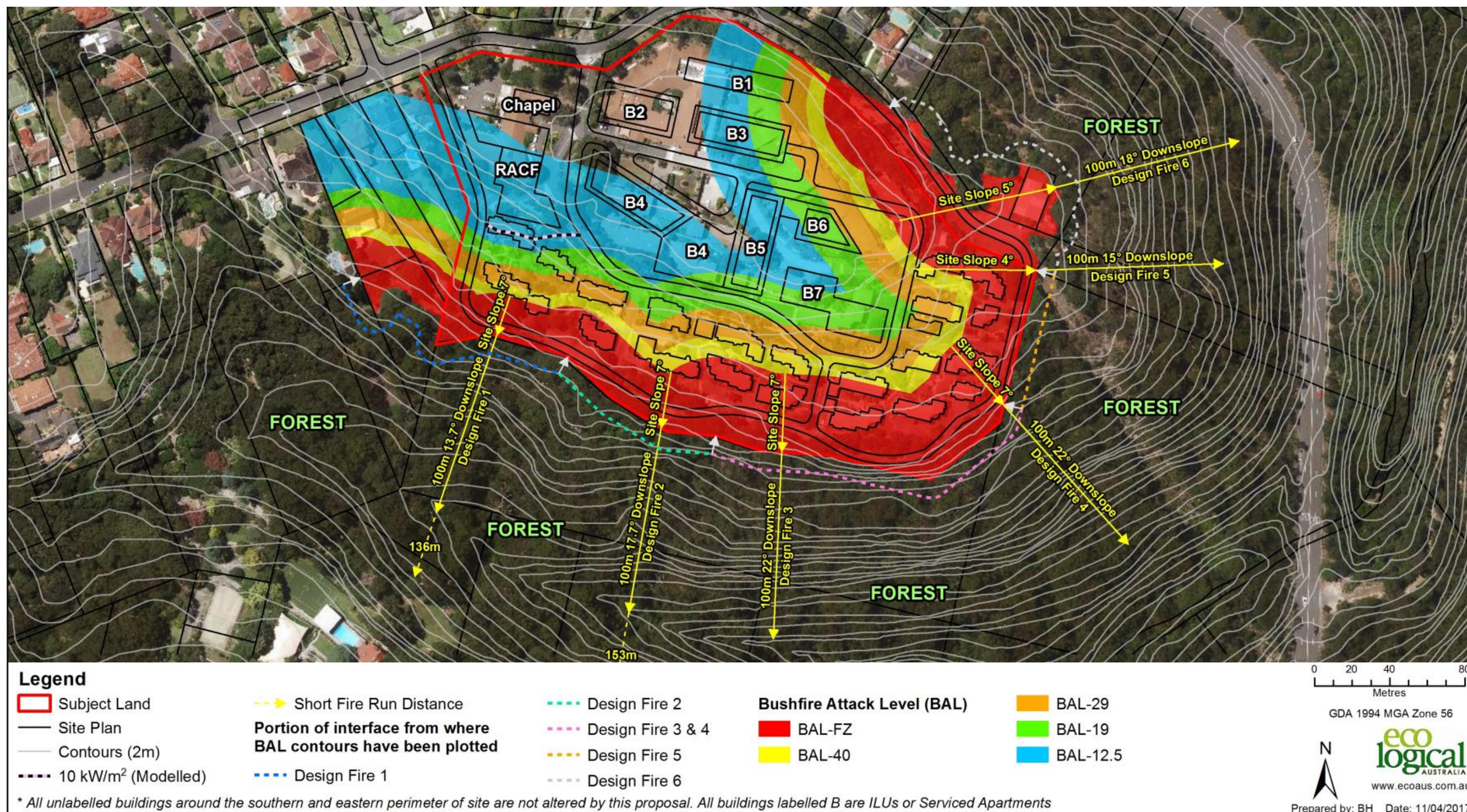
This assessment identifies that the southern portions of the site are significantly constrained as a result of the bushfire affectation. However, with an engineering approach agreed with NSW RFS, the site may be developed in the future to improve the site's risk profile.

Legend

--- Subject boundary

- BAL -FZ
- BAL -40
- BAL -29
- BAL -19
- BAL -12.5





3.1.9 Opportunities

- ① The village in the area identified is predominantly flat and easily accessible from Stanhope Road.
- ② The front and side gardens located adjacent Headfort House (Chapel) may be better utilised to accommodate more functions compatible with the existing building and its uses.
- ③ The site affords residents with sweeping views of bushland across the valley and beyond to both Chatswood and central Sydney.
- ④ Utilise the sloping topography of our site to maximise the opportunities for additional off-street parking.
- ⑤ Retain and enhance the existing pockets of landscaped gardens located along Lourdes Avenue.
- ⑥ Enhance pedestrian connections across the site, given the steep nature of the site, particularly in the north-south direction.
- ⑦ Consider providing walking path access to Swain Gardens and Seven Little Australians Park to facilitate better access to the broader network of bushland parks in the area (subject to topography and access constraints).
- ⑧ The existing vehicular entry into the site is poorly defined and should be upgraded to better service new development on the site.

Legend

- Site boundary
- Bushland views
- North-south connections
- Existing landscape pockets
- Landscape entrance and heritage listed building
- Level area
- Existing basement car park

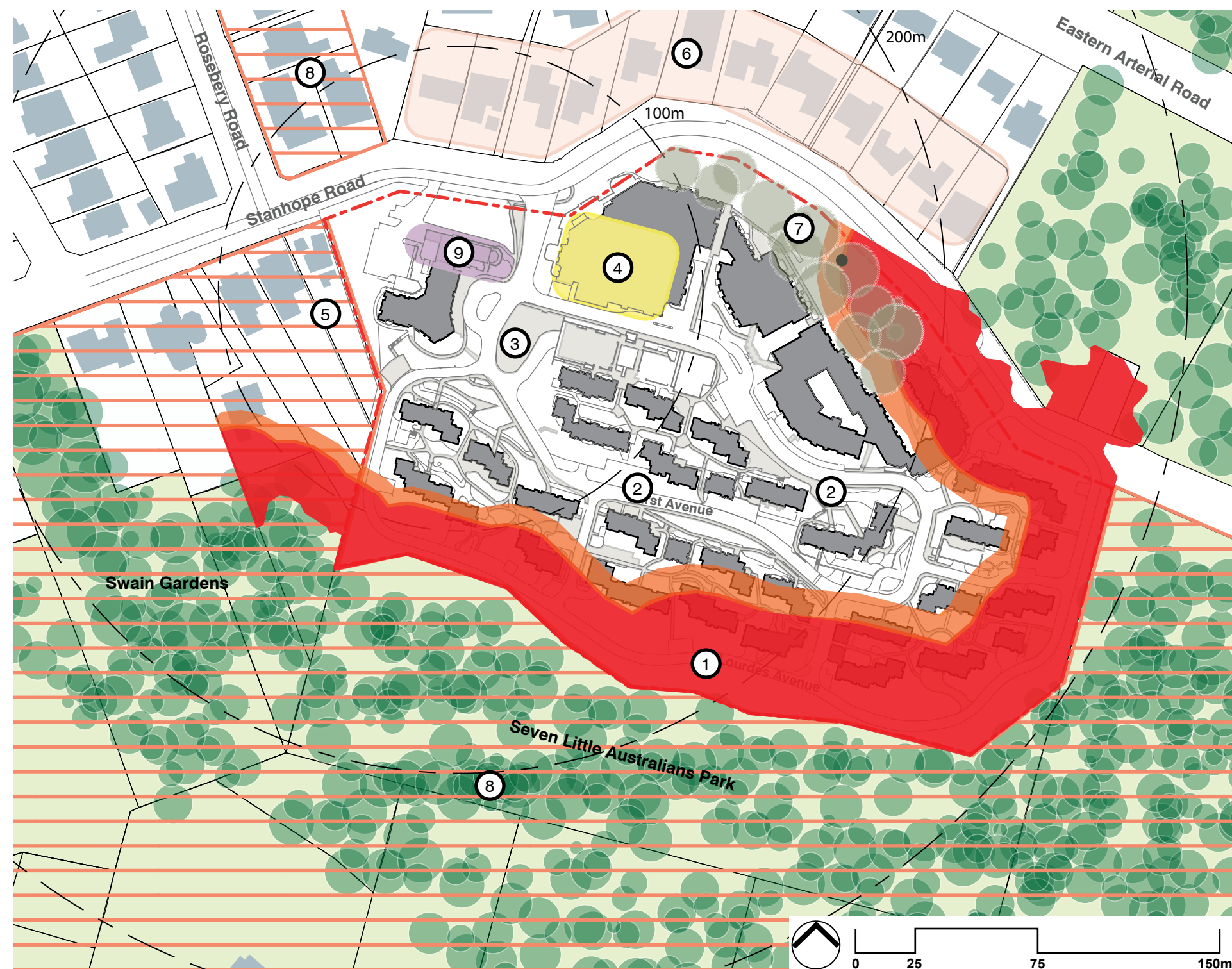


3.1.10 Constraints

- ① The construction of any new independent living units or residential aged care facilities is not be permitted in the Asset Protection Zone or in the Bushfire Attack Level Zone 40.
- ② The topography of the site is steep and difficult to traverse by foot making pedestrian access difficult, especially for elderly residents on site.
- ③ The existing Grotto located opposite the community centre is a place of great importance for residents. Careful consideration needs to be taken if it is to be relocated due to re-development of the site.
- ④ The existing RACF may need to remain functional during construction. This is subject to further review following further design development of the proposed buildings.
- ⑤ The western boundary contains existing single detached houses. Future development will need to respond to this sensitive edge condition.
- ⑥ Residents living in the existing dwellings will need to be considered to minimise their loss of view and access to sunlight.
- ⑦ Significant planting is to be retained where possible.
- ⑧ The site is located at the edge of the Ku-rin-gai Council Heritage Conservation area. Development on site should be responsive to the requirements of the zoning in relation to visual impact on the surrounding environment.
- ⑨ Headfort House is historically significant and future development will need to respond to this.

Legend

	Site boundary		Headfort House (locally significant building)
	Residential interface on Stanhope Road		Flame zone
	Existing residential aged care facility (RACF)		Bushfire attack level 40
	Heritage Conservation Area		





4 Proposed Master Plan

4.1 Trends in Aged Care

The Overview of Social Effects report prepared by Elton Consulting describes the evolving demand for seniors housing, including both the quantum of demand and characteristics demanded. The report also provides an analysis of the potential community impact issues that may affect future residents and the surrounding community as a result of the proposed redevelopment. Three main drivers of changing demand were identified in the report:

- The continuing expansion of the older population;
- Cultural change – baby boomers expect choice; and
- Growing affluence.

Elton Consulting identify that seniors' living providers are responding to these factors by seeking to address the demand for wider choice, more spacious dwellings, and a range of services, including 'lifestyle' facilities.

There are currently approximately 220 residents occupying independent living apartments and serviced apartments at Lourdes, with this number likely to increase by up to 250 people under the proposed master plan. As such, the report provides that the proposed increase in resident numbers has the potential to impact services and facilities in the local area, with resulting effects for future residents and for people in the surrounding community. These impacts include requirements such as increased transport, options for entertaining and socialising, shopping, medical services and domestic assistance.

These requirements have been addressed by the master plan for Lourdes and are supported by expert advice appended to the Planning Proposal.

The Lourdes Demand Study also prepared by Elton Consulting reviews the future economic viability of the existing dwellings and infrastructure and concludes that a full redevelopment is required. The study found that the existing building stock on the site is already "experiencing decline in viability and cannot meet the expectations of the emerging baby boomer market, which differs significantly from the more modest demands of previous generations".

Architectus is currently working on a number of local aged care projects, and have looked nationally and overseas to identify best practice for the design of sustainable aged care communities. The vision for Lourdes Retirement Village is to provide high quality seniors housing in a village environment focused on community life. The following four design philosophies have been developed to inform a master plan for Lourdes. The philosophies aim to achieve a built form which encourages active and social living.

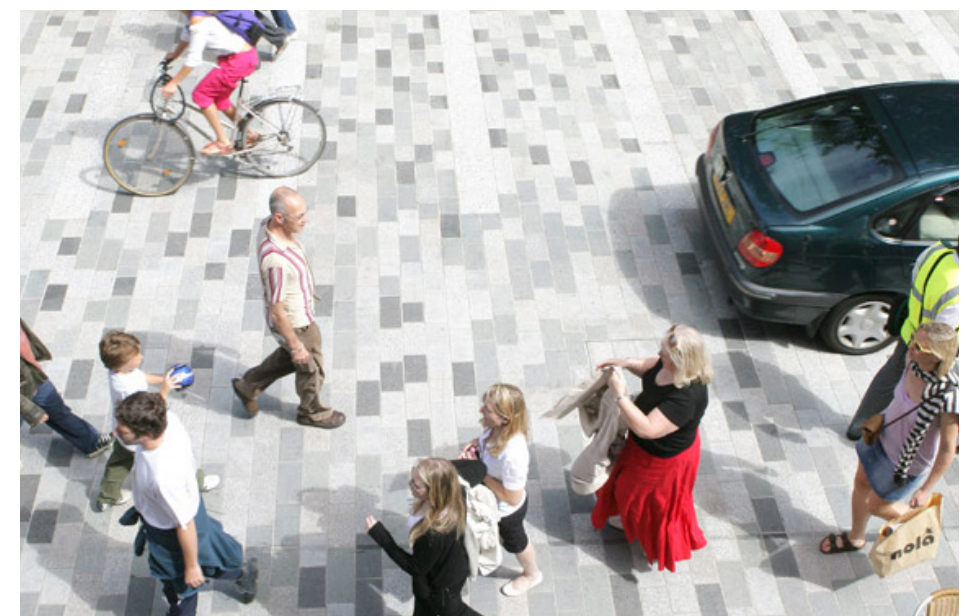
1. Connection to village life - A 'main street' in Lourdes

In some new aged care developments, apartments are designed to face 'outward' to promote integration with people and businesses outside of the facility. In the case of Lourdes, it does not make sense for the village to turn to the quiet residential street (Stanhope Avenue) for activity.

This represents the opportunity to create a new main street within the Lourdes Village, where residents and visitors can experience an element of village life and feel part of their community.

Creating a main street can also provide a space within the village that feels more public, is inviting for visitors, and where way-finding and parking is clear for deliveries and emergency services. The main street should be in close proximity to the entrance, improving legibility for visitors.

In Lourdes, the opportunity is to create a straight, level street that is legible and feels semi-public, which is also the focus for services provided on site (hairdressers, medical suites, cafés) and has an active and vibrant character.



2. Connections to each other through design

Getting to know your community and neighbours has demonstrated health benefits, but people can be uncomfortable making contact. As part of our analysis for the Johnstons Creek Open Space Plan for the City of Sydney Council, Architectus observed a number of older people sitting in cars and watching people. Conversations revealed that they were not necessarily comfortable sitting in the park (particularly if they were by themselves) but were seeking interaction and a connection.

The response to this issue was to attempt to create spaces in the park that validated their sitting in the park and made it comfortable to be in the park by themselves – such as short circuit walks and community gardens.

This principle could be adopted in Lourdes - typical balcony planting could be located in communal walkways and corridors to allow for passive and comfortable interaction.

In the 8 House, by Danish architects BIG, a cycle and pedestrian spine is provided and residents have individual entries onto the path. Residents benefit from being able to get to know their neighbours who have to walk past each other's houses.

Residents have the opportunity to sit on their porches and watch the passers-by, and control their level of interaction with others.

3. Private and common open space

Consultation has confirmed that solar access and views are extremely important to seniors.

The Lourdes Villages' topography represents the opportunity for green roofs for both communal and private open space that takes advantage of the incredible bush, and district views. Elevated communal open spaces will allow for distant views and give residents a sense of connection to their neighbourhood and to nature.

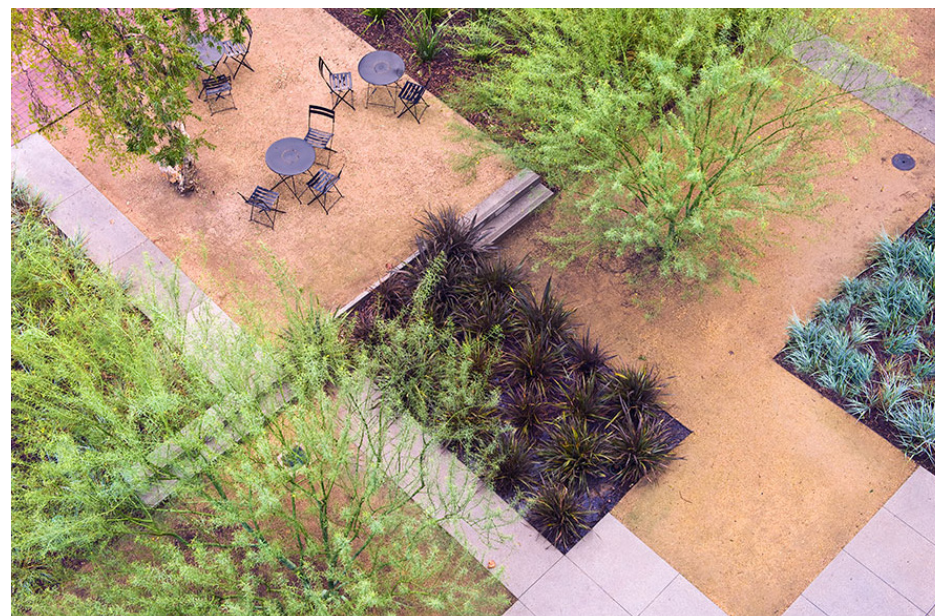
For Lourdes, it is important that an open space hierarchy that clearly defines private, communal (building scale) and communal (village scale) open space is defined early and used to determine the structure for the redevelopment of the site.

4. Spaces for events – bringing people into Lourdes

Markets, outdoor dining or musical events would bring a whole new type of entertainment to Lourdes and provide varied and exciting entertainment for guests.

The master plan could provide for a green, flexible space to potentially allow for this type of programming. Consider servicing needs (such as a small public toilet, lighting, outdoor power sources) that would support these uses without damaging the grounds or interrupting residents.

A good example of how attracting people in the site has created a successful community is Westbury Fields site in England. The Westbury Fields site involved the refurbishment of a cricket oval with training facilities and a licensed clubhouse. Local community cricket clubs use the facilities – as do residents – and this creates a real sense of community. While this type and intensity of use is not appropriate for Lourdes, the idea should be considered in the pursuit of creating the best village life possible for future residents.

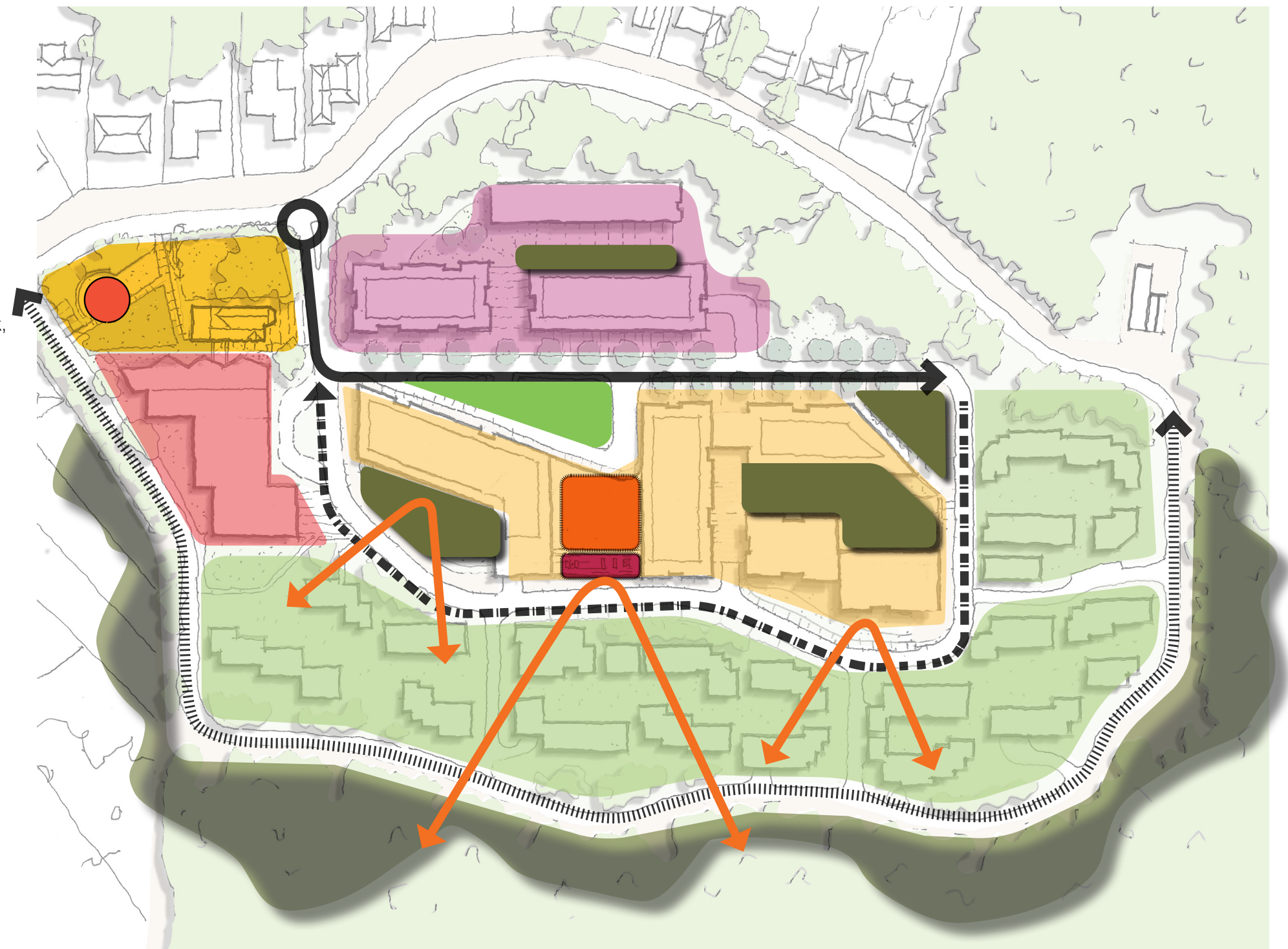


4.1.1 Structure Plan

The structure plan provides a graphic illustration of the basic organisation of land-uses, facilities, features and circulation for the proposals. The re-development can be divided into three distinct precincts, each with their unique character and identity. It is a direct response to the site analysis and in particular the opportunities and constraints.

Although the current master plan retains the existing independent living units on site, these will be subject to further resolution to address the bushfire prone nature of this land.

However, the master plan has been designed to allow for this work to be undertaken independently at a later stage as the proposed road network, built form and pedestrian connectivity is robust, responds to the existing site topography and allows for a range of built form options to be further explored.



CHARACTER, LAND USE AND BUILT FORM

Stanhope Road precinct

- Residential uses, with multiple entries on to the new “Main Street” to make the street feel public and active
- Built form is lower scale - consistent with the scale of Stanhope Road.

Village centre precinct

- Concentrate community uses, community open space and non-residential uses in this active central precinct.
- This precinct should feel more public, and inviting for visitors to the site.
- Residential uses above retail and community uses provide convenience for active residents and spectacular city and bush views.
- Taller built form is concentrated in this precinct, to identify it as a centre and to minimise visual impact from the surrounding sites.

Residential Aged Care Facility (RACF)

- Community uses specific to the RACF located on the ground floor with aged care facility located above.
- Built form will be consistent in height with the Village centre precinct and feature a setback to Stanhope Road to minimise visual impacts from the street and form a sympathetic interface to Headfort House.
- Dedicated service access off Lourdes Avenue.

Bushland precinct

- Retention of existing lower scale dwellings and circulation paths between buildings to minimise the impact of development when viewed from the bush.
- Generally a quieter residential area with a lower density and less foot traffic.
- A precinct which focuses on the intimate relationship between the existing dwellings and bushland.

LANDSCAPE AND COMMUNITY USES

Headfort House (Chapel) refurbishment

- Retain and restore the existing building.
- Upgrade of the existing front and side garden landscape to accommodate the relocated Grotto and a new outdoor pavilion.

Village Green

- A central, sunny green space for community uses and visitors.
- Strong visual connection between the entry and Village Green.

Community Centre

- Centralised community facilities that bring all residents together in beautifully designed building.
- Vertical circulation in the community facility helps move residents up through the steep site.

Forest View Terrace

- Celebrates view over the adjacent bushland towards the city skyline.

Re-located Grotto

- A new and intimate location for prayer and reflection and an appropriate home for the Our Lady of Lourdes depiction.

Communal open spaces

- North aspect where possible to maximise solar access
- At street level to allow for easy vertical movement through buildings to the street then community centre .

Landscaped boundary and bush walk

- Retain and enhance the landscaped edge to the site.
- Provide for a bush-edge pedestrian walkway around the boundary of the site, and connecting into existing bush trails.

Maximise access to regional views

- Views through/over the surrounding tree canopies towards the city skyline beyond.

TRANSPORT AND ACCESS

Main street

- The main spine for the precinct: lined with community facilities including bus stop, cafe and retail uses. Gives residents the experience of village life within the safety of the site.
- Designed to be welcoming to visitors with on-street street parking.
- Could be paved and designed to function as an extension of the Village Green for events and community gatherings.

Primary circulation street

- This street should have a public character.
- Uniform street planting and the intermittent communal open spaces adjoining this street.
- Local bus route to have a number of stops along this street.

Secondary circulation street

- This street could have a more informal character.
- Provides access to car parking from the south of the site, working with the topography and minimising vehicle/ pedestrian conflict on the primary street.



4.2 Illustrative master plan

The master plan for Lourdes Retirement Village provides 266 new independent living units and serviced apartments arranged within a series of buildings ranging from 3 to 6 storeys in height. The village will have improved pedestrian and vehicle circulation including a rationalised internal road network, improved pedestrian gradients and up to 401 basement parking spaces across two basement levels.

A major feature of the master plan is the retention of the existing Chapel building and the proposal of a large open space at the entry to new development off the main street making it a focal point for the community as a place to socialise and interact.

Other major features of the master plan include:

- ① New central village 'Main Street' for improved access and functionality across the site.
- ② 1,500m² community centre and facilities at grade adjacent to new improved Main Street.
- ③ Village green and community event space located adjacent to community facilities
- ④ Upgrade of the front and side garden of Headfort House (Chapel) including the relocation of the existing Grotto and a new pavilion for outdoor functions.
- ⑤ Provision for a new 130 room residential aged care facility (RACF).
- ⑥ Upgrade of the existing entry to Headfort House (Chapel) including an interface to the new residential aged care facility (RACF).
- ⑦ Retention of existing native vegetation along Stanhope Road along the northern boundary of the site.
- ⑧ Retention of the existing independent living units on the southern portion of the site.



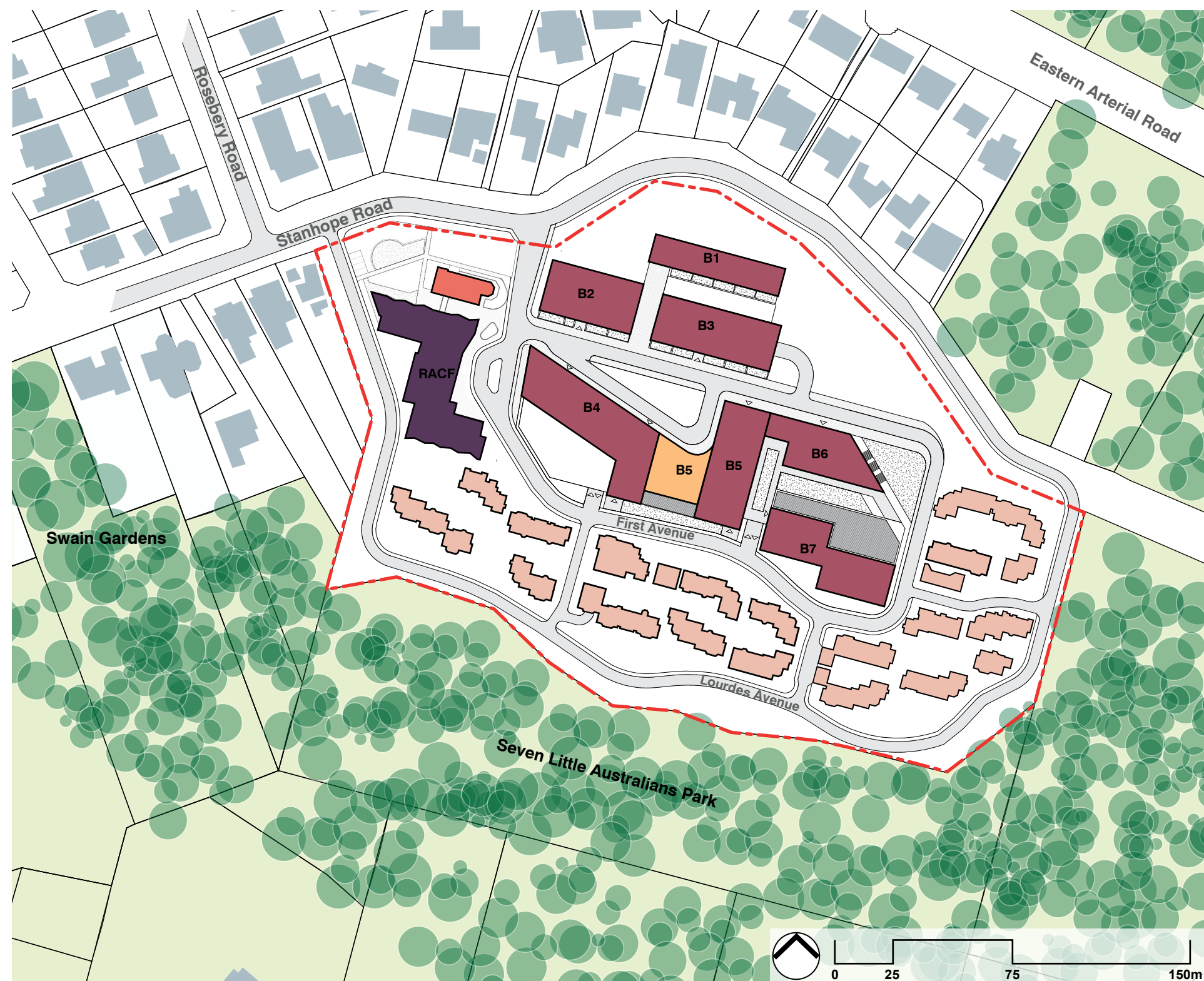
4.2.1 Building Uses

The master plan does not propose any new uses for the site but as part of the re-development, key community facilities are re-located in new buildings in more central locations to allow new and existing residents improved pedestrian access. This includes the incorporation of lifts in the community facility to help move residents across the steep site allow residents to more easily access services and facilities. The adjacent plan shows the proposed locations of these community facilities will be in the northern portion of the site off the proposed Main Street interface, including Headfort House which will continue to serve as a Chapel for the community.

Although the current master plan retains the existing independent living units on site, these will be subject to further resolution to resolve the bushfire prone nature of this land. However, the master plan has been designed to allow for this work to be undertaken independently at a later stage as the proposed road network, built form and pedestrian connectivity is robust, responds to the existing site topography and allows for a range of built form options to be further explored.

Legend

- Site boundary
- Proposed independent living units
- Existing independent living units
- Residential aged care facility
- Community facility
- Headfort House (Chapel)



4.2.2 Building Heights

The proposed master plan has created a pattern of new development that respects the need to provide a sensitive design interface with neighbours while taking advantage of the views afforded by the natural topography of the site.

The majority of the proposed new development ranges from three to six storeys when measured from the lowest point. The tallest and more prominent buildings are centrally located and clustered around the newly upgraded upper portion of First Avenue also known as 'Main Street'.

This provides an opportunity for the buildings beyond the community centre to be lower in height and better relate to the scale on Stanhope Road and the residential dwellings located opposite. This is reflected by the height of the development's northern most building which is 3 storeys.

The buildings envelopes have been orientated predominantly to capture the panoramic views across the valley via Seven Little Australians Park but also provide good solar access and amenity.

Legend

--- Site boundary

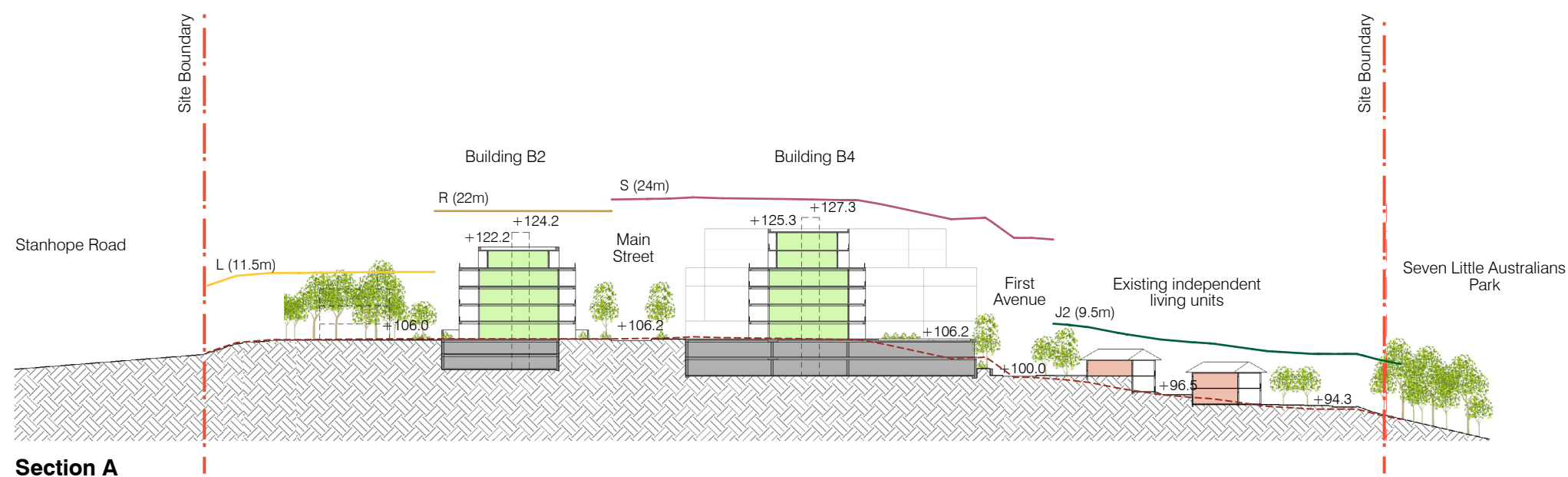
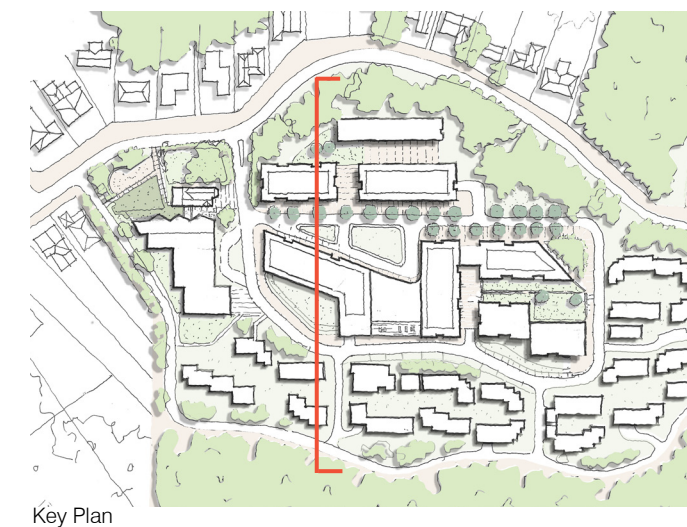
- 6 Storeys
- 5 Storeys
- 4 Storeys
- 3 Storeys
- 2 Storeys



4.2.3 Site Sections

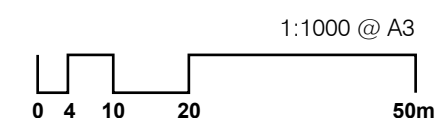
The site sections demonstrate how the proposed development has been scaled to address the sites edge conditions. The lowest scale buildings are located close to adjacent neighbours on Stanhope Road.

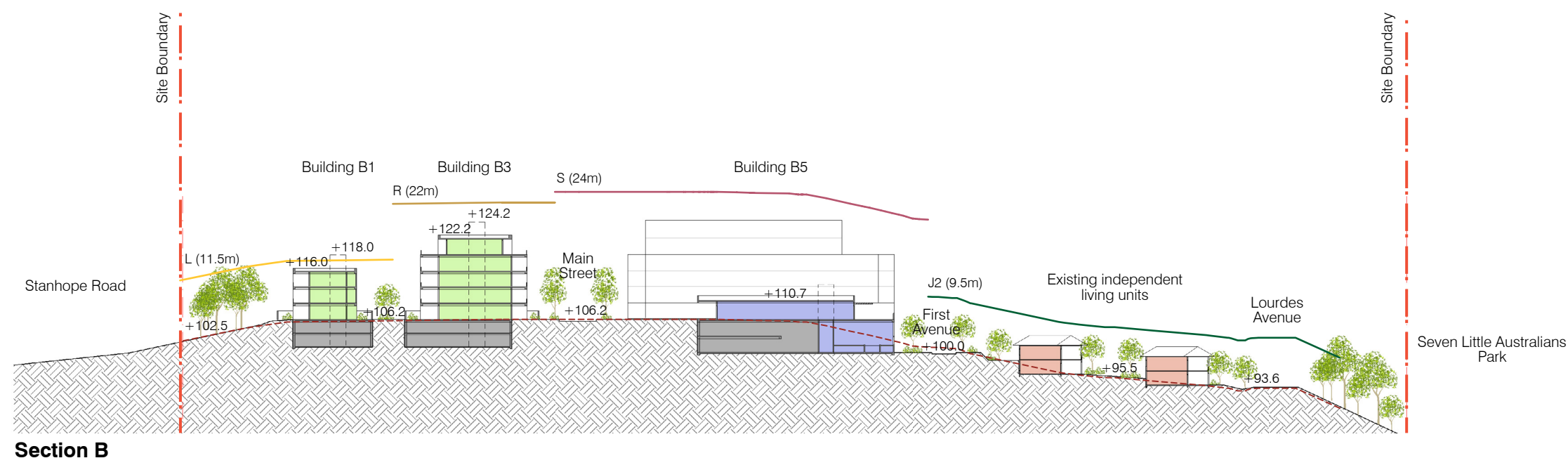
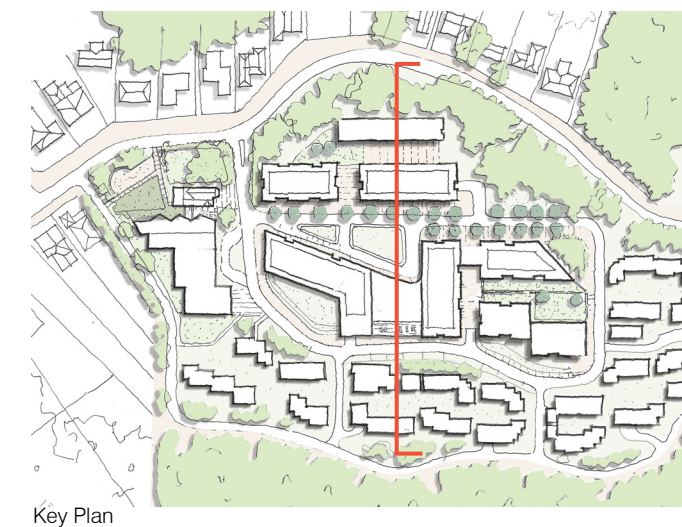
The sections also demonstrate how the visual impact of the taller buildings on the site are minimised from Stanhope Road by locating them on the centre of the site.



Legend

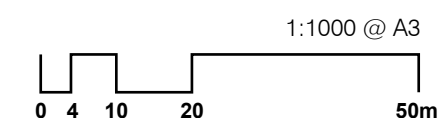
- Existing ground level
- Residential
- Community facilities
- Existing independent living units
- Car park

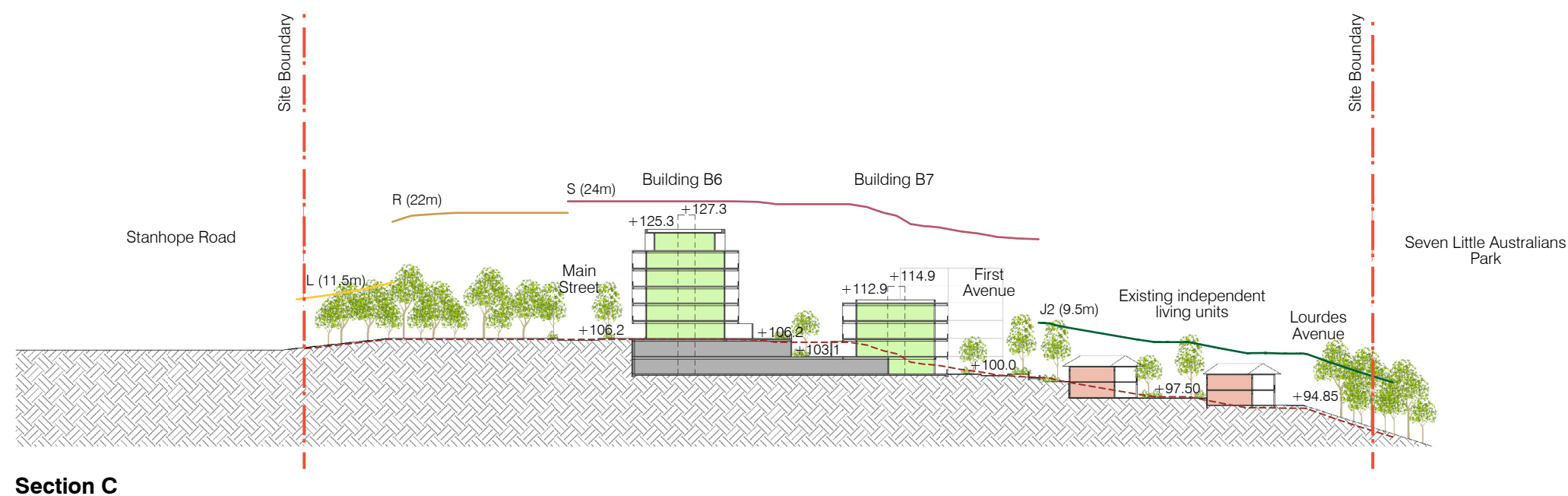
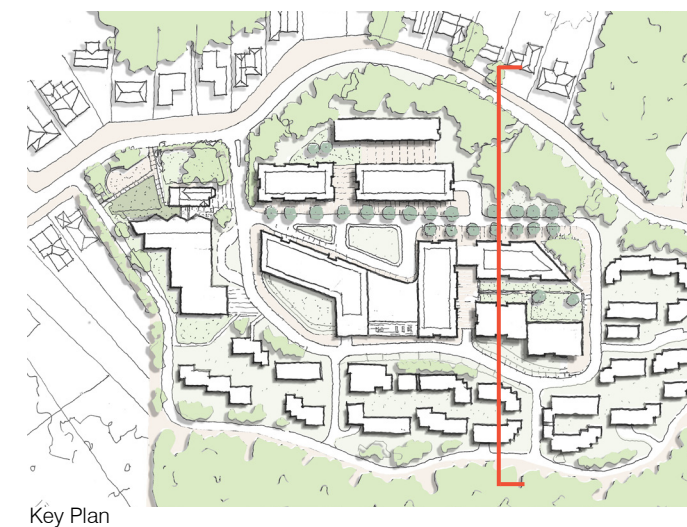




Legend

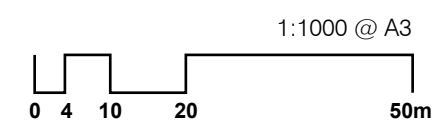
- Existing ground level
- Residential
- Community facilities
- Existing independent living units
- Car park

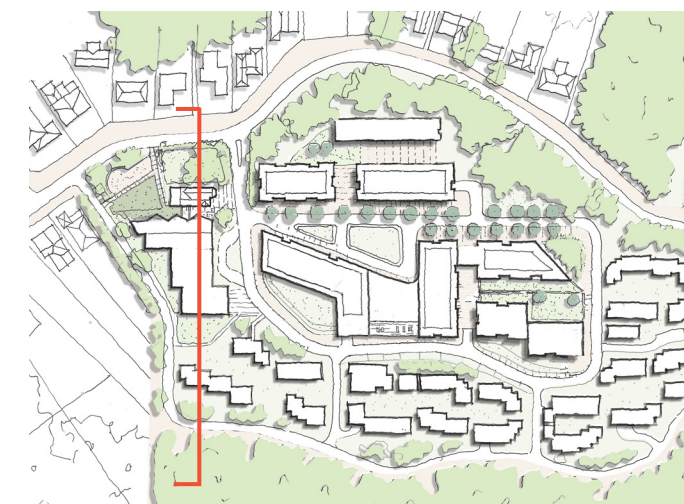




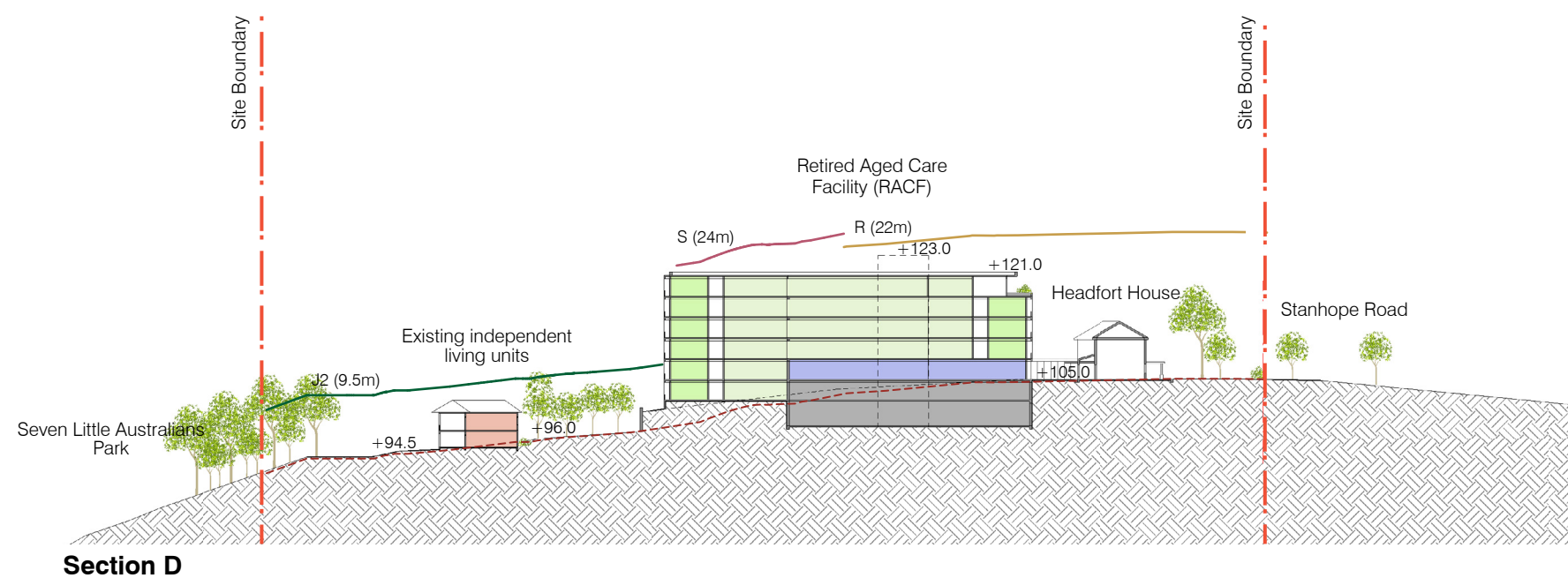
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- Existing ground level
- Residential
- Community facilities
- Existing independent living units
- Car park





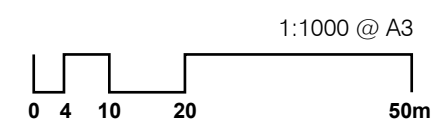
Key Plan



Section D

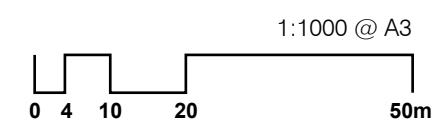
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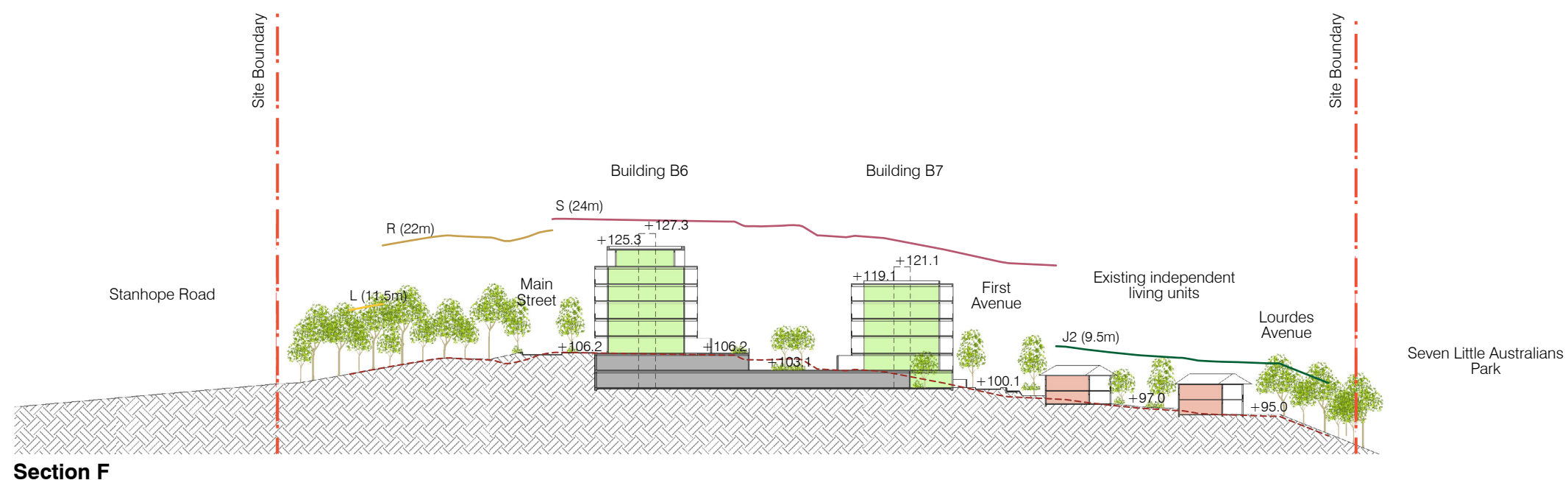
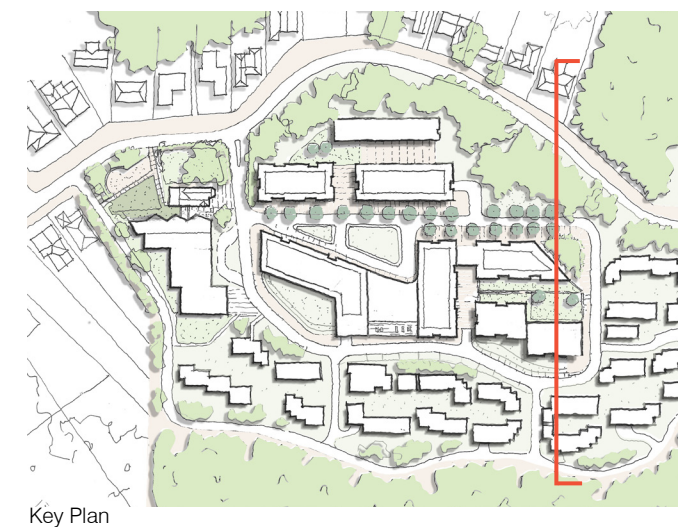
- - - Existing ground level
- Residential
- Community facilities
- Existing independent living units
- Car park





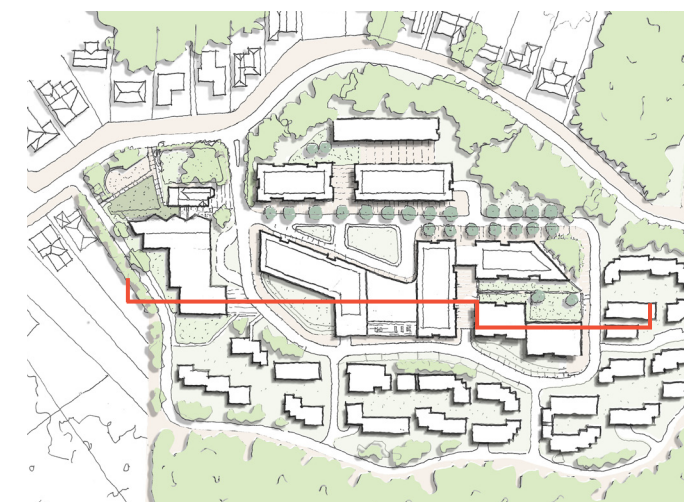
- - - Existing ground level
 Residential
 Community facilities
 Existing independent living units
 Car park



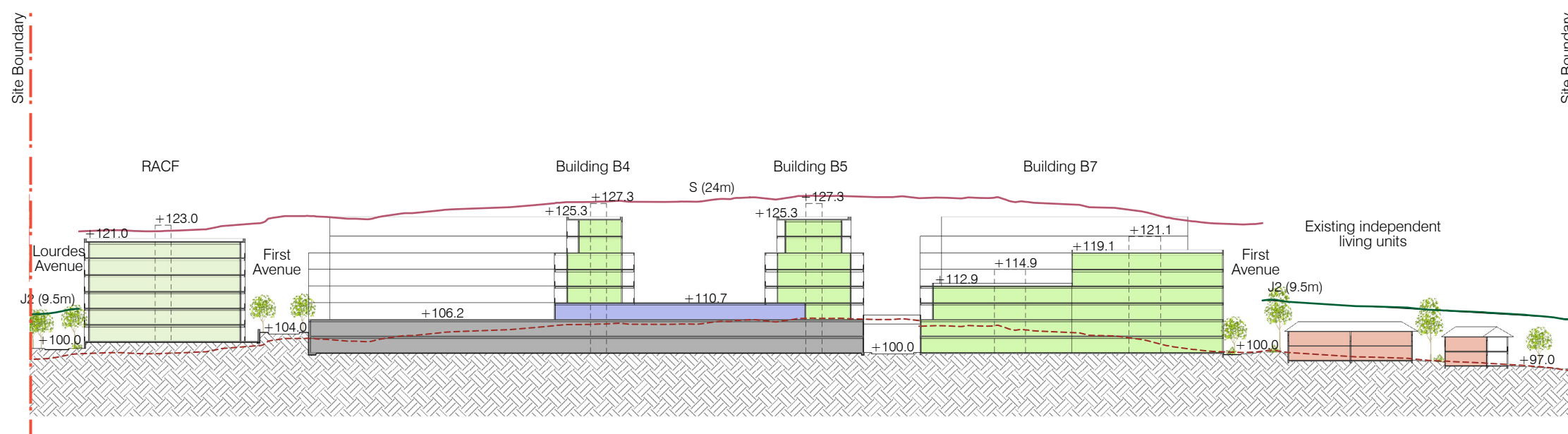


Legend

- Existing ground level
- Residential
- Community facilities
- Existing independent living units
- Car park



Key Plan



Section G

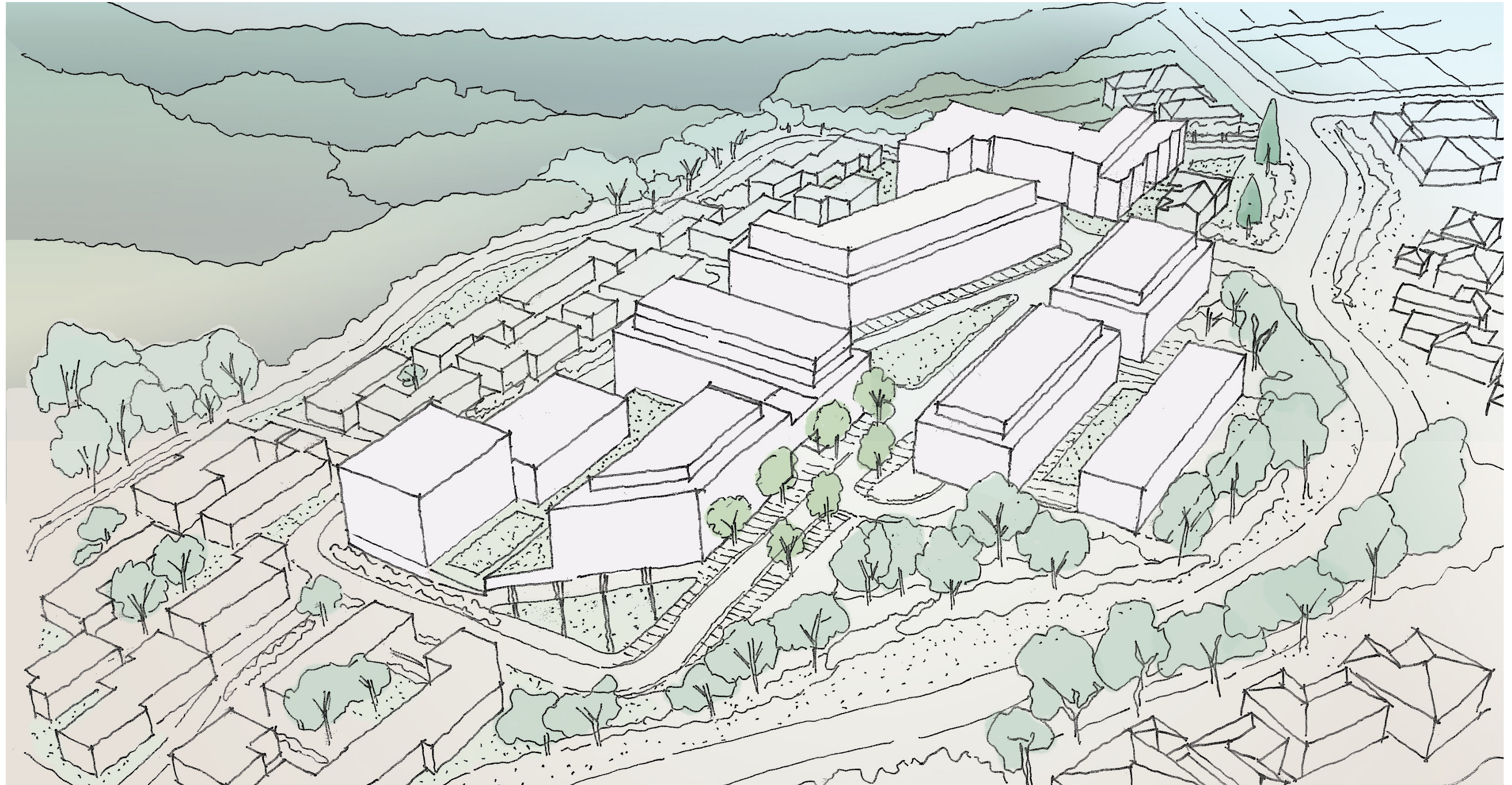
Legend

- Existing ground level
- Residential
- Community facilities
- Existing independent living units
- Car park

1:1000 @ A3



View looking south-east.



View looking east down the new Main Street.



4.2.4 Pedestrian Circulation

A key outcome for the redevelopment of the site is an improved pedestrian network for the residents with better accessibility to the newly created community facilities and spaces, and therefore encourage participation in village life.

The proposed master plan works with the existing topography of the site to establish three tiers of pedestrian movement which provide improved walk-ability for residents. The upper and middle tier of access is marked by First Avenue. The upper portion of this road has been lengthened and re-graded to provide an improved walking gradient for residents and widened to accommodate dedicated footpaths.

Access between the middle and lower sections of the site will also be improved with the introduction of resident accessible lifts. These lifts will provide safe and easy access for residents located on the lower sections of the site to the upper portion of the site to the central club facilities and neighbouring dwellings.

No changes will be made to the existing accommodation on the southern portion of the site are proposed at this stage, with the final nature of these buildings to be resolved at a later date. The circulation paths nominated are capable of being amended / relocated as part of this further resolution if required.

Legend

- Site boundary
- Main street pedestrian network
- Landscape boundary walk
- L Lift access



4.2.5 Vehicular Circulation

The Master Plan proposes an upgrade to the existing road network to improve vehicular movement across the site, over a complete demolition and re-design of new streets.

This strategy minimises disruption for residents in existing independent living units south of First Avenue and facilitates access to their dwellings during the construction of the proposed development, while minimising the need for extensive relocation of road infrastructure.

The proposed road network will continue to function in principle as a series of one-way loop roads which serve the existing dwellings and proposed development.

The key features of the upgraded road network include:

- An upgrade to the existing two-way entry off Stanhope Road.
- A new secondary vehicular entry from Stanhope Road (East)
- A new dedicated services road to service the Retired Care Facility.
- Extension of the existing Main Street westwards and introduction of new road infrastructure to better connect Main Street to First Avenue.
- Creation of a road loop (via First Avenue) which is easily accessible by residents and capable of supporting internal bus services.
- Retention of existing roads including Lourdes Avenue, First, Second and Third Avenues including all existing street parking.

Legend

- | | | | |
|--|---------------------------|--|-------------------------|
| | Site boundary | | Internal road |
| | Primary vehicular entry | | New internal road |
| | Secondary vehicular entry | | Bus stop |
| | Bus route | | Basement car park entry |
| | Local street | | Basement services entry |



4.2.6 Basement Parking

Based on a parking rate of 1.5 spaces per dwelling the parking strategy aims to reduce excavation by using the existing topography and natural fall of the site to locate parking below the proposed development. The total number of basements will vary from 1-2 floors below the existing upper ground level for both the residential aged care facility and independent living units.

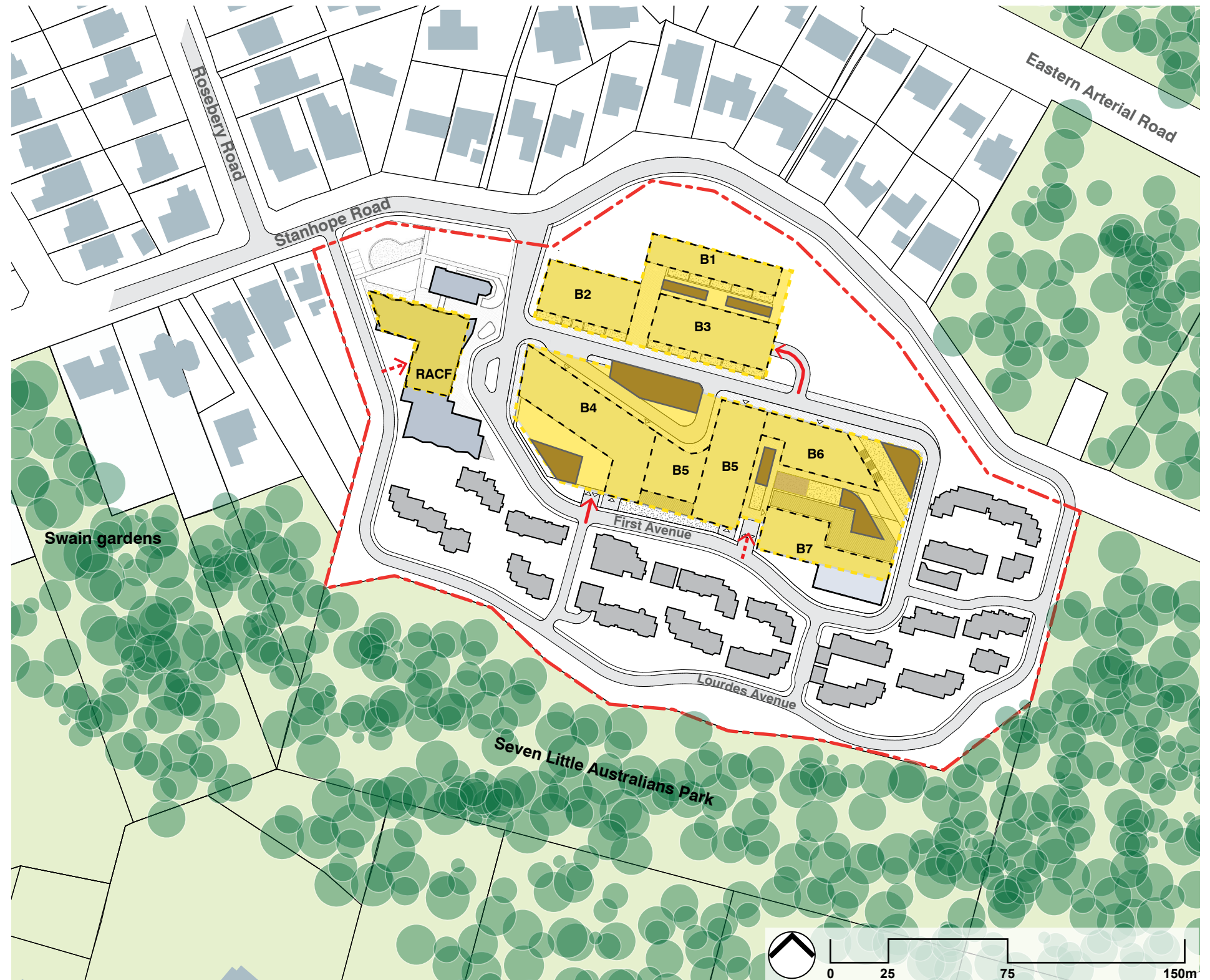
Basement parking access is located off the new Main Street for buildings B1 to B3, while parking access for buildings B4 to B7 will be located off First Avenue.

A loading dock area with a minimum clearance of 4.5m is located off First Avenue, adjacent to the lower floor of the community centre. It will be the centralised point for deliveries and waste collection (refer to section 3.15 for details)

On grade car parking spaces and garages currently allocated for guests and residents in the dwellings to be retained south of First Avenue will be retained and not moved.

Legend

- Site boundary
- Basement parking
- Deep soil planting
- Outline of proposed development
- ← Car park entry
- .-.-> Car park and loading dock entry



4.2.7 Bushfire

As a result of the sites bush fire affectation, the southern existing lower scale buildings will be retained and may be developed in the future under a seperate Planning Proposal. The majority of the proposed new buildings will be located within the BAL 12.5 area or within the BAL 19 affected parts of the site. There are some minor encroachments into the BAL 29 area.

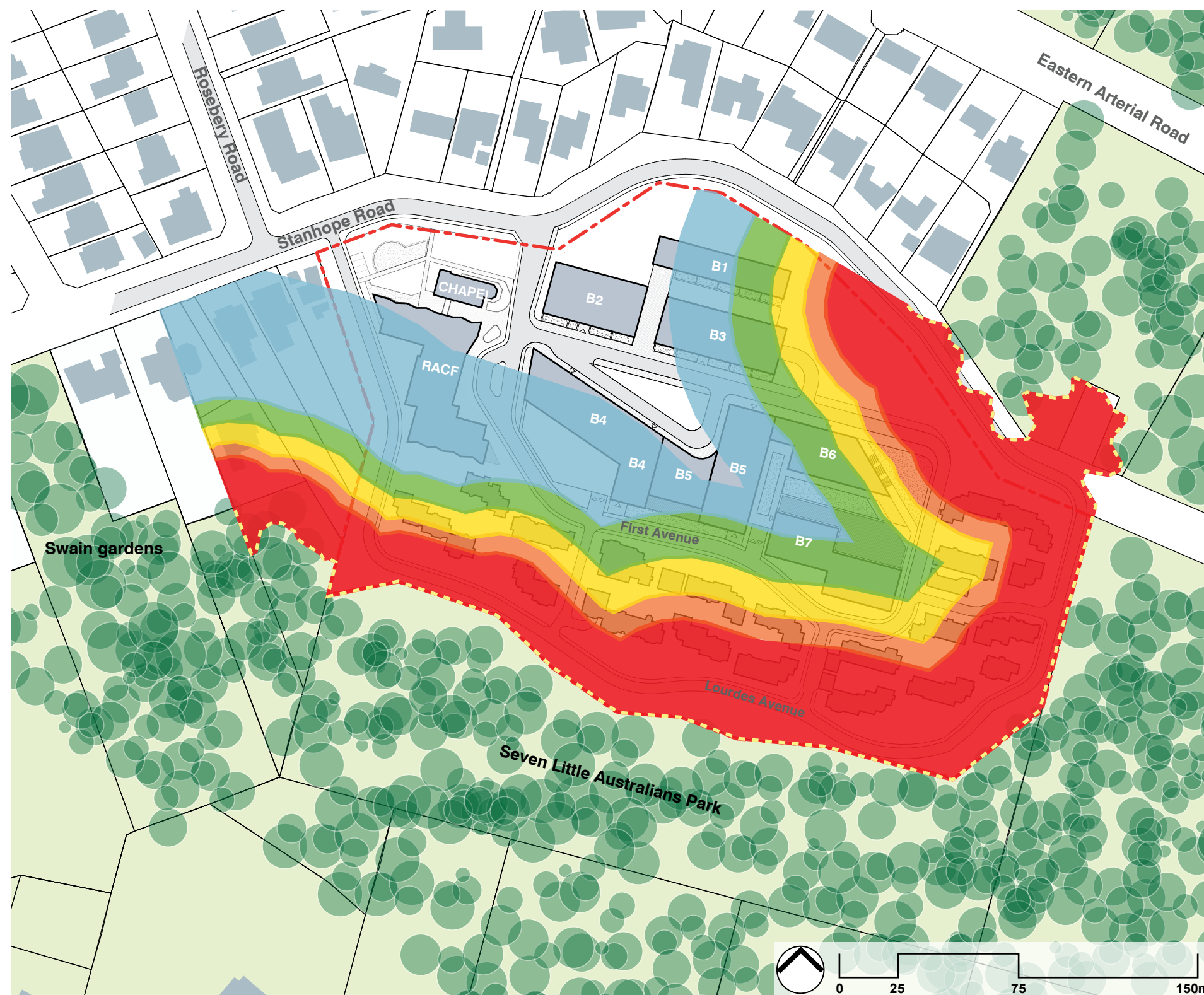
A review of the proposal by EcoLogical has identified that subject to the implementation of the following strategies, the proposed master plan is acceptable:

- Ensuring adequate setback from bushfire prone vegetation, through provision of Asset Protection Zones (APZs);
- Ensuring adequate access and egress from the subject land through a well-designed road system;
- Considering the adequacy of water supply and the delivery of other services (gas and electricity);
- Providing for effective and ongoing management of APZs; and
- Considering construction standards (AS3959) implications for future developments depending on development type.

The southern area of the site consists of existing independent living units which are proposed to be retained at this stage. The master plan for the site has been designed to allow future work to be undertaken in this area at a later stage under a seperate Planning Proposal and subject to an agreed engineering approach with NSW RFS.

Legend

- Subject boundary
- BAL -FZ
- BAL -40
- BAL -29
- BAL -19
- BAL -12.5



4.2.8 Building types for community living

The re-development will provide a new housing model for the area to meet future market demand for affluent baby-boomers based on a high quality, walk-able, passive and community focused environment which encourages development that is durable and can be practically maintained to a high standard.

The key components which are the focus of this residential re-development are:

① Independent living and serviced apartments

Independent living units are a building type designed with consideration to older people who are actively independent and able to care for themselves and do not require assistance with day to day activities.

② Community Centre

Located at the heart of the new re-development, the community “clubhouse” style facility will be the focal point for many of the daily activities at Lourdes and be a central location for community gatherings.

③ Residential aged care facility

The new residential aged care facility will be re-located on the site to allow for better access to Headfort House. The facilities within the building will cater for residents leading their own lives, but do require access to care and assistance when needed.

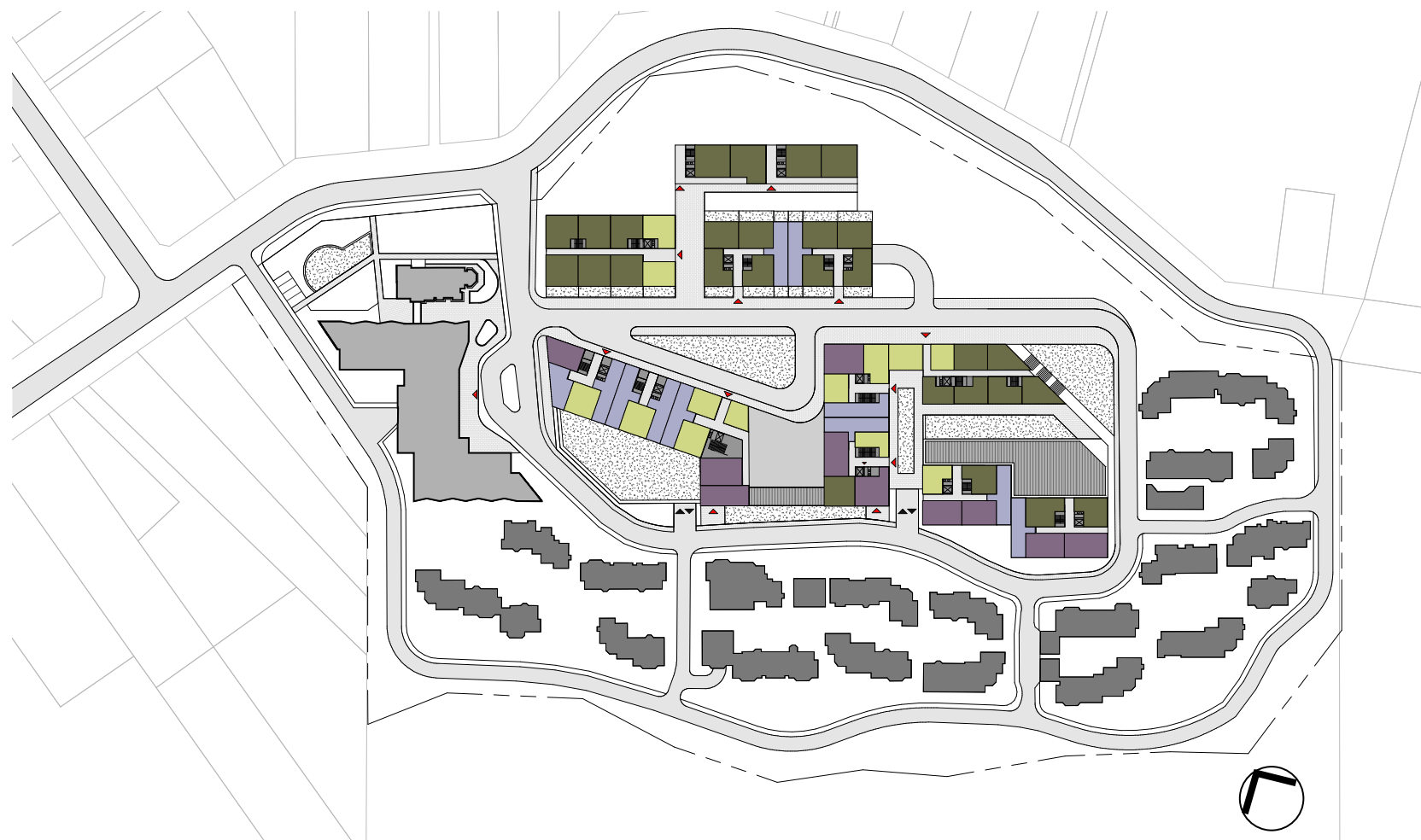
It should be noted that the following plans are indicative and for illustrative purposes only. Future development will be subject to development applications which will undergo detailed design demonstrating compliance with the relevant Australian Standards and other relevant requirements.



Independent Living and Serviced Apartments

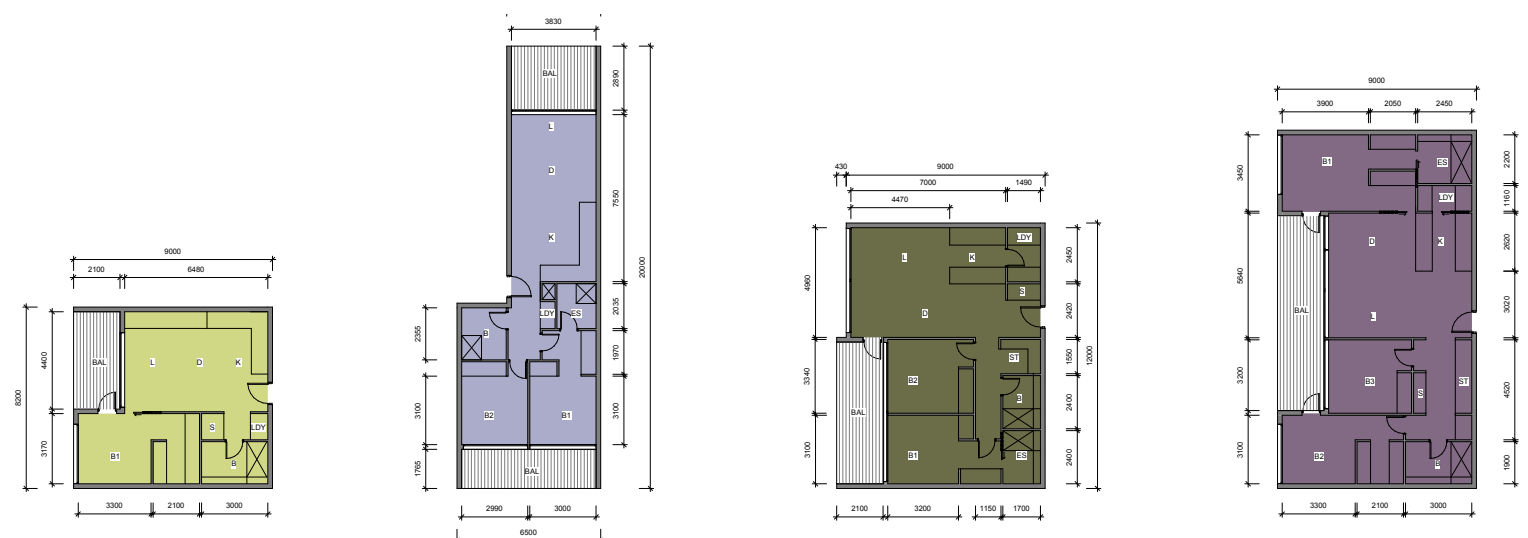
The indicative apartment plan layouts demonstrate the ability for passive design features to be incorporated into the proposed built form envelopes which allow for compliance with the Apartment Design Guide for solar access and cross ventilation requirements. These plans feature examples of mainly 2 and 3 bedroom configurations with a combination of modern, relaxing and vibrant places, making them a desirable place to live.

Both the independent living and serviced apartments will be designed with wide circulation spaces and feature open plan living configurations allowing residents to move easily through their dwellings.



Legend

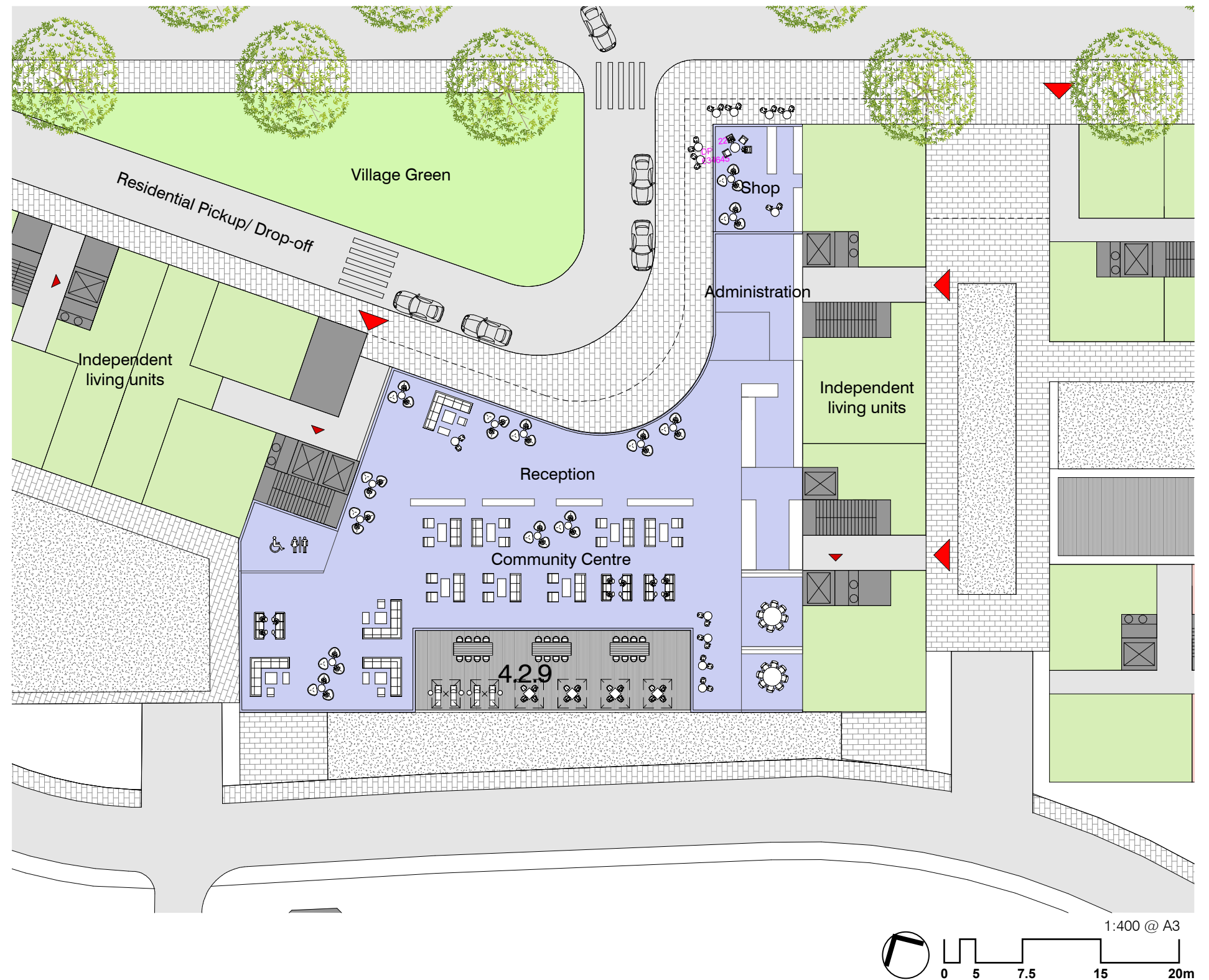
- 1 bedroom Independent Living Unit
- 2 bedroom dual aspect Independent Living Unit
- 2 bedroom + study Independent Living Unit
- 3 bedroom Independent Living Unit



Community Centre Ground Floor

The final design of the community centre will be agreed with the residents as part of the consultation process. However, current plans show the facility will house a bar facility along with extensive lounge areas, meeting spaces and include facilities such as a cafe and convenience shop. The community centre will also be the main drop-off and pick-up point for residents wishing to entertain guests. The centre is accessible by foot via the new Main Street at the upper level of the site and by lift from the lower portion of the site.

The community centre will also feature a large terrace ideal for enjoying the bush view or to cater for outdoor events.

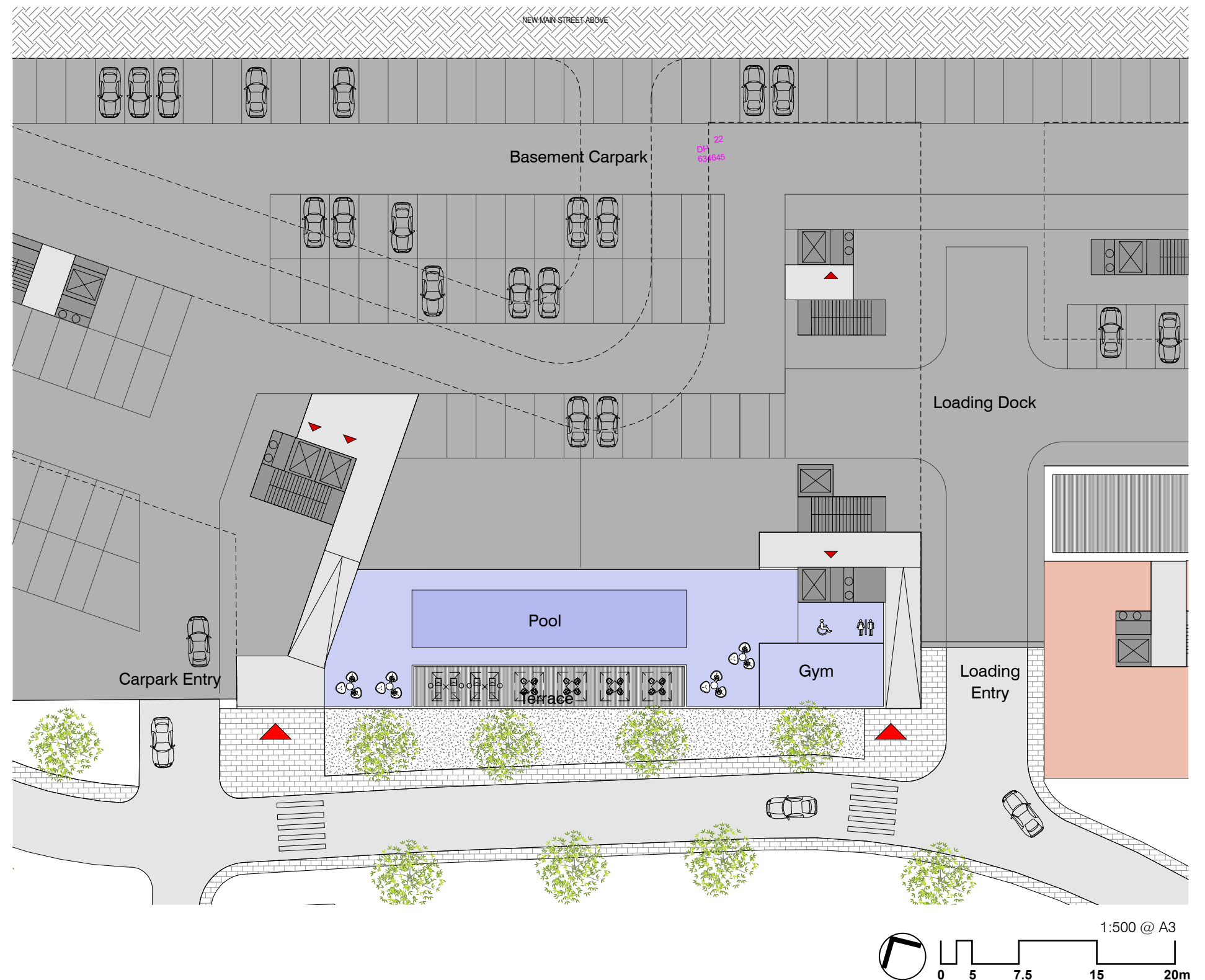


Community Centre (Lower Ground Floor)

The lower level of the community centre integrates an indoor pool, lounge area, gym and sauna facilities together in one convenient location and will be a key location for social activities. The facilities are easily accessible via the lifts from the community centre above or via the footpath network on First Avenue.

This lower level is accessible off First Avenue serves as the car park and loading dock level, located in behind the club facilities which front the street. The loading dock access is located to the east of the pool facility, while the vehicular entry for the car park is located to the west.

Final facilities are to be resolved as part of future detailed design Development Applications.



Residential aged care facility and Headfort House

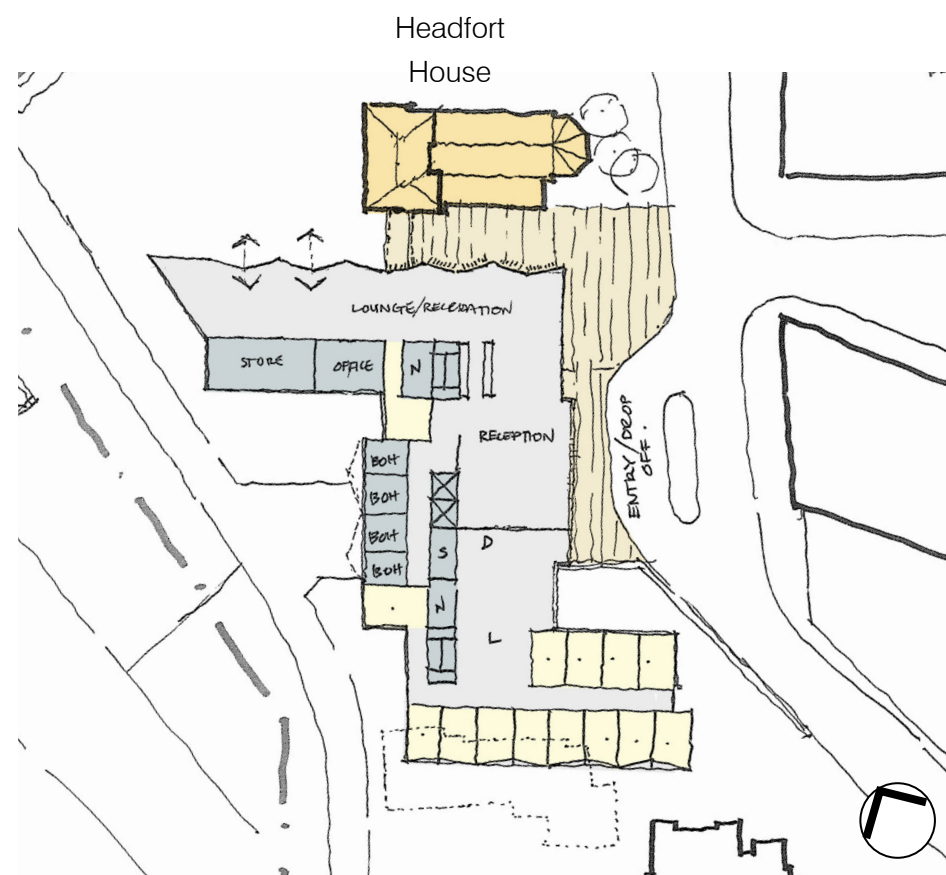
Below are examples of indicative floor plan configurations which demonstrate the feasibility of the proposed envelope for the residential aged care facility. Typically resident rooms are organised around a central living/dining area and nurses station for residents.

Residents in these facilities generally require ongoing care and supervision and as such the facility is largely self contained. Separate dedicated entries are given to residents (off First Avenue) and services (off the Lourdes Avenue extension)

A new covered ground floor building link is proposed to connect the Headfort House (chapel) building to the proposed RACF. This new link will allow on-grade resident access between the buildings. The design of the link will have as minimal impact on the existing building as possible and will be in keeping with the history of the building.

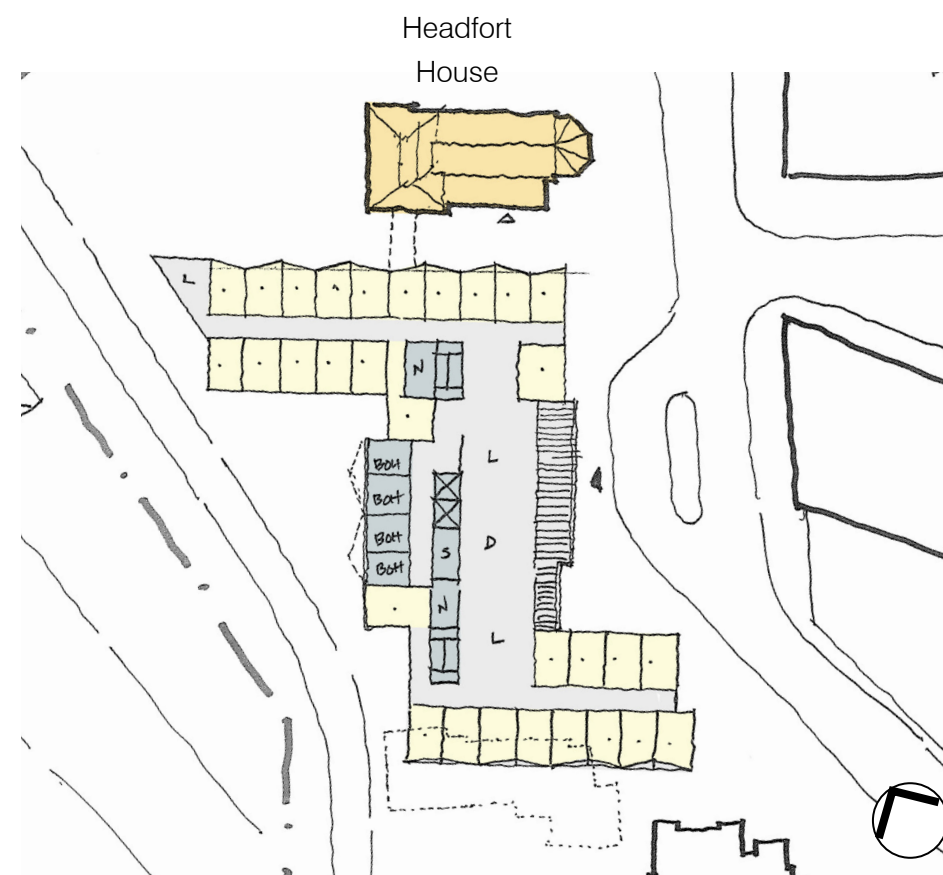
It is noted that the current facilities require aged care rooms to be shared with up to six people. The master plan for Lourdes is driven by the need to provide contemporary facilities to compete with modern standards.

Future applications will also be lodged for the alteration and additions of Headfort House to expand the current facilities to enhance amenities for current residents. Any such alterations will need to respond to the historical significance of the building, but would be subject to separate approvals at a later stage.



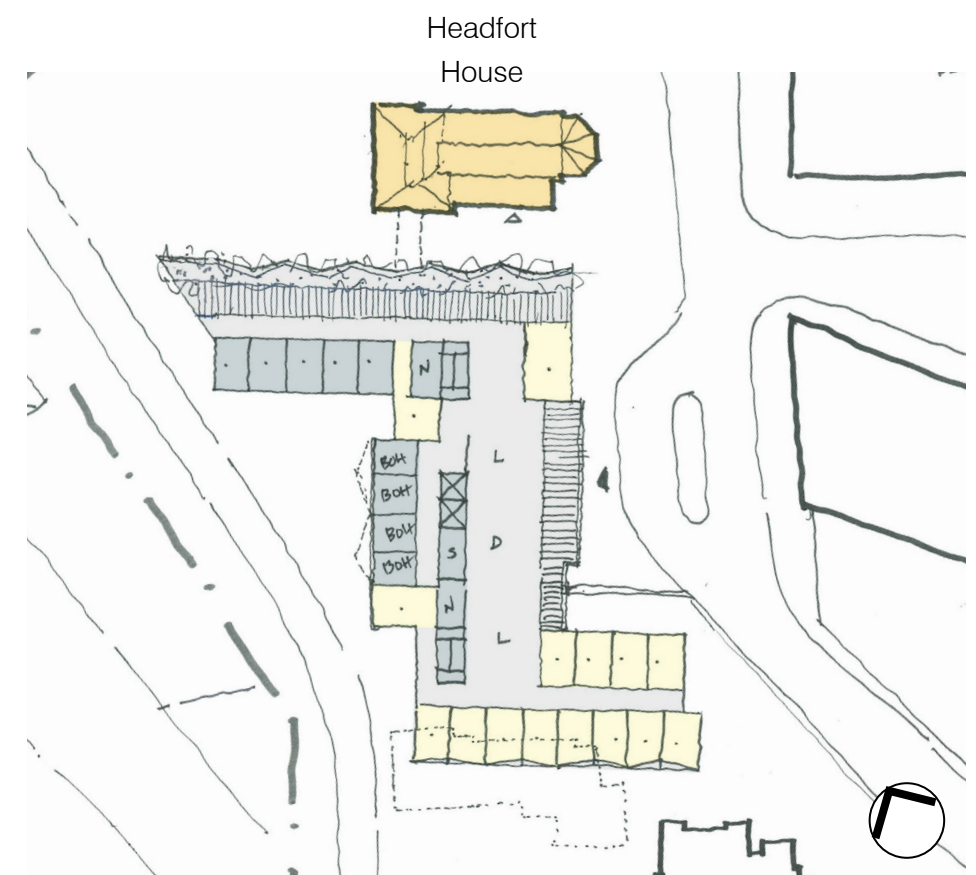
Ground Floor

- Staff/Services Entry
- Lounge / recreation + administration
- Forecourt to Chapel
- 13 residential rooms
- Ground floor covered link to Headfort House



Level 1-3

- 20 residential rooms
- Lounge and dining areas



Level 4

- Setback level to north overlooking Headfort House.
- 20 residential rooms
- North facing garden

4.2.10 Indicative Schedule of Yield

The proposed new development on the site will comprise a minimum of 266 new independent living and serviced apartment units and the retention of 74 existing dwellings on the site.

A new residential aged care facility will be located in the north-west corner of the site which is included as part of the re-development of the site. This is included in the floor space calculation.

The built form on site ranges from 3 to 6 storeys in height and will have a combined floor space ratio for the site of 0.8:1.

The following assumptions have been made for each dwelling type:

- Independent living units (ILUs) + Serviced apartments (SA)
- Independent living unit GFA calculated at 80% efficiency, based on Building Envelope Area (BEA), typical dwelling size of 100 m2.
 - Serviced apartment GFA calculated at 80% efficiency, based on Building Envelope Area (BEA), typical dwelling size of 70 m2.
 - GFA area excludes all car parking, plant, balcony and vertical circulation areas.
 - Car parking spaces based on assumption of 1.5 cars per ILU and SA.

Residential aged care facility (RACF)

- Facility Gross Floor Area is calculated based on a 70% efficiency ratio of Building Envelope Area (BEA) to Gross Floor Area GFA.
- Floor Space Ratio (FSR) calculation includes the RACF on site.

Use	Site Building	Levels	GBA (m2)	GFA (m2)	No. APTS
ILU	B1	3	2052	1642	16
ILU	B2	5	4070	3256	33
ILU	B3	5	4809	3847	38
ILU	B4	6	7155	5724	57
COM	B5	2	2050	1640	-
ILU	B5	5	3450	2760	28
SA	B5	1	1000	800	11
SA	B6	6	4235	3388	48
ILU	B7	6	2700	2160	22
ILU	B7	4	1650	1320	13
COM	B7	1	550	440	-
Subtotal			33171	26977	266
Existing Building Stock *					
-	-	1 to 2 Storeys	-	6168	74
Subtotal				6168	74 (Indicative)

*Includes serviced apartment level

Site Wide Summary	
No. Apts	340
Total GFA	43004
Site Area	52906
FSR	0.8
Car Space	512

Site Building	Basement Levels	GBA (m2)	No. Cars (@ 1.5/Apartment)
B1	1	-	25
B2	1	-	49
B3	1	-	58
B4	1	-	86
B5	-	-	-
B5	2	-	41
B5	2	-	17
B6	2	-	73
B7	2	-	32
B7	2	-	20
B7	-	-	-
Subtotal		-	401
Existing Building Stock			
			111
Subtotal			111 (Indicative)

* GBA Area shown includes 1 level of sleeved carpark / apartments in upper level

Retired Care Facility (Excluded from FSR Calculation)			
	Levels	GBA (m2)	GFA (m2)
RACF	5	2817	1972
Total		14085	9859.5

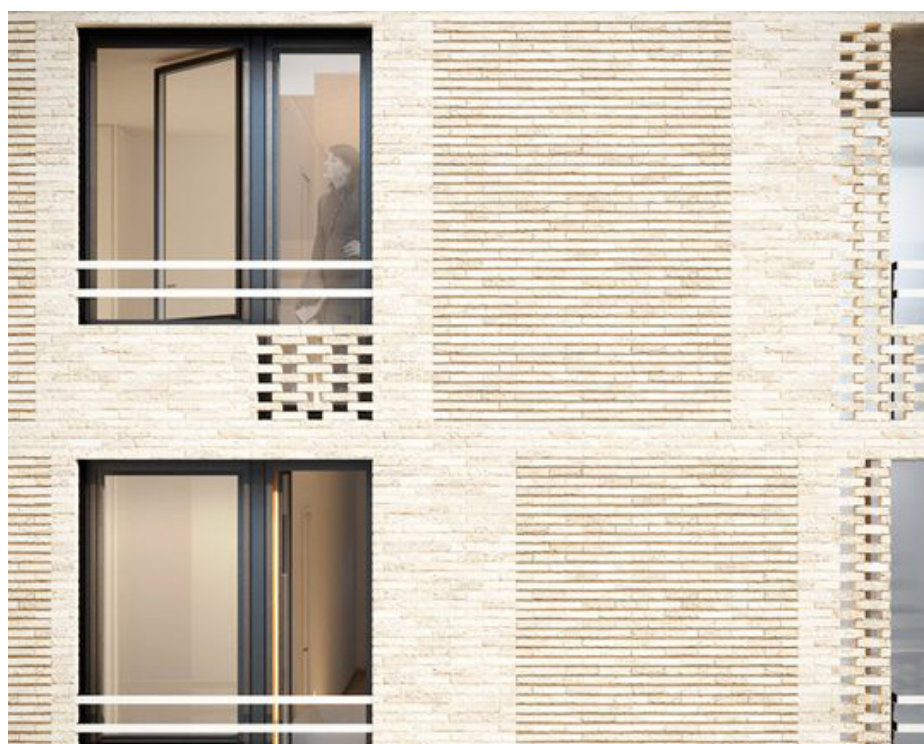
4.2.11 Building Materials and Finishes

In keeping with the existing Headfort Housel building on site and the sub-urban context of Killara, the primary construction material proposed for both the independent living units and residential aged care facility will be masonry brickwork, copper and zinc. These materials are robust, easy to maintain and are sympathetic to the existing neighbourhood. These materials are also familiar and in keeping with the expectations of prospective residents who would consider a move to the proposed development from surrounding areas.

The new independent living units will also feature larger more generous outdoor living areas including balconies on the upper floors and loggia garden spaces at the ground floor to provide a high level of amenity for residents. All balconies and windows will feature architectural devices such as shutters and louvres to ensure privacy. This will allow residents to control the elements and temper environments to their liking.

The community facilities will feature a generous club and lounge space and include recreation facilities such as a gym and indoor swimming pool.





4.3 Landscape strategy

4.3.1 Principles

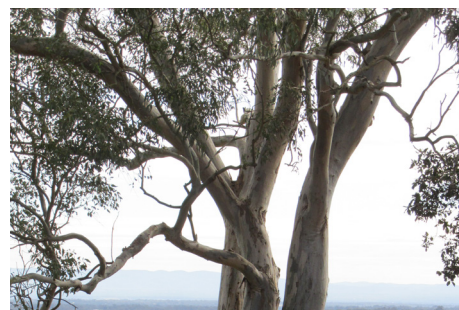
The proposed master plan has been heavily influenced by an approach that seeks to work with the existing landscape both in terms of levels and landforms, vegetation, views and overall character. The landscape and communal spaces that form part of the new village will respond to the following key principles:



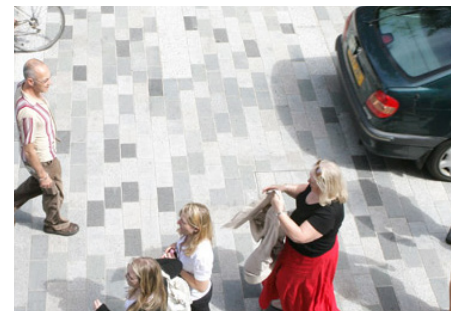
Encourage social interaction through the inclusion of well designed communal spaces with visual and physical connections to surrounding residences and opportunities for sitting, relaxing, meetings and small gatherings and events.



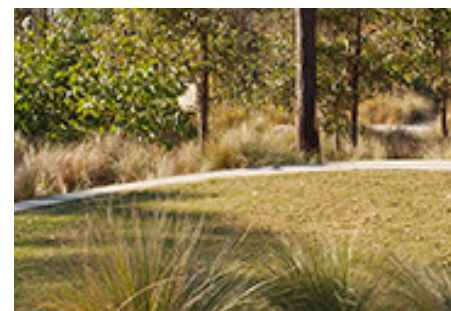
Improved pedestrian connections through new accessible pathways and shared routes that link key spaces, facilities and amenities.



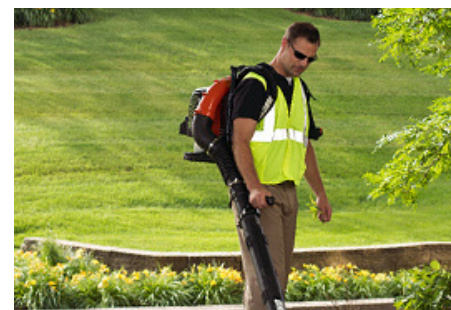
Retention of existing vegetation wherever possible. Particularly existing mature tree planting that contributes to the leafy character of the village and its connection to nature.



High quality hard landscape materials and design that reinforces the sense of a low speed pedestrian focussed 'village' environment.



A considered approach to planting that includes native tree and shrub species that contribute to local biodiversity as well as selected exotic species as features in key locations.



Minimise landscape maintenance through well thought out design of communal areas with appropriate materials and planting that allows for easy and regular access by maintenance crews.

4.3.2 Landscape Design

1 Headfort House Front Garden

The existing front garden will be restored and enhanced with the existing car park to be demolished and transformed into landscaped gardens and made consistent in appearance with the existing grounds.

2 Headfort House (Chapel) forecourt

A new forecourt space will be located between the RACF building and Headfort House. This space will be the main assembly point for people attending events at Headfort House.

3 Main Street

A street for vehicular and/or pedestrian movement that is designed to reinforce a small 'village scale' environment and is the focal point for the community.

4 Village Green

A highly visible space at the heart of the village. The existing open space will be improved to provide a level open lawn that can provide a focal point for small events and gatherings.

5 Communal Open Spaces

A series of smaller scale open spaces that create focal points within residential precincts for informal recreation and socialising between neighbours.

6 Forest View Terrace

A new north-facing outdoor terrace will capture bushland views across the valley into Seven Little Australians park and will be a place to relax. The space will also form an extension to the community centre located adjacent.

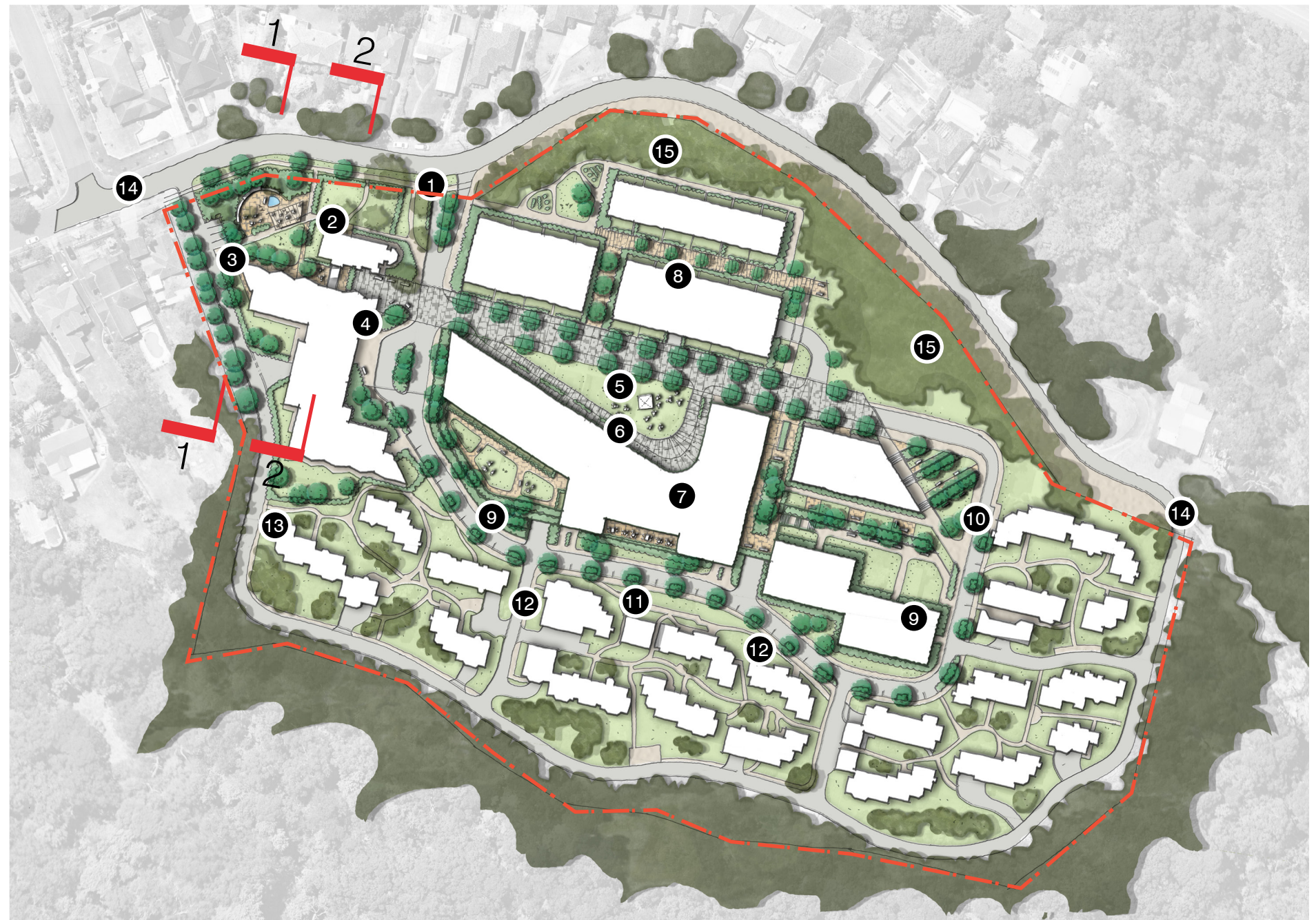
7 Landscape Boundary - Bush Walk

A leafy paved link around the central parkland that provides an accessible walking route and a parkland address to surrounding residences.



4.4 Landscape master plan

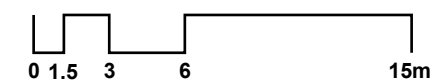
- 1 New entry threshold with planted median and entry feature to Stanhope Road.
- 2 Restored front garden and hedge to Headfort House (Chapel).
- 3 Relocated Grotto with new paved courtyard space and outdoor pavilion for functions.
- 4 Forecourt entry to Headfort House (Chapel) with shaded seating area.
- 5 Village street with vehicular and pedestrian access. Surface treatment to reinforce low speed environment.
- 6 North-facing communal green with multi-purpose lawn space for large functions and gatherings.
- 7 Porte-cochere drop-off area for residents and guests.
- 8 Pedestrian pathway with landscaped edges, providing access to adjoining buildings.
- 9 Communal garden area with lawn, seating, pergola and BBQ areas.
- 10 Open lawn area and terraces for small events.
- 11 Large communal terrace area with regional bushland views.
- 12 Vehicular access to basement parking and service areas.
- 13 Landscaped terrace area for RACF patients with bush views.
- 14 New road connection to Stanhope Road from Lourdes Avenue.
- 15 Existing wooded area with retained mature trees.



Section 1-1 Through Headfort House (Chapel)



Section 2-2 Through Grotto and front garden area

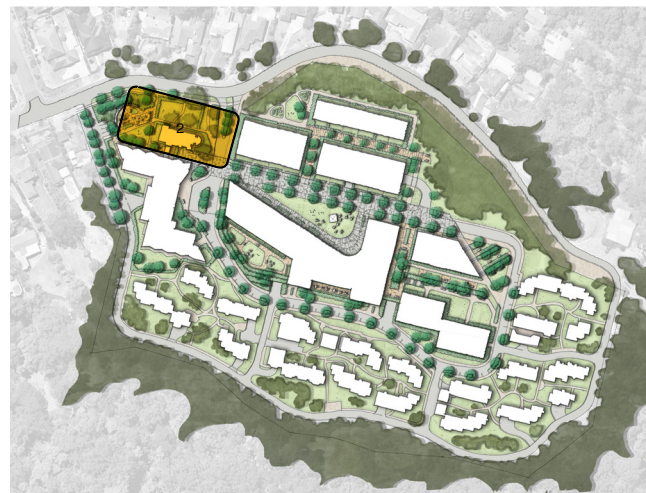


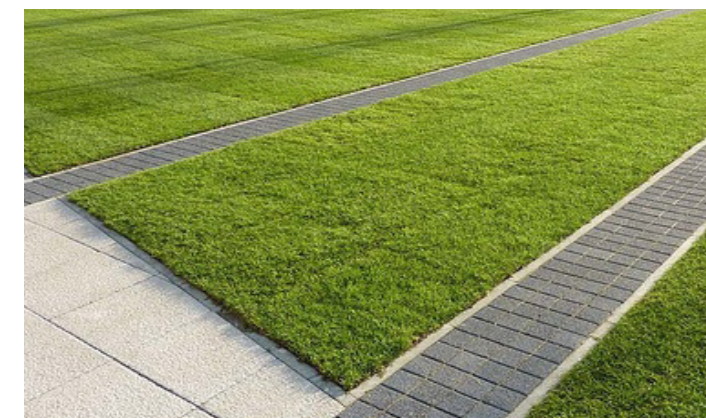
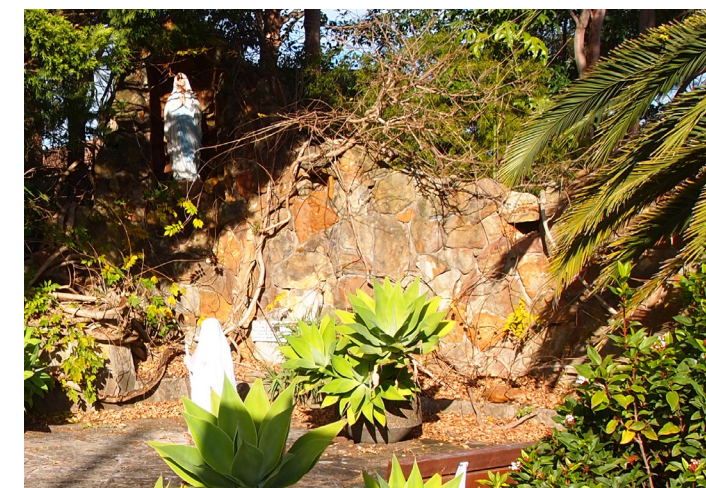
4.4.1 Headfort House Front Garden

The existing entry to the village is relatively low key and is in keeping with the scale and character of the adjoining leafy suburban streets. This character will be maintained as part of the new development with a focus on providing upgraded hard materials, formal shrub planting and clear lines of sight for traffic and pedestrians. The front lawn and hedges will respond to the garden's original condition and will provide tranquil spaces for sitting and relaxing away from the village centre. The existing grotto and statues will be relocated to a dedicated area within this space in the western corner of the site and include a small pavilion for intimate services and events. The new grotto will also feature on-grade access from the RACF to better service residents. This space will respond to the heritage nature of Headfort House and provide an improved setting. GML have identified that the location of the Grotto in this area is acceptable subject to research and community consultation as part of the redevelopment process.

Landscape Elements

- 1 Feature Grotto wall approximately 1.5m above ground level to enclose courtyard space and house relocated Statues with water feature and shaded seating area.
- 2 Dense planting to enclose Grotto and screen RACF building from Stanhope Road.
- 3 Mature trees including the two Norfolk pines, palm, magnolia to be retained in the existing garden.
- 4 Lightweight pavilion structure for small scale gatherings and events.
- 5 Hedge planting to reflect the original garden / boundary layout.
- 6 New accessible car park spaces and on-grade footpath.





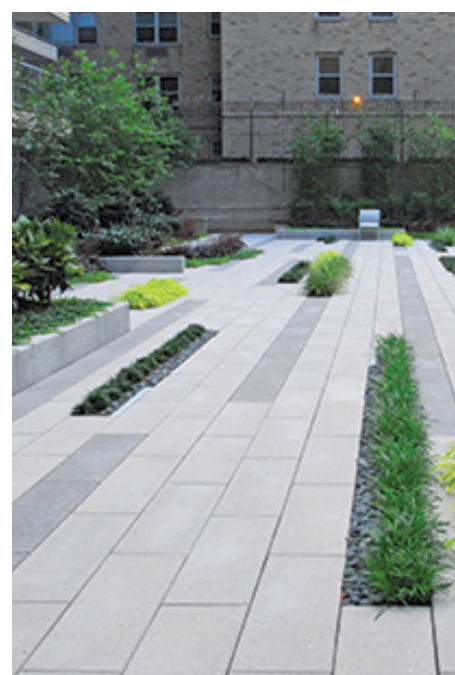
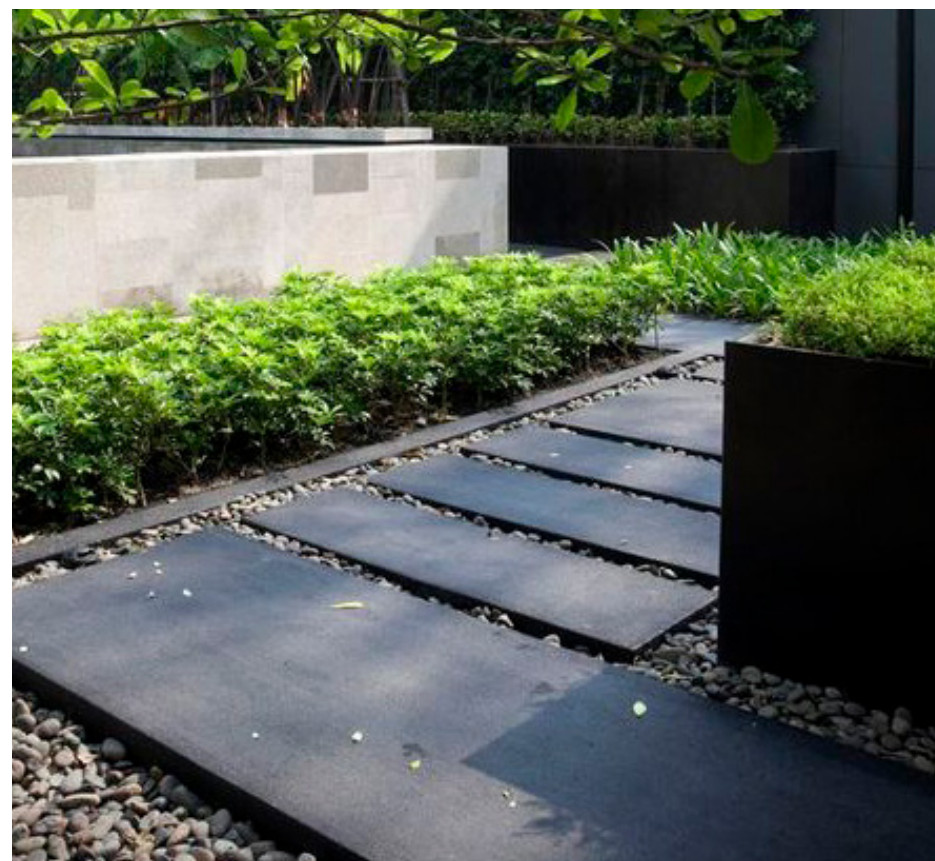
4.4.2 Headfort House (Chapel) Forecourt

The forecourt will be the focal gathering point for people prior to the commencement of services in the Chapel. The area will be a quiet space designed for people to gather their thoughts and to meet. The forecourt will also be in alignment with the proposed main street and act as a buffer between the Chapel and the RACF behind. It will provide a setting which responds to the heritage nature of Headfort House.

Landscape Elements

- ① Paved forecourt waiting area.
- ② Shaded seated benches provide opportunities for sitting and contemplation.
- ③ Low level screen planting to RACF ground floor with a mix of under storey planting.
- ④ The RACF may also feature green planting on the facade to allow the building to better blend into its surrounding landscape.
- ⑤ Open lawn and paved recreation space for RACF.
- ⑥ Existing Paperbark trees to be retained.
- ⑦ Dense screen planting to property boundary





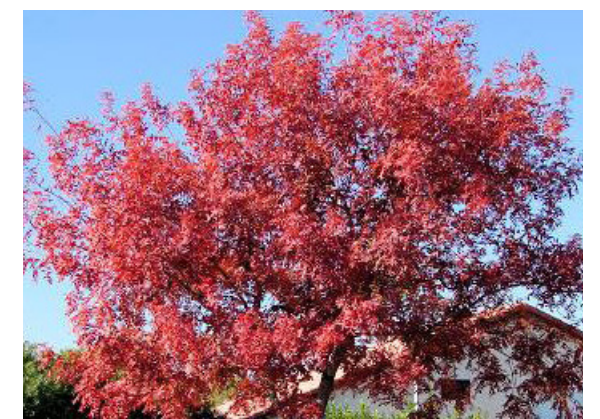
4.4.3 Main Street

This east-west street provides an accessible pedestrian and vehicular route that links the village entry, chapel and community buildings along an attractive pedestrian focussed environment. It will be an important place that provides activation and opportunities for social interaction. The street will be one way with dedicated footpaths and some limited short term parking. A formal avenue of street trees and verge planting will provide shade and seasonal interest.

Landscape Elements

- 1 Formal tree lined street with deciduous street trees to provide shade from summer sun and seasonal variation.
- 2 Accessible grades and footpaths
- 3 Ground floor apartments with terraces to animate the street and provide passive surveillance.
- 4 Limited short stay/visitor parking to help activate the street
- 5 Clear pedestrian priority areas especially adjacent to village green.
- 6 Generous Port cochere pick up + drop off area adjacent the Village Green.



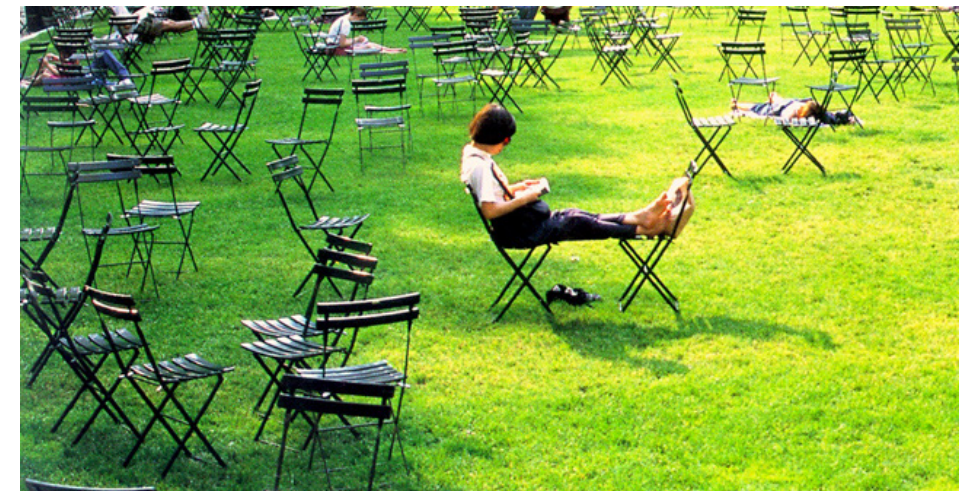
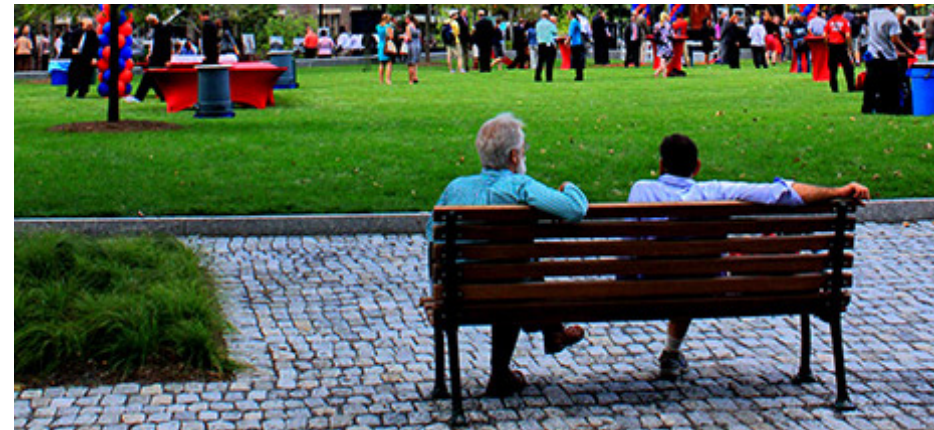


4.4.4 Village Green

The Village Green is at the heart of the community and as such is located along the Village Street adjacent to community centre. The large central lawn offers a welcoming relaxing green space as well a flexible space for potential community activities. The green and the surrounding community facilities benefit from a northerly aspects making it the ideal location to sit back and enjoy a coffee and socialise with other residents in the sunshine.

Landscape Elements

- North facing sun drenched open space.
- Large central flexible lawn space.
- Ample seating opportunities for relaxing and social interaction.
- Adjacent north facing cafe/alfresco dining facilities
- Some small retail to service village requirements
- Occasional community events (markets, performances etc..)



4.4.5 Communal Open Spaces

These communal courtyards are co-located with each residential apartment block. They will be individual in character and create a sense of place for each building. They will provide common open space for residents to meet with neighbours in close proximity of their home. The spaces will also offer opportunities for passive recreational activities such as gardening.

Landscape Elements

- Each courtyard to be have a unique character.
- Plenty of seating, greenery and shade.
- Opportunities for gardening and the cultivation of vegetables and flowers.
- Orientated to maximise sunlight where possible.
- A mix of native or exotic planting species.
- Visual connections to the adjacent streets to welcome visitors.



4.4.6 Forest View Terrace

This space will flow through the heart of the community centre and open up to elevated views south across the tree tops of the adjacent woodland. These views will play an important role in connecting residents and visitors with the surrounding natural environment. The terrace will function as a flexible community space with both open and covered seating areas, planting and space to have community events, talks or meetings.

Landscape Elements

- Elevated views south over tree tops of adjacent woodland.
- Lift access from streets below.
- Open and covered seating options and gathering spaces.
- Flexible space for events and meetings.

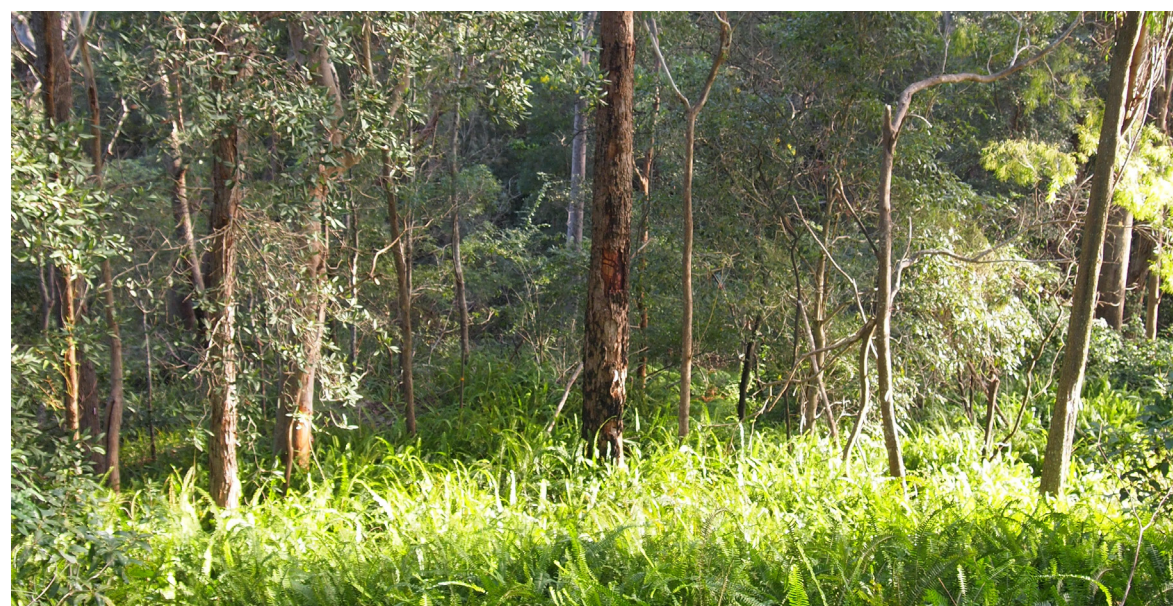
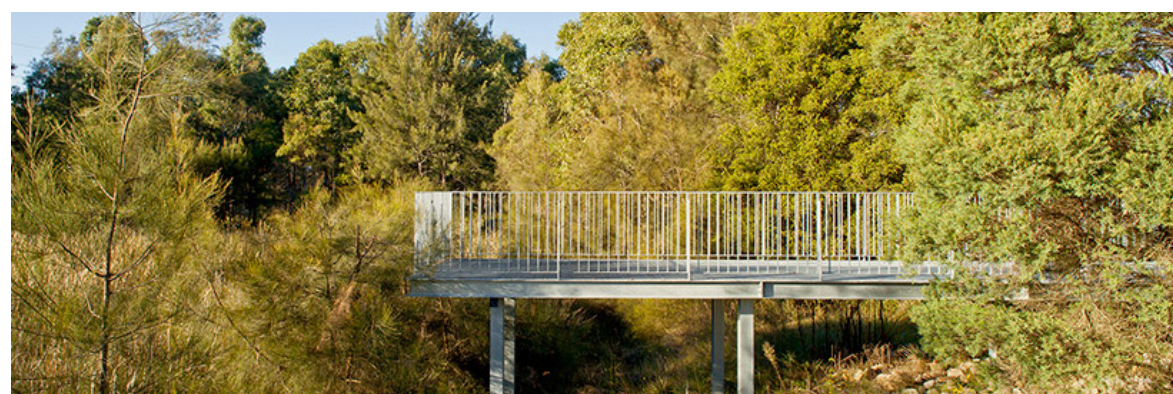


4.4.7 Landscape Boundary and Bush walk

The existing bush edge is one of the site most desirable assets. The development of the site will include improvements to allow for more pedestrian interaction with these areas. New perimeter paths, sitting and lookout points as well as exploring opportunities to link into local bush tracks will further enhance the villages connection with nature and access to more active pursuits. It is noted that the existing independent living units are proposed to be retained at this stage and will be subject to a separate planning process at a later stage.

Landscape Elements

- Retain and manage existing natural bushland edge.
- Explore opportunities to create/access local bush walks.
- A perimeter bush walk allowing easy enjoyment and views into the bushland.
- Opportunities for new lookouts and wildlife watching locations.
- Plenty of tranquil bush edge seating.



4.5 Evolution of Design

Consultation with Ku-ring-gai Council officers has been undertaken as the Planning Proposal and Urban Design Study have been prepared, including meetings in October 2015 and December 2016 (minutes of these meetings are appended at **Attachment A** and **Attachment B** respectively). This consultation has involved the sharing of information and advice on a range of issues to inform the Planning Proposal and Urban Design Study.

Pre-Planning Proposal meetings were held in October 2015 and December 2016 with representatives of Ku-ring-gai Council's Planning, Heritage, Transport and Natural Areas teams. The applicant's team was comprised of representatives from Stockland and Architectus, as well as heritage and bushfire consultants. The original plan presented to Council in December 2016 is shown overleaf.

Key elements of this meeting included:

- Presentation of the urban design testing and the resulting preferred master plan;
- Discussion of the proposed amendments to the KLEP 2015; and
- Discussions to confirm the Planning Proposal process.

At this meeting, the proposed amendments to the KLEP 2015 included rezoning the site from R2 Low Density Residential to R4 High Density Residential and amending the associated standards (FSR, building height and permitted land use). Council officers questioned the intent of the proposed site rezoning to the R4 zone under the KLEP 2015 and requested that the proposal demonstrate how it will not set a precedent within Ku-ring-gai for out of local centres higher density development.

Architectus and Stockland have considered the feedback provided by Ku-ring-gai Council officers, and as a result, have amended the proposal and are now seeking rezoning to R3 Medium Density Residential. While rezoning of the site to R4 High Density Residential may provide a more appropriate land use zone to facilitate the desired outcomes proposed under the masterplan, this Planning Proposal proposes to rezone the site to facilitate development under the R3 zone. It is considered that this amendment to the Planning Proposal is appropriate given the adjacent R2 land use zone and in addition, provides Council with assurance that the development will not set a precedent within Ku-ring-gai for out of local

centres higher density development.

It is considered that Council Officers' comments relating to heritage, bushfire, urban design and transport have also been addressed through the revised master plan and the Planning Proposal.





5 Assessment

5.1 Visual Impact Assessment

Architectus has considered the visual impact of the potential resultant built form on the surrounding area. Views have been selected from the public domain based on our topographic assessment of the local area and from where the site is most visible.

Assessment methodology

This visual assessment method has addressed views from the public domain and from private properties.

The public domain views have been assessed in accordance with the planning principles set by the NSW Land and Environment Court in the case *Rose Bay Marina Pty Ltd v Woollahra Municipal Council* 2013/1046.

The visual impact assessment method for the public domain views acknowledges the following five step process of the Court planning principles:

- Identify the scope of the existing views from the public domain
- Identify the locations in the public domain from which the interrupted view is enjoyed
- Identify the extent of the obstruction at each relevant location
- Identify the intensity of public use of those locations
- Review any document that identifies the importance of the view to be assessed.

This report has not included a visitation to private properties and documentation of actual existing views.

Standards for photography

All individual photographs have been taken with a 35mm focal length lens format or equivalent.

This is the accepted standard of the New South Wales Land and Environment Court for approximating the normal human depth of field, so that the size of the image approximates the size of the object as seen by the eye from the same location.

Preparation of the masked outline overlays involved the following steps:

- Digital photographs were taken from each of the selected viewpoints in the direction of the proposed development;
- A computer generated 3D model of the proposed building was prepared;
- The 3D model was inserted into the photographs from the key vantage points using the same 35mm focal length;
- The precise RL of the location (plus 1.7m to represent eye height); and
- A mask is placed over the location of the 3d model, illustrating its extent in the view.

Disclaimer:

All views are prepared with the information available and all effort has been made to accurately depict the proposal, the following are assumed information:

- RL points were extrapolated from a survey, not from surveyor’s precise location of the photographs; and
- LPI 2m contours used for the terrain for RL points of the photograph location.

5.1.1 Summary of View Impacts

The existing bush edge is one of the site's most desirable assets. The development of the site will include improvements to allow for more pedestrian interaction with these areas. New perimeter paths, sitting and lookout points as well as exploring opportunities to link into local bush tracks will further enhance the villages connection with nature and access to more active pursuits. The impacts of the future development on views of the following sites have also been considered:

- 1 Eastern Arterial Road North
- 2 The Crest
- 3 Roseberry Road + Kardella Lane
- 4 Roseberry Road
- 5 Stanhope Road + Roseberry Rd
- 6 Stanhope Road + Redgum Ave
- 7 Swain Gardens
- 8 Swain Gardens East
- 9 Stanhope Road (west)
- 10 Stanhope Road (north of site)
- 11 Stanhope Road (east)
- 12 Slade Avenue
- 13 Seven Little Australians Park
- 14 Eastern Arterial Road South
- 15 Archbold Road + Tryon Street
- 16 Archbold Street + Owen Street
- 17 Archbold Street + Middle Harbour Road
- 18 Lindfield Cricket Oval



5.1.2 Location 1- Eastern Arterial Road North

Description:

This view is taken looking south along Eastern Arterial Road. The highly used street is topographically lower situated than the subject site and lined with trees. The view from the footpath includes a wall to private gardens.

Visual Impact Rating:

The visual impact of potential future development is considered to be nil, as its view will be obstructed by existing built form and vegetation. Due to the topographical elevation of the site the scale of potential development will not be noticeable.

Key Plan



Existing



Proposed



5.1.3 Location 2 - The Crest

Description:

This view is taken at the Crest approximately 300m North of the subject site. The viewpoint is located on a lower level as the subject site and shows the ascending street with neighbouring buildings.

Visual Impact Rating:

The visual impact of potential future development is considered to be nil, as proposed future development will be screened by the existing built form. Due to the topographical change the scale of potential built form on the subject site will be below the level of existing buildings.

Key Plan



Existing



Proposed



5.1.4 Location 3 - Roseberry Road + Kardella Lane

Description:

This view is taken at the intersection of Roseberry Road and Kardella Lane approximately 200m North-West of the subject site. The viewpoint is located at about the same topographic height as the main entrance of the subject site. It comprises a local road with low-rise residential buildings with large setbacks from the street.

Visual Impact Rating:

The visual impact of potential future development is considered to be nil, as proposed future development will be screened by residential buildings and dense vegetation along Roseberry Road.

Key Plan



Existing



Proposed



5.1.5 Location 4 - Roseberry Road

Description:

This view is taken from Roseberry Road approximately 120m North of the subject site. The view shows the intersection with Stanhope Road and the directly adjacent low-rise residential buildings.

Visual Impact Rating:

The visual impact of potential future development is considered to be nil, as proposed future development will be screened by existing buildings along Roseberry Road and Stanhope Road.

Key Plan



Existing



Proposed



5.1.6 Location 5 - Stanhope Road + Roseberry Road

Description:

This view is taken from the corner of Stanhope Road looking east toward the subject site. The viewpoint allows a visual impact perspective from the descending topography of Stanhope road. It represents the view when approaching the site from the Western end of Stanhope Road.

Visual Impact Rating:

The visual impact of potential future development on views from the public domain are considered to be low, as the bulk and scale of the potential future development will be screened by the neighbouring buildings and mature vegetation. The sloping topography away from the site minimises the visual impact from the street.

Key Plan



Existing



Proposed



5.1.7 Location 6 - Stanhope Road + Redgum Ave

Description:

This view is taken from the intersection of Stanhope Road and Redgum Avenue. The view is located on a high point of Stanhope Road before the road descends towards the topographically lower level of the Swain Gardens and ascends again before reaching the subject site.

Visual Impact Rating:

The visual impact of potential future development is low to negligible, as the bulk and scale of the potential future development will be obscured by existing mature vegetation which will obstruct the view of the proposed built form.

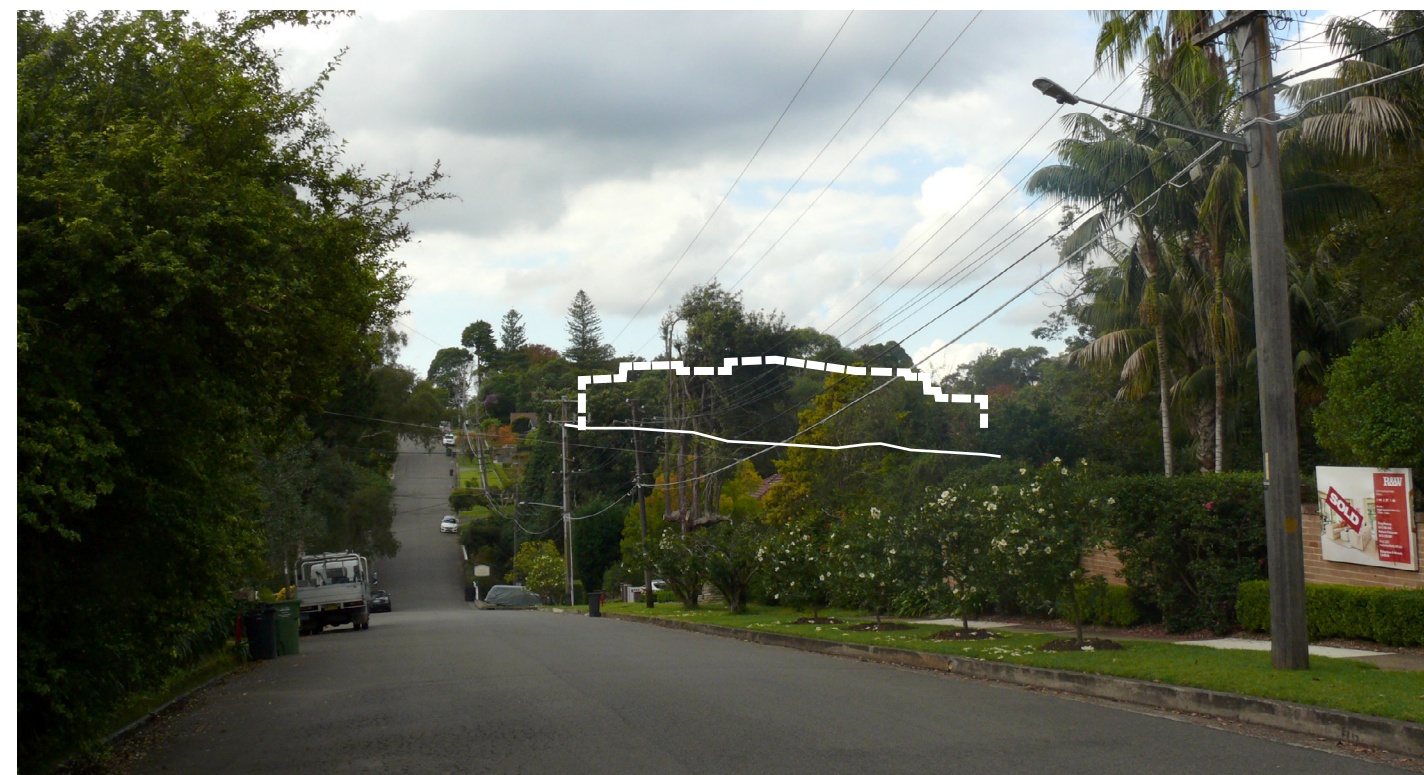
Key Plan



Existing



Proposed



5.1.8 Location 7 - Swain Gardens

Description:

This view is taken looking east from Swain gardens. The viewpoint is taken from an elevated lookout to the rear boundary of several properties which surround the gardens. Close to the creek, the topographic height of this viewpoint is considerably lower than the subject site. The view comprises primarily dense vegetation and tall trees. The bottom images represent eye level views whereas the top images represent a tilted view of looking up into the tree canopy as indication of the extent of vegetation surrounding the view point.

Visual Impact Rating:

The visual impact of potential future development is considered to be negligible. The dense tree canopy will obstruct views of potential development.

Existing



Proposed



Key Plan



5.1.9 Location 8 - Swain Gardens East

Description:

This view is taken further east in the Swain gardens following the creek. The viewpoint is located around 100m south of the subject site on a bush walking track. The view comprises primarily dense vegetation and tall trees. The bottom images represent eye level views whereas the top images represent a tilted view of looking up into the tree canopy as indication of the extent of vegetation surrounding the view point.

Visual Impact Rating:

The visual impact of potential future development is considered to be negligible. The dense tree canopy will obstruct views of potential development.

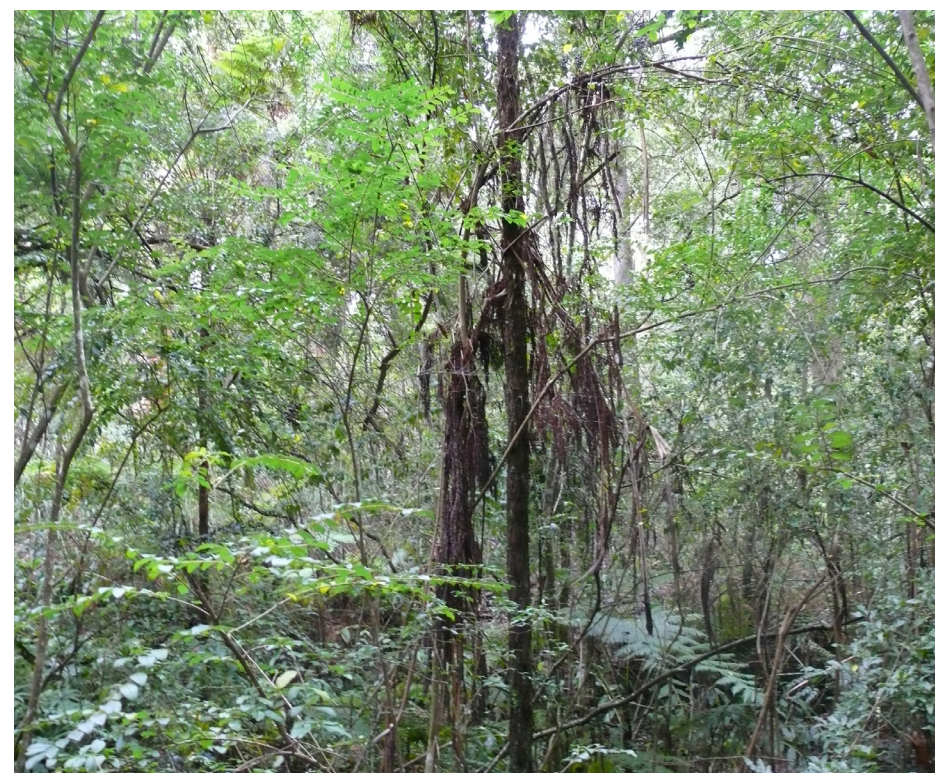
Existing



Proposed



Key Plan



5.1.10 Location 9 - Stanhope Road

Description:

This view is taken from the footpath of Stanhope Road across from Headfort House on the subject site. The view comprises, apart from Headfort House, its existing driveway and the landscaping features of its garden. Retention of significant trees and proposed landscaping of the chapel garden will likely not significantly alter this view.

Visual Impact Rating:

The visual impact of potential future development is considered to be low to medium, as the bulk of potential future development is screened by existing trees and bushes on the subject site. The retained chapel is located in front of the proposed RACF and largely obstructs views of the proposed built form. This is a significant view as it will be the primary approach to the site for vehicles approaching from the west on Stanhope Road (main access to the site). Visual amenity is likely to improve through new planting in the chapel garden.

Key Plan



Existing



Proposed



5.1.11 Location 10 - Stanhope Road (north of site)

Description:

This view is taken from the footpath in front of the private residence No.92 Stanhope Road looking South. The view comprises the existing age care facilities, largely screened by scrubs and bushes. The vegetation is planted on a slope ascending from Stanhope Road.

Visual Impact Rating:

The visual impact of potential future development is considered to be low as potential future development does not exceed the height of existing built form. Additionally future development will be partially screened by the vegetation on the slope ascending from Stanhope Road.

Key Plan



Existing



Proposed



5.1.12 Location 11- Stanhope Road (east)

Description:

This view is taken from the footpath in front of the private residence No.100 Stanhope Road looking west. The view comprises the existing built form on the subject site, largely screened by scrubs and bushes. The vegetation is planted on a slope ascending from Stanhope Road.

Visual Impact Rating:

The visual impact of potential future development is considered to be low to medium. Potential future development exceeds the height of existing built form by about two levels. However, the majority of future development will be screened by the vegetation on the subject site, reducing the perceived visual bulk of future buildings.

Key Plan



Existing



Proposed



5.1.13 Location 12 - Slade Avenue

Description:

This view is taken at the corner of Slade Avenue approximately 300m South of the subject site. The viewpoint is located on a topographically lower height as the subject site and shows low-rise residential buildings with dense vegetation of Seven Little Australians Park in the background.

Visual Impact Rating:

The visual impact of potential future development is considered to be low, as proposed future development will be screened by the existing built form and mature vegetation.

Key Plan



Existing



Proposed



5.1.14 Location 13 - Seven Little Australians Park

Description:

This view is taken in the Seven Little Australians park where the walking tracks divide into north-south directions, next to Gordon Creek. The view comprises primarily dense vegetation and tall trees. The viewpoint is located on a considerably lower topographic height as the subject site. The adjacent bottom images represent eye level views, whereas the top images represent a tilted view of looking up into the tree canopy.

Visual Impact Rating:

The visual impact of potential future development is considered to be negligible. The dense tree canopy will obstruct views of potential development.

Existing

Proposed



Key Plan



5.1.15 Location 14 - Eastern Arterial Road South

Description:

This view is taken from the footpath along Eastern Arterial Road with the Seven Little Australians Park in the foreground. The view comprises primarily dense vegetation and tall trees on the descending slope adjacent to the road. The viewpoint is located on a lower topographic height as the subject site.

Visual Impact Rating:

The visual impact of potential future development is considered to be nil as the subject site has an elevated topography and the dense tree canopy will obstruct views of potential development.

Key Plan



Existing



Proposed



5.1.16 Location 15 - Archbold Road + Tryon Street

Description:

This view is taken looking north-east at the intersection of Archbold Road and Tryon Street. The view shows Eastern Arterial Road and the Seven Little Australians Park. The view comprises primarily dense vegetation and tall trees on the descending slope adjacent to the road. The viewpoint is located on a lower topographic height as the subject site.

Visual Impact Rating:

The visual impact of potential future development is considered to be nil as the subject site has an elevated topography and the dense tree canopy will obstruct views of potential development.

Key Plan



Existing



Proposed



5.1.17 Location 16 - Archbold Street + Owen Street

Description:

This view is taken looking north-east at the intersection of Archbold Road and Owen Street. The view shows low-rise residential buildings with large setbacks from the main street. The viewpoint is located on a lower topographic height as the subject site.

Visual Impact Rating:

The visual impact of potential future development is considered to be negligible as the subject site has an elevated topography and the dense tree canopy will obstruct views of potential development.

Key Plan



Existing



Proposed



5.1.18 Location 17 - Archbold Street + Middle Harbour Road

Description:

This view is taken looking north-east at the intersection of Archbold Road and Middle Harbour Road. It shows low-rise residential buildings with large setbacks from the main street and Seven Little Australians Park canopy in the background. The viewpoint is located on almost the same topographic height as the subject site. Therefore, upper levels of existing built form on the subject site are seen in the background.

Visual Impact Rating:

The visual impact of potential future development is considered to be low to medium as the dense tree canopy will screen a large part of potential development. As this view is located on a high point of Archbold Road it will only be seen on a limited section of the road.

Key Plan



Existing



Proposed



5.1.19 Location 18 - Lindfield Cricket Oval

Description:

This view is taken looking north-west from Lindfield cricket club, approximately 550m south-east of the subject site. It shows the cricket field and Seven Little Australians Park canopy in the background. The viewpoint is located on almost the same topographic height as the subject site. Therefore, upper levels of existing built form on the subject site are seen in the background.

Visual Impact Rating:

The visual impact of potential future development is considered to be low, as the subject site has an elevated topography from the Lindfield cricket club perspective, in addition to the existing visual obstruction by the existing built form and mature vegetation.

Key Plan



Existing



Proposed

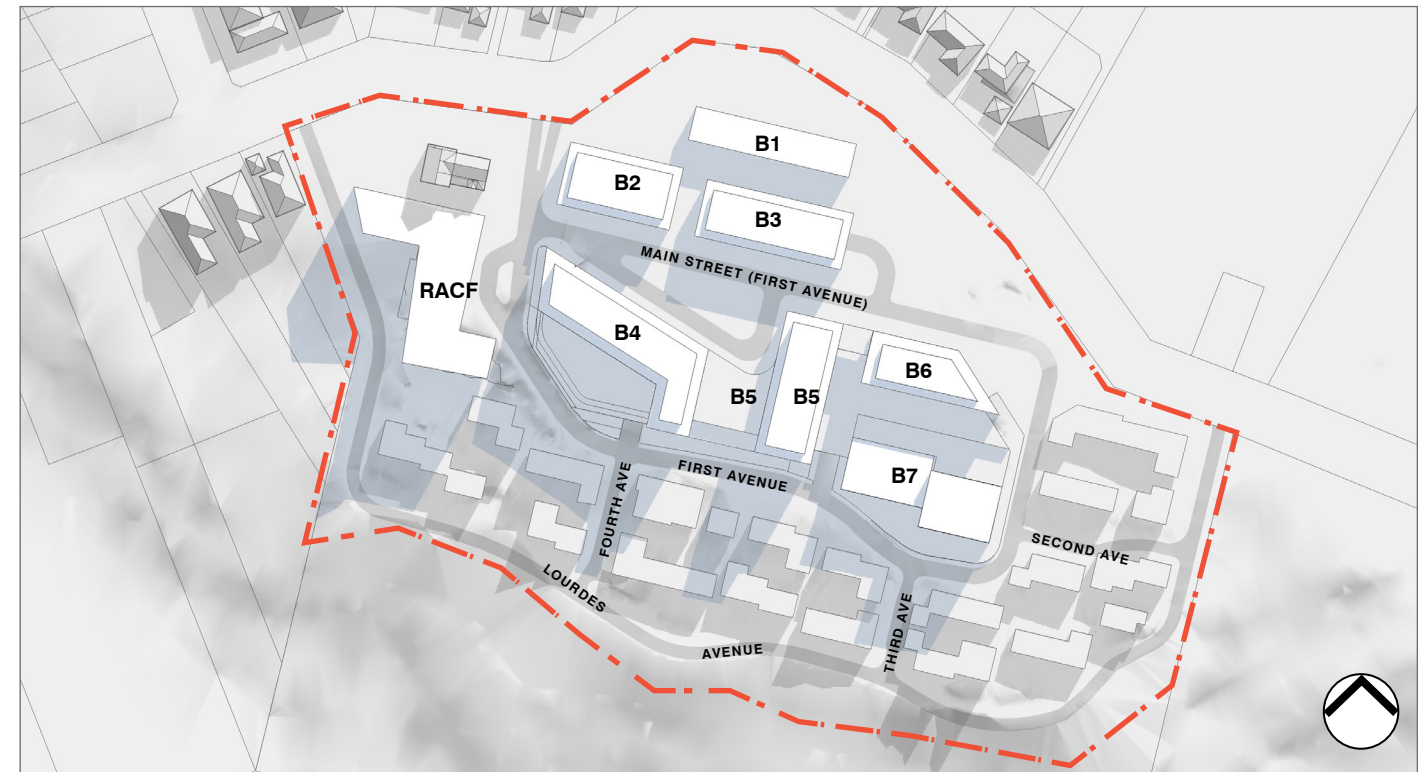


5.2 Solar Testing

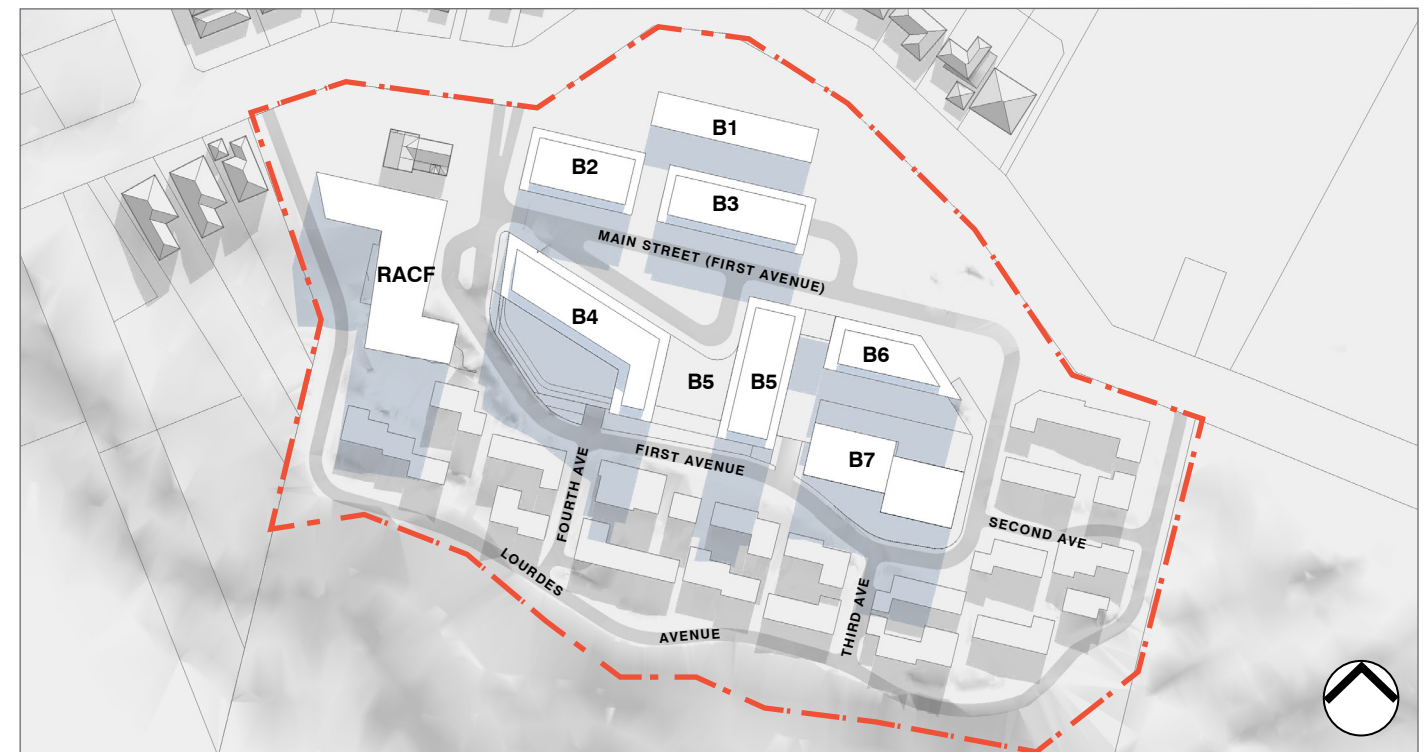
5.2.1 Overshadowing analysis

Overshadowing impacts have been modelled for specific times of the day during the winter solstice. The modelling reveals little impact on the surrounding residential properties within the site. It should be noted that where these impacts occur they are limited to short periods of the day during the winter months only. Importantly, the areas affected are yard areas at the rear of the adjoining properties which are unlikely to be primary areas of open space and contain existing trees.

Within the site, overshadowing occurs along the southern portion of the site and within some residential areas. It should be noted that in the majority of these cases overshadowing is limited to certain times of the day with the majority of open space areas receiving more than 2 hours of sunlight during the winter solstice.



10am winter solstice



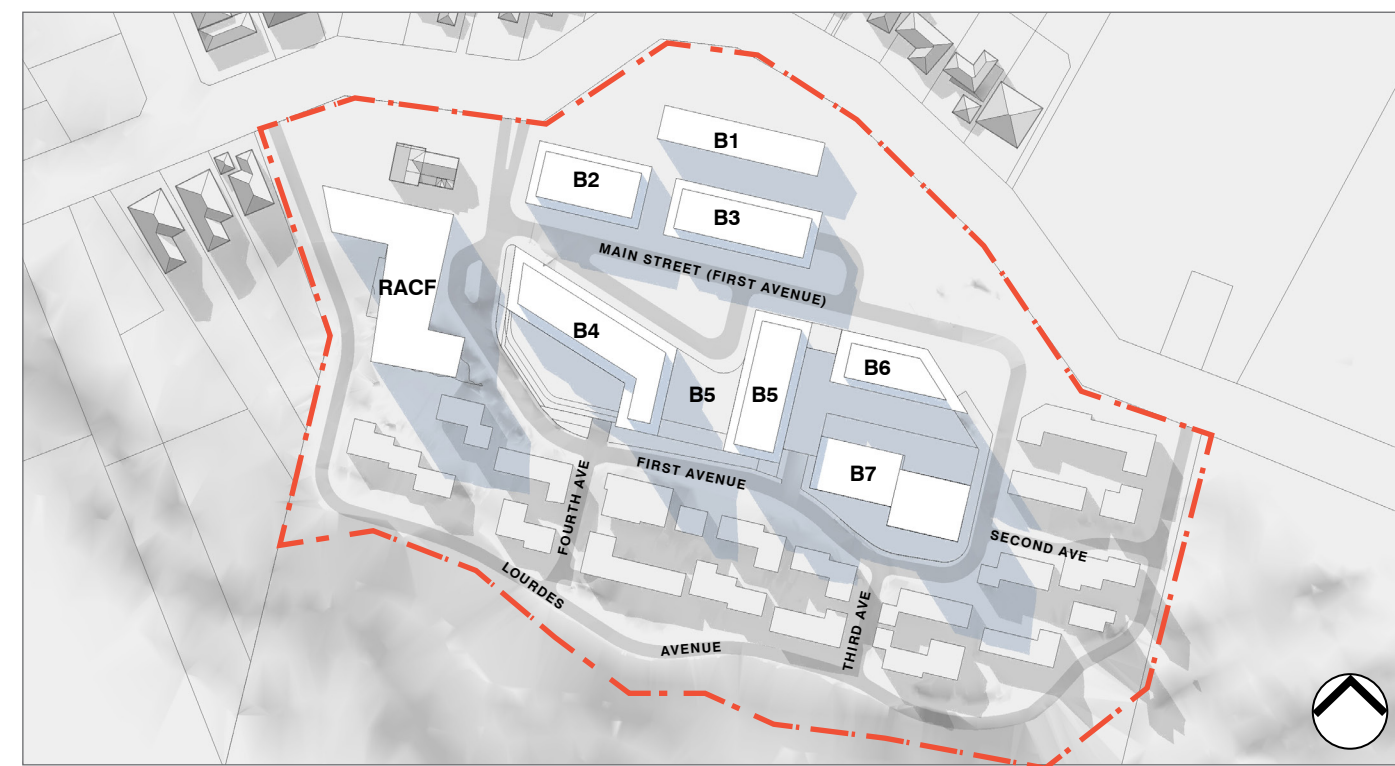
11am winter solstice

Legend

- Shadow cast by new development
- Shadow cast by existing buildings on site



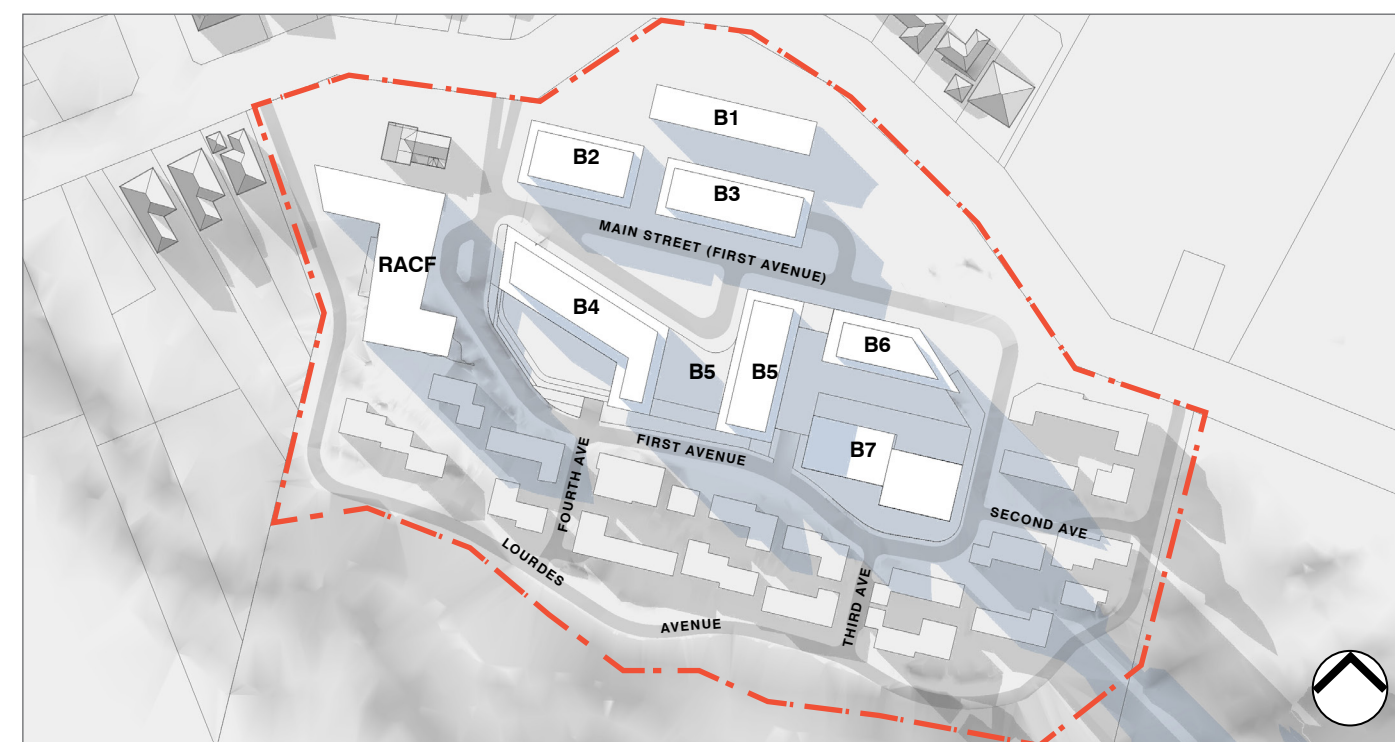
12 noon winter solstice



2pm winter solstice



1pm winter solstice



3pm winter solstice

5.2.2 SEPP 65 Design Compliance

Solar access

Daylight access to the indicative built form of the master plan proposal has been assessed for mid-winter (June 21) between the hours of 9.00am and 3.00pm.

The indicative built form in the proposed master plan is oriented to best suit the existing topography and the new communal open space for the site. Where possible the built form has been orientated to maximise solar access and achieve the required amount of sunlight (2 hours) required under the Apartment Design Guide.

However owing to the orientation of built form around the existing topography, some of the indicative built form in the master plan proposal will not receive the 2 hours sunlight required under the Apartment Design Guide. This can be potentially resolved during detailed design of future buildings. The façades which do not achieve a minimum of 2 hours sunlight are generally south facing and likely to achieve significant amenity as a result of southern district views.

Potential design features to promote solar access within the re-development include:

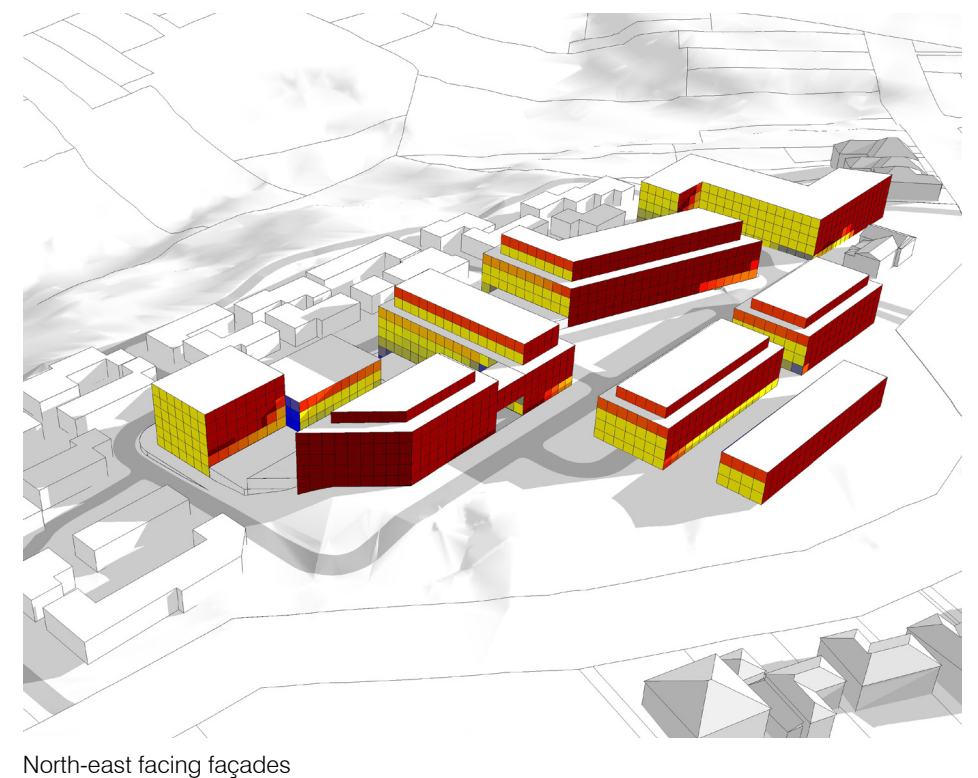
- Provision of high ceilings and window heads to allow deep natural light penetration.
- Provision of high ceilings and window heads to allow deep sunlight penetration.
- Provision of external horizontal sun shading to north facing windows and vertical shading to east and west facing windows.

Legend

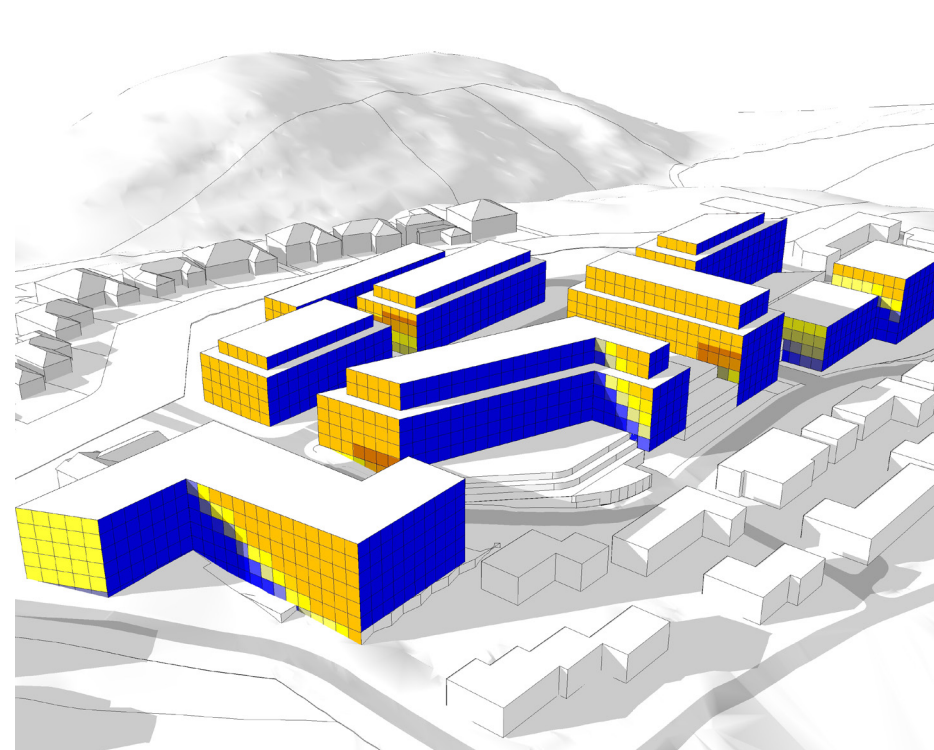
■	6 or more hours solar access
■	4-6 hours solar access
■	2 hours solar access
■	Less than 2 hours solar access



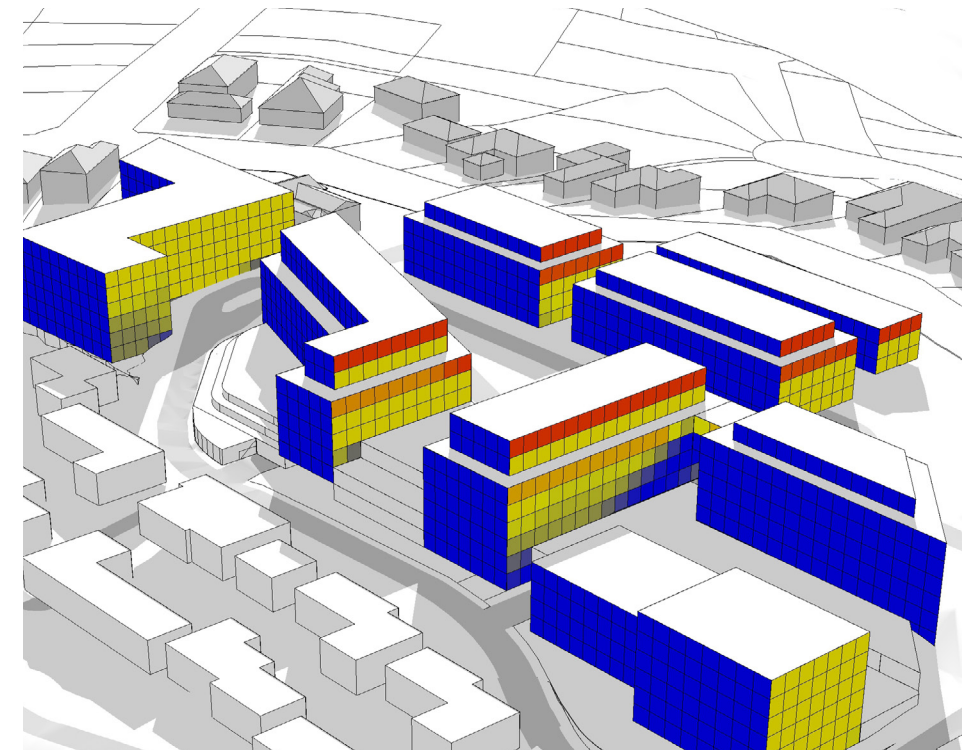
North-west facing façades



North-east facing façades



South-west facing façades



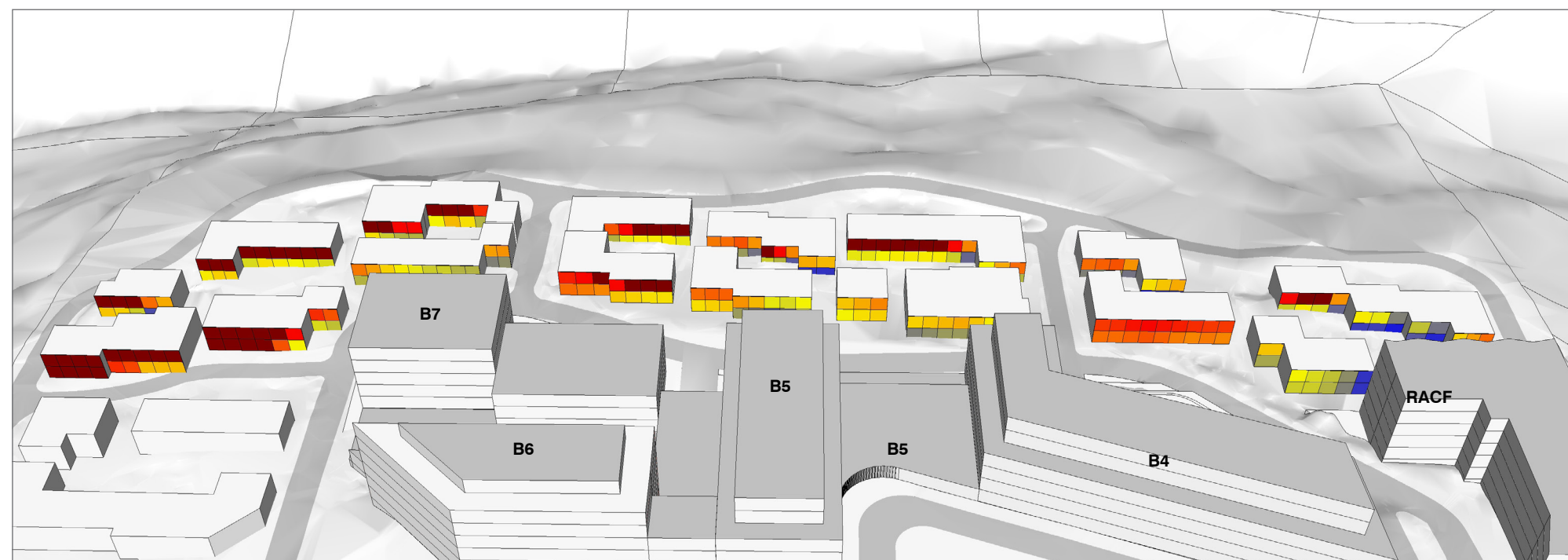
South-east facing façades

5.2.3 Solar access to existing dwellings

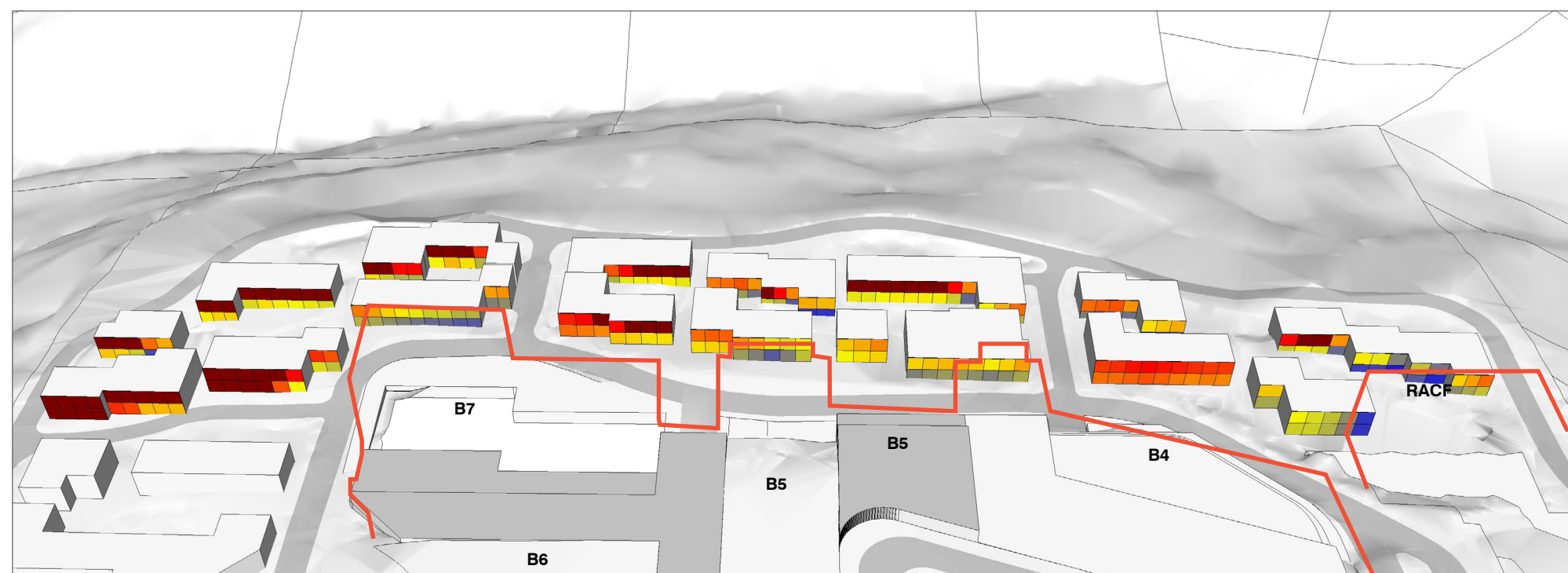
An overshadowing study on the existing residential dwellings demonstrates the impact between the hours of 9.00am to 3.00pm in reference to the draft Medium Density Design Guidelines

Key Observations:

- The primary shadow cast on the residential area between the hours of 9.00am to 3.00pm is caused by the RACF, Buildings B5 and B7 and its is greatest to the dwellings located on Third Avenue.
- Existing residential dwellings all receive a minimum of 2 hours solar access between the hours of 9am-3pm during the winter months (between June and August)
- Existing residential dwellings receive more than 2 hours solar access between the hours of 9.00am-3.00pm in non-winter periods.



Winter solstice



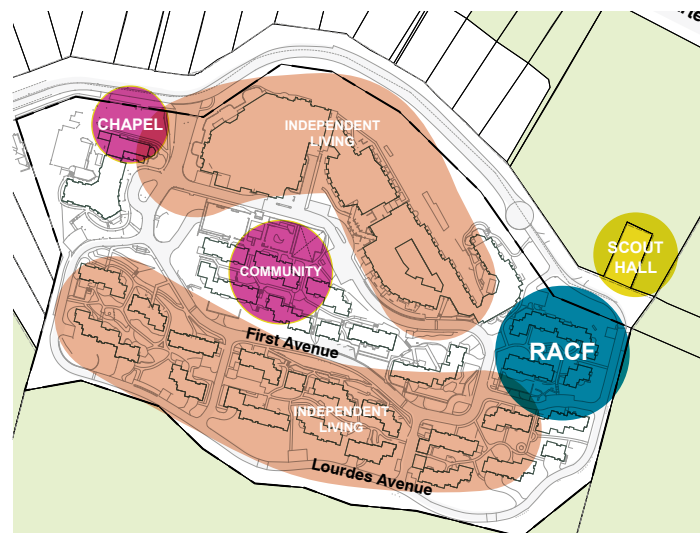
Winter solstice (Image without proposed built form)

Legend

- 6 or more hours solar access
- 4-6 hours solar access
- 2 hours solar access
- Less than 2 hours solar access

5.3 Options Considered

Prior to settling on a preferred land-use layout for the site a number of options were considered. In the assessment of each option it was assumed that the new Community Centre and RACF would be delivered in the early stages of construction.



Option 1

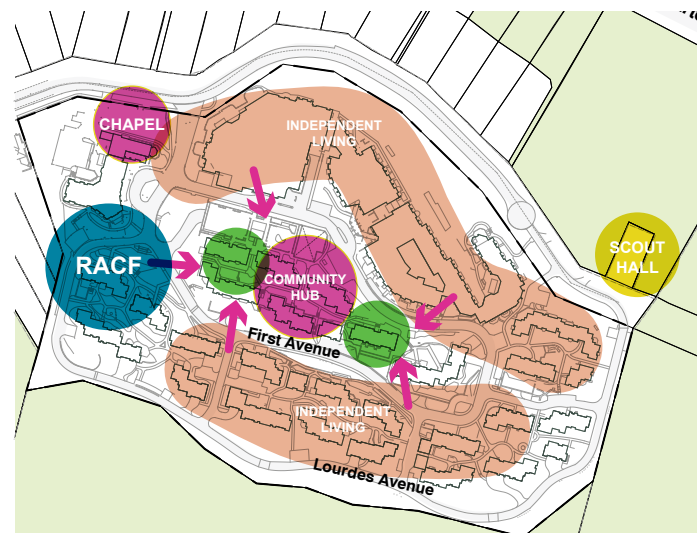
- RACF on the eastern edge
- Central Community Centre and open space

Advantages:

- RACF can be a stand alone facility with own access
- Centralised community facilities
- Allows for staging/sequencing of RACF and community facilities

Challenges:

- RACF isolated to east of site
- RACF is not supportable from a bushfire perspective



Option 2

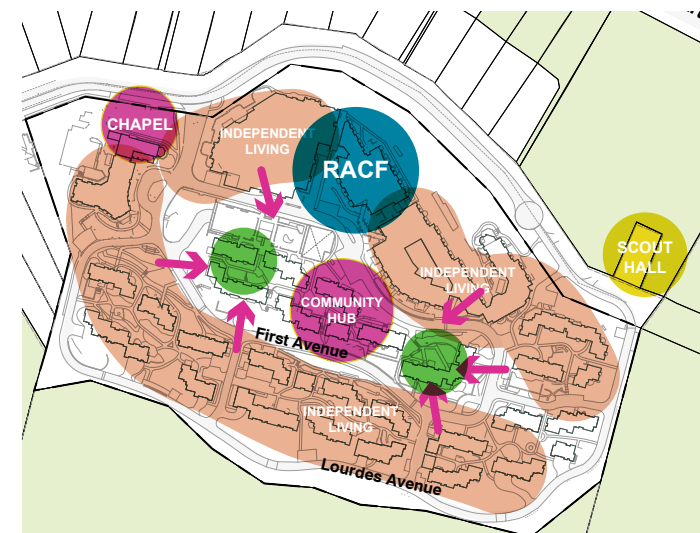
- RACF on the western edge
- Central Community Centre with open spaces either side

Advantages:

- Centralised community facilities with open space either side
- Allows for staging/sequencing of RACF and community facilities

Challenges:

- RACF isolated to west of site



Option 3

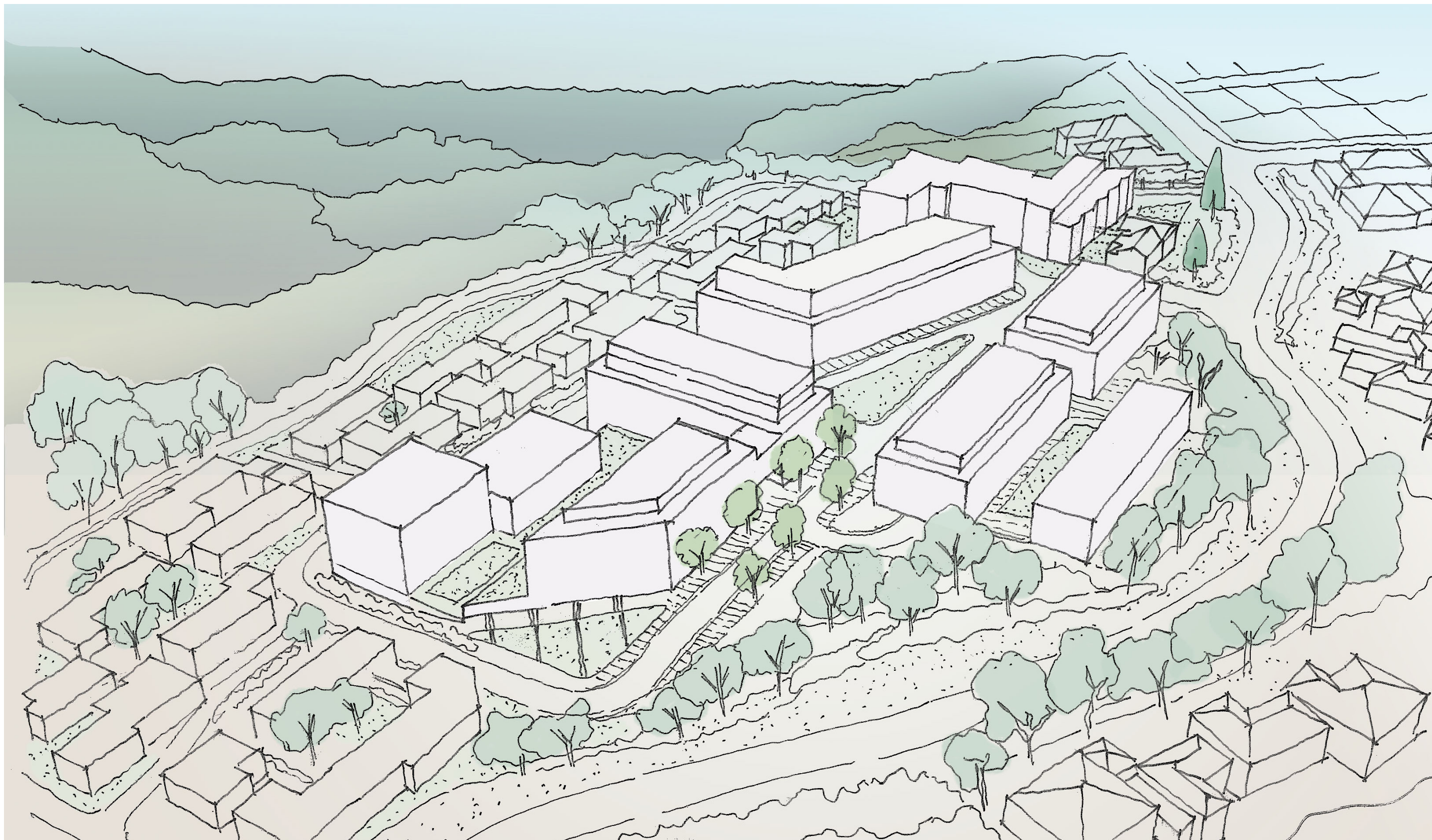
- RACF on the northern edge
- Central Community Centre with open spaces either side

Advantages:

- Centralised community facilities with open space either side
- Allows for staging/sequencing of community facilities

Challenges:

- Disruption to the existing RACF during construction (residents would need to be relocated offsite)
- RACF is very visible and the 4-5 storey development would not be appropriate in this location (in accordance with Council advice).





6 Recommendations

6.1 Proposed Planning Controls

6.1.2 Zoning

The current land use zone for the site under the Ku-ring-gai LEP 2015 is ‘R2 Low Density Residential’. This zone prohibits the development of the site for Seniors Housing, except through the use of the SEPP (Housing for Seniors or People with a Disability) 2004. However, as ‘residential flat buildings’ are prohibited within the zone, pursuant to Clause 40 maximum building height is limited to 8 metres.

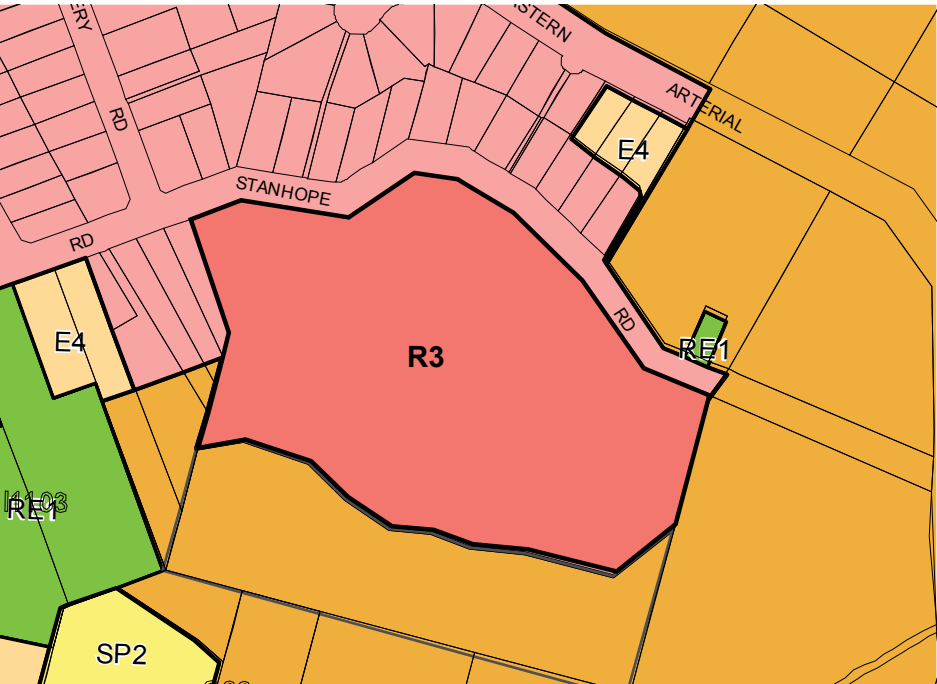
The development outcome as envisaged by this Master Plan would therefore require a rezoning to a residential land use zone that permits residential flat buildings.

As such, to allow for the master plan development to occur which is considered to be an ideal outcome for the site, it is suggested that the site be zoned R3 Medium Density Residential, which permits Seniors Housing, resolving this issue as development no longer needs to rely on SEPP (Housing for Seniors or People with a Disability) 2004 to permit the land use.

In addition to Seniors Living, R3 Medium Density would also allow neighbourhood shops and places of public worship.

Whilst this would also potentially allow for an increase in residential density on the site through ‘Shop-Top housing’ or ‘Multi-dwelling Housing’ would also be permitted it is unlikely to occur on the site for the following reasons:

- The site is not an appropriate location for ‘shop top housing’ due to its lack of connectivity with a wider area of significant density which would support local shops. Those proposed are ancillary to the proposed seniors housing and supportive of this land use rather than separate as required by stand alone commercial uses in a mixed use development.
- The site is unlikely to be redeveloped as multi dwelling housing as this would likely represent a reduction in the existing density on the site and unlikely to be financially viable for the site.
- Alternate uses would not capitalise on the existing seniors community present on the site and the demand in the wider area for seniors housing.



Legend

B1 Neighbourhood Centre	R1 General Residential
B2 Local Centre	R2 Low Density Residential
B4 Mixed Use	R3 Medium Density Residential
B7 Business Park	R4 High Density Residential
E1 National Parks & Nature Reser	R5 Large Lot Residential
E2 Environmental Conservation	RE1 Public Recreation
E3 Environmental Management	RE2 Private Recreation
E4 Environmental Living	SP1 Special Activities
R1 General Residential	SP2 Infrastructure

6.1.1 Heights

The proposed heights of buildings range in height from 3 to 6 storeys. It is proposed to amend the Ku-ring-gai LEP 2015 Height Map to reflect the Master Plan heights. This will result in maximum building heights of 11.5 metres to 24 metres for the area to under development as per the current master plan and the southern part of the site to remain at 9.5m. This takes into consideration the maximum storey heights proposed and the substantial slopes across the site.

The proposed maximum building height of 24 metres is comprised of the following floor to ceiling heights:

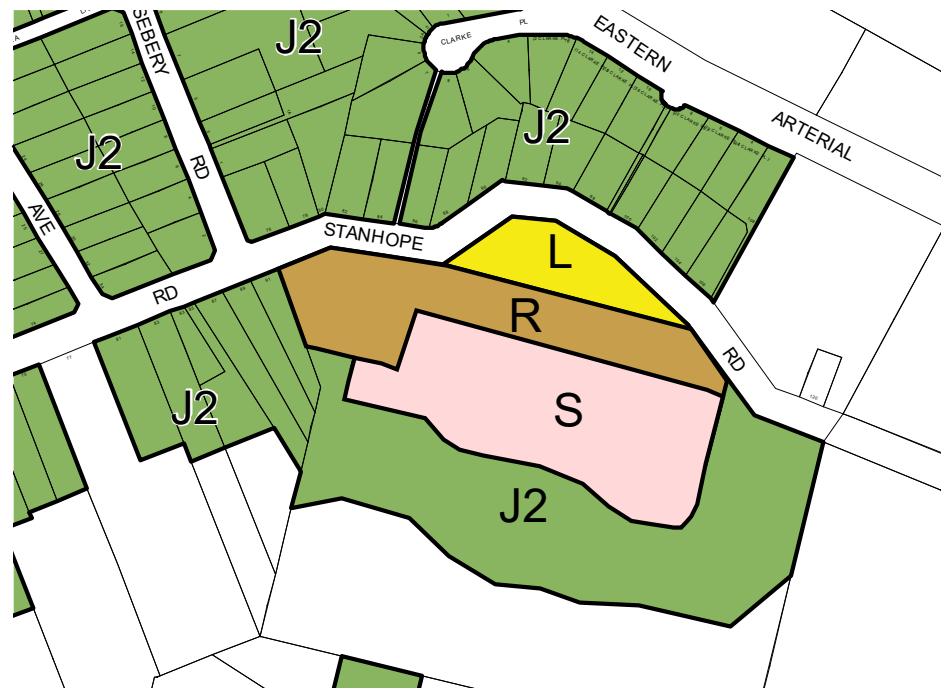
- Community Centre: two (2) storeys with a floor to ceiling height of 3.6 metres;
- Independent Living and Serviced Apartment: four (4) storeys with a floor to ceiling height of 3.1 metres; and
- Plant and lift overrun: 3 metres.

This also allows for a 1.4m tolerance to respond to topography. It is noted that tolerance is provided in the proposed building height for the design resolution of the proposed roof form of the six storey building.

The proposed maximum building height of 22 metres in the northern part of the site comprises of the following floor to ceiling heights:

- Independent Living and Serviced Apartment: six (6) storeys with a floor to ceiling height of 3.1 metres; and
- Plant and lift overrun: 3 metres.

The maximum height amendments reflect buildings sited in such a way to create transitions between the surrounding area and taller development on the subject site. It should be noted that the proposed heights, although achieving a maximum of 24m responds to the existing topography and do not have any significant visual impact on surrounding areas. The maximum development potential on the site will also be limited through the application of the FSR control.



Legend

J1	9	Q2	20.5
J2	9.5	R	22
L	11.5	S	24
N	14.5	T	26.5
O	16	U	32.5
P	17.5	V	39.5
Q1	20		

6.1.3 FSR

The total gross floor area proposed under the Master Plan is:

- 26,977sqm for the independent living units and associated community uses; and
- 9,859sqm for the residential aged care facility
- 6,168sqm for the retained existing dwellings in the southern part of the site.

This amounts to a floor space ratio of 0.8:1. Accordingly, it is recommended the floor space ratio zone 'J' under Ku-ring-gai LEP 2015, which permits a maximum floor space ratio of 0.8:1, be applied to this site.



Legend

A1	0.2	K	0.85
A2	0.24	N	1.0
A3	0.3	Q	1.3
A4	0.37	U	2.5
B	0.4	W	3.5
D	0.5		
G	0.65		
I	0.75		
J	0.8		

6.1.4 DCP amendment – Site specific provision

Because the site is in a sensitive landscape and heritage context, it is considered appropriate to develop a site specific DCP in parallel with the Planning Proposal to ensure more detail design outcomes are achieved at DA stage.

It is recommended that this be a site specific DCP which seeks to provide guidance for future development in the following key areas:

- Building setbacks and separation
- Relationship of built form to adjoining and adjacent properties;
- Site topography;
- Pedestrian network and paths of travel;
- Street network, parking rates and basement access points;
- Character and location of landscaped areas; and
- Response to heritage buildings.



7 Conclusion

7.1 Conclusion

The master plan concept represents an opportunity for the renewal and reinvigoration of the site. This will allow for the updating of the northern part of the site and improved access to facilities and public domain improvements for those retained in the southern portion of the site.

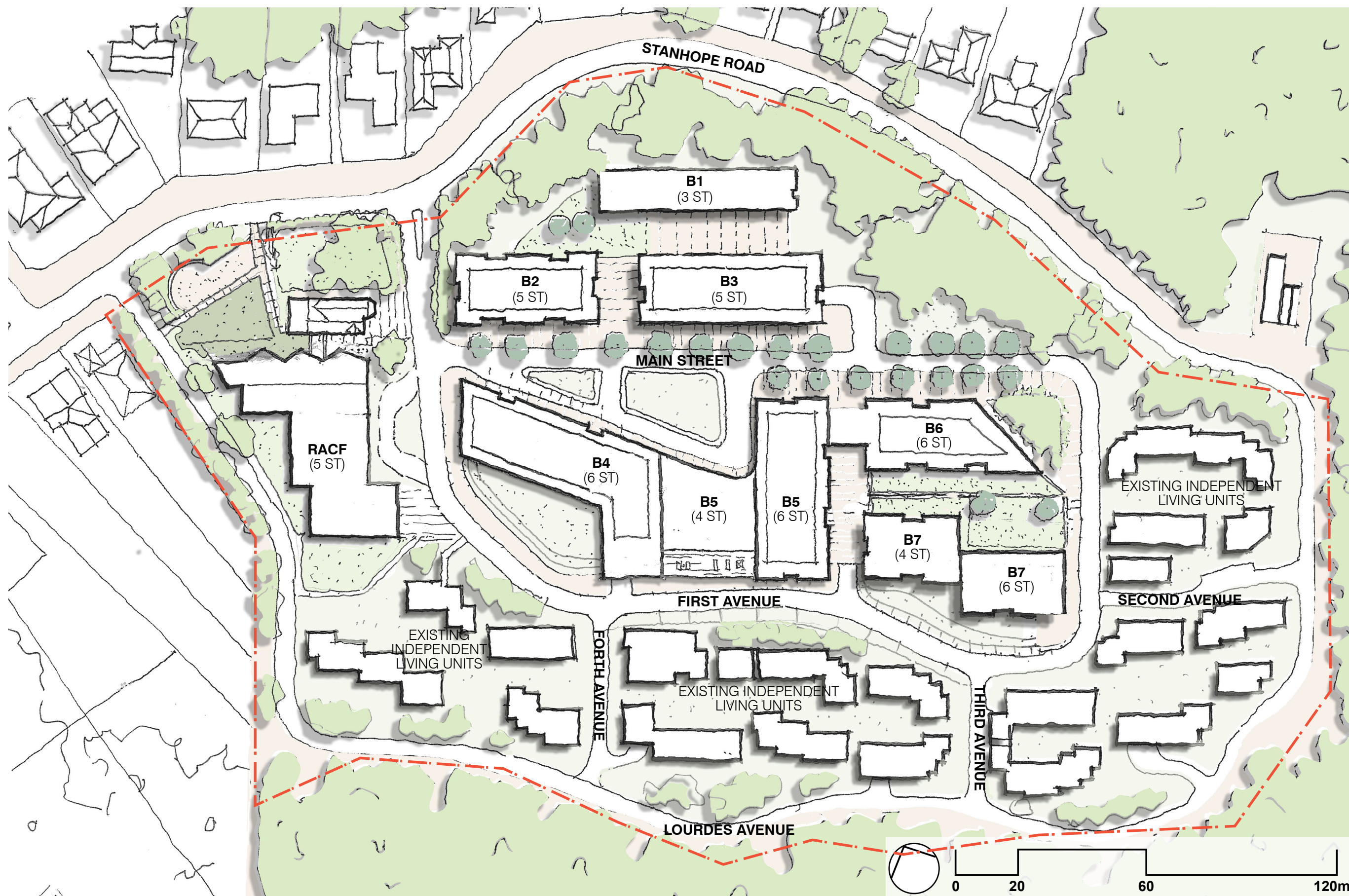
Key benefits to be delivered by the proposal include:

- Rejuvenation of the existing building stock on the site to reinvigorate and support the seniors community through delivery of new modern buildings including community facilities;
- Retention of existing entrance with an improved landscape setting, with the chapel to also be retained with new community facilities.
- Retention of Headfort House.
- New village 'main street' which will form the central spine of activity.
- New 'village green' which will form the focal point for events and flexible open space. This will be adjacent to a new community centre , with a range of village-wide facilities.
- Retention of existing trees along Stanhope Road.
- A new residential aged care facility (RACF).
- A terraced garden from First Avenue leading southward toward the bushland.

The proposal represents a genuine opportunity to develop a consistent master plan for the site which:

- Responds to the existing site constraints including topography, bushfire, existing trees, streetscape character and heritage;
- Allows for the provision of significant areas of public domain and community facilities for the future and retained residents;
- Provides housing for seniors in a diverse range of building typologies, providing housing choice;
- Responds to a wider need for Seniors Housing across Sydney and particularly, within the Ku-ring-gai area.





Indicative Master Plan



8 Appendix

Attachment A - Council Meeting Minutes October 2015

Attachment B - Council Meeting Minutes December 2016