URBAN DESIGN STUDY

4 PENNANT AVENUE, GORDON

Concept development scheme

March 2021

Prepared for Ku-ring-gai Council

by Studio GL

Document Information

Job title	4 Pennant Avenue, Gordon
Client	Ku-ring-gai Council
Job number	20052
Report title	Urban Design Study
File name	20052_Pennant-Ave-Gordon_Report.indd

Revision	Date	Prepared by	Approved by
Draft	05/03/2021	RS/SR/AN/CH/GT	FL/DG
Final	24/03/2021	CH	FL

Note: This document takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party. The report layout is designed to be printed at A4 portrait.

STUDIO GL

Studio GL Pty Ltd
77 Buckland Street
Chippendale NSW 2008

TABLE OF CONTENTS

1. Introduction

1.1. Background

Studio GL has been appointed by Ku-ring-gai Council to prepare two concept development options demonstrating how a low-density residential development, or a seniors living option, will achieve appropriate setbacks, privacy and a sympathetic built form on a site at 4 Pennant Ave, Gordon.

Council resolved to prepare a planning proposal for part of 4 Pennant Avenue, being Lot Y DP387680, to rezone it to R3 Medium Density Residential with the and associated development standards of HOB 11.5m, FSR 0.8:1 and minimum lot size of 1200sqm on the 8 May 2018.

The planning proposal also wished to reclassify 'community land' to 'operational land'. The planning proposal was submitted to the Department of Planning, Industry and Environment (DPI&E) on 2 October 2018.

DPI&E issued a Gateway Determination on 17 February 2020 which included a number of conditions which required amendments to be made to the planning proposal prior to public exhibition, specifically:

1. Prior to undertaking public exhibition, the planning proposal should be amended to:

a. Update the proposal for the site to reflect the following development standards:
- Zone R2 Low Density Residential
- FSR 0.3:1
- A maximum building height of 9.5m
- A minimum lot size of 840m^2

b. Prepare a flood risk management assessment/ study for the site to assess the inconsistency with section 9.1 Direction 4.3 Flood Prone Land

c. Prepare a traffic study for the site to assess the impacts of the proposal and the capacity of the local road network

d. Prepare a concept development scheme incorporating an urban design study demonstrating how low-density residential development on this site will achieve appropriate setbacks, privacy and a sympathetic built form

e. Prepare a heritage impact statement addressing the effect of the concept development on the adjoining heritage conservation area and the local heritage items in the vicinity.

Council resolved to proceed with the R2 Low Density zoning on the site as conditioned by the Gateway Determination on the 30 June 2020.

This urban design study will consider a low density residential scheme for the site and a second option of a seniors living community, compliant with the relevant SEPP, which is allowable development typology under the R2 zoning.

1.2. Report structure

This report is divided into the following chapters:

1. Introduction

Provides background to the site, study and key relevant planning documents.

2. Site analysis

This chapter involves the analysis of the existing site conditions, and the identification of opportunities and constraints that will inform the concept schemes.

3. Concept Scheme 1: R2 Low Density

This chapter provides a concept plan, including built form, yield and urban design analysis for the first development scheme - subdivision and built form under R2 Low Density zone with development standards of HOB 9.5m, FSR 0.3:1 and minimum lot size 840sqm. The chapter also provides site specific DCP controls for the scheme.

4. Concept Scheme 2: Seniors Living

This chapter conducts a built form, yield and urban design analysis for a second concept development scheme - seniors living independent units (ILU's).

1.3. Study area

The site, owned by Council, was occupied by the former Gordon Bowling Club, which had continuously leased the site from 1953 until 2017. The site is currently zoned RE1 Public Recreation under the Ku-ring-gai LEP2015 and classified as 'community land'.The site is not considered appropriate for more intensive recreation uses, and its future under the current zoning is not considered the highest or best use of the site.

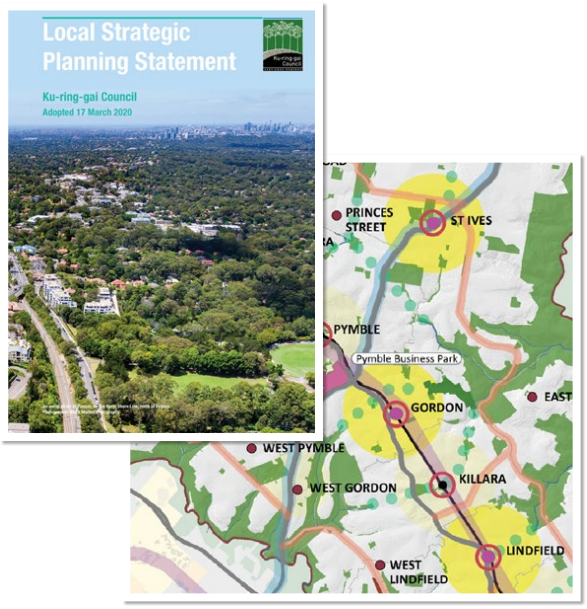
The site has an area of approximately 1.12ha, is irregular in shape with an access frontage to Pennant Avenue, and pedestrian access to the north of the site providing access to Bushlands Avenue, Gordon. An adjoining site to the west, with an area of 1638m^2 is also owned by Council and formed part of the former bowling club site at 4 Pennant Avenue. No change is sought to this parcel of land, and it will be retained as open space.

Figure 1 Aerial map of the study area and local context (aerial source: nearmap.com 2020)

1.4. Strategic review

Local Strategic Planning Statement (LSPS)

Author: Ku-ring-gai Council (2020)



Gordon is one of four Ku-ring-gai Local Centres identified in the Greater Sydney Commission's 'North District Plan'. One of the planning priortities within the Ku-ring-gai LSPS is to support the growth and revitalisation of Gordon Local Centre as the "centre for business and civic functions and as the cultural heart of Ku-ring-gai".

The LSPS identifies that the western side of Gordon has a more challenging topography which has resulted in low density residential development and dense tree canopy coverage. It notes that there has been an increase in the development of apartment buildings and town houses on the western side of the suburb in recent years, especially adjacent to the Pacific Highway.

The LSPS references how the changing age demographics of the area has resulted in different preferences for recreation and leisure. This can be seen in the declining participation rates for golf and bowling and the closure or merging of two bowling clubs across Ku-ring-gai, at Gordon and Roseville Chase.

Some of the key components identified in the LSPS for Gordon and relevant for the site at 4 Pennant Avenue include:

- "Ensure appropriate interface and separation between future development adjoining Heritage Conservation Areas and Heritage Items."
- "Locate medium density housing types within a 5min walk (400m) radius of Neighbourhood Centres serviced by major bus routes along arterial roads (subject to provision of priority bus infrastructure from Mona Vale to Macquarie Park and Dee Why to Chatswood)."
- "Maintain, upgrade and increase through block connections in both the commercial centre and through large residential blocks near the centre."

As shown in the Gordon Local Centre Stucture Plan (Figure 2) the site at 4 Pennant Avenue has been identified as providing an 'opportunity for pedestrian link". This proposed east-west connection extends from Pennant Avenue to the existing north-south link onto Bushlands Avenue.

The structure plan also illustrates the close proximity of the site to significant biodiversity and tree canopies as well as its interface with Heritage Conservation Areas. The site is south of the identified Mixed Use development zone along the Pacific Highway which is focused around the Gordon Centre.

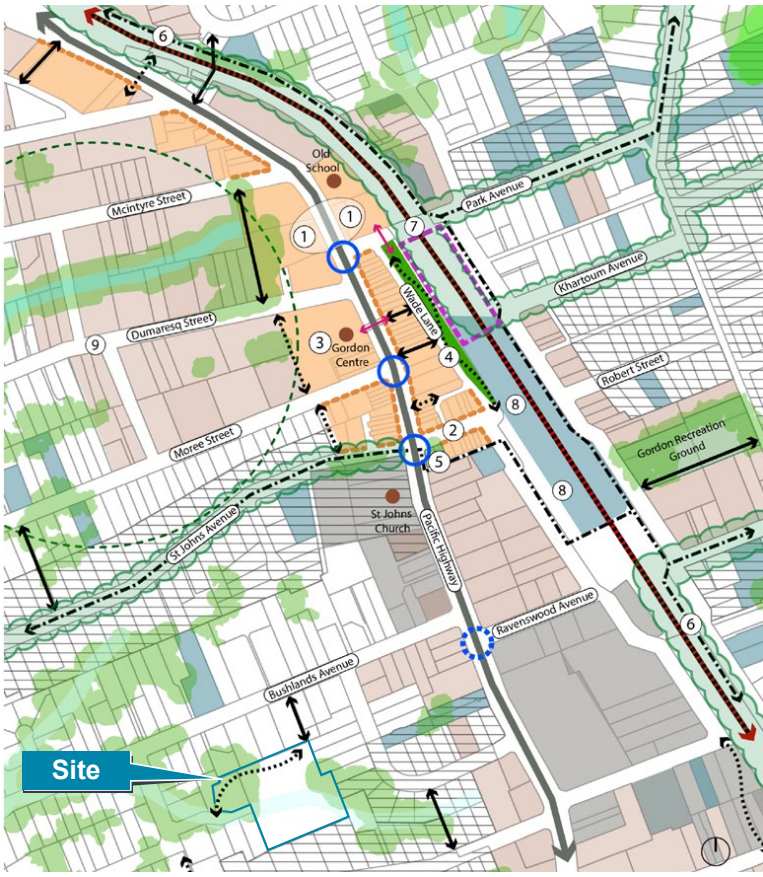
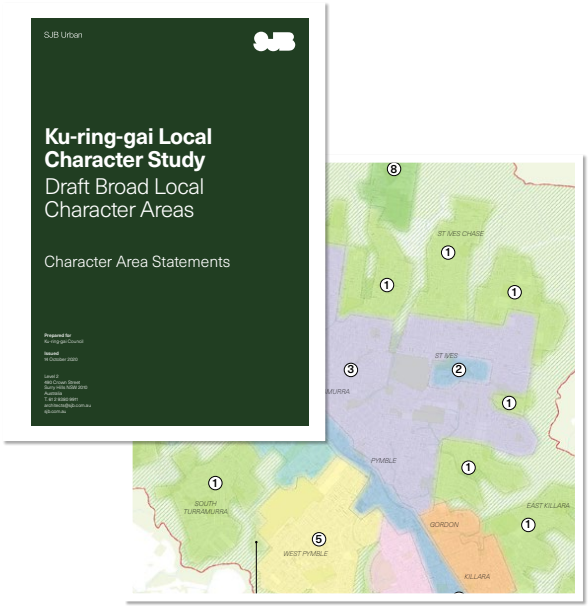


Figure 2 Gordon Local Centre Structure Plan - annotated by SGL (source: LSPS, Ku-ring-gai Council 2020)

Ku-ring-gai Local Character Study

Author: SJB Urban (2020)



A draft local character study has been prepared for the Ku-ring-gai local government area but at the time of the preparation of the report, it has not been finalised or adopted by council. It has been included as it provides useful insights into the character of the local area. The site at 4 Pennant Avenue lies within the 'Lower West' Local Character Area. This is one of 8 character areas identified in the Draft Ku-ring-gai Local Character Study (2020).

The 'Lower West' area is described as being "characterised by large single detached dwellings set out on streets laid predominantly perpendicular from the Pacific Highway. The street layout is distorted around heavily vegetated gullies and golf courses which form barriers to movement in the northern portion of the character area".

It notes that the character area includes heritage conservation zones that contain examples of Federation and Inter-war housing and subdivision including grand homes set within large lots with manicured private gardens.

Figure 3 Gordon and Central extent of Killara west of Pacific Highway - annotated by SGL (source: Ku-ring-gai Local Character Study, SJB Urban 2020)

The study lists the key characteristics of the area as:

- Streets run perpendicular to Pacific Highway
- Low density residential area with large houses
- Close to and includes multiple golf courses
- Edges to high density and low density residential, and bushland

The Ku-ring-gai Local Environmental Plan

Author: Ku-ring-gai Council (2015)

The Ku-ring-gai Local Environmental Plan (LEP) guides development and planning decisions within the local government area. An LEP is prepared by Council and approved by the State Government. Provisions such as land use zoning provide a framework for the way land can be used and seek to ensure development is done appropriately and natural resources are protected.

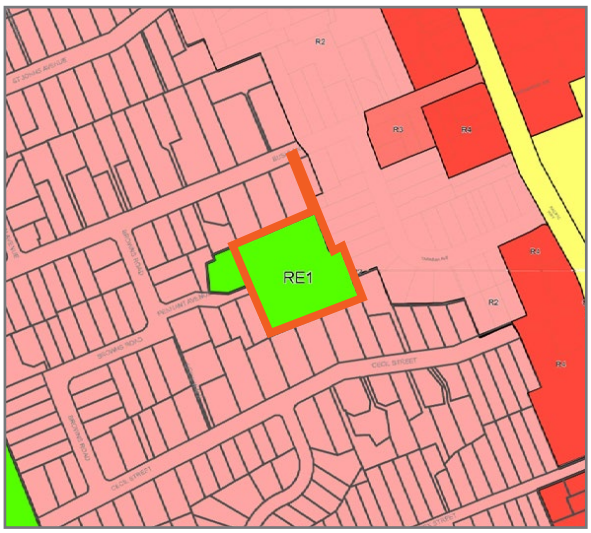
In relation to the proposed development of 4 Pennant Avenue, Gordon, the key planning controls set out within the LEP are land use zoning, limits to the permissible floor space ratio (density), minimum lot size, maximum building height and the identification of heritage listed items and conservation zones.

LEP	Site	Surrounds
Land Zoning	RE1 Public Recreation	R2 Low Density Residential
Max. FSR	N/A	0.24:1 03:1
Max. Building Height	N/A	9.5m
Min. Lot Size	N/A	840m^2
Heritage	N/A	Conservation Area to the south
Riparian Lands	Category 3a	N/A
Biodiversity	*Peripheral*	N/A

Land Use Zoning

The predominant land use zone surrounding the former bowling club site is R2 Low Density Residential. The objectives of this zone are:

- To provide for the housing needs of the community within a low density residential environment.



Land Zoning

R2 Low Density Residential
R3 Medium Density Residential
R4 High Density Residential
RE1 Public Recreation
SP2 Infrastructure
Site boundary

- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To provide for housing that is compatible with the existing environmental and built character of Ku-ring-gai.

The focus of this zoning is on the provision of residential dwelling houses, but a range of other uses are permitted with consent, including Bed and breakfast accommodation, Boarding houses, Centre-based child care facilities, Hospitals, Neighbourhood shops and Recreation areas.

Currently the former bowling club site is zoned RE1 Public Recreation, all surrounding sites are zoned R2 Low Density Residential with sites zoned R3 Medium Density and R4 High Density located along the Pacific Highway to the east. The Pacific Highway is zoned SP2 Classified Road. There is land to the south west that is zoned RE1 Public Recreation, which forms the Gordon Gold Course.

Height of Buildings

Another control set out in the LEP relates to the height of buildings permissible on the site. The objectives of setting a building height, are:

- To ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres.
- To establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity.
- To enable development with a built form that is compatible with the size of the land being developed.

Building height refers to the vertical distance from ground level (existing) to the highest point of the building, and includes roof elements.

The LEP applies a maximum building height of 9.5m across the area, with heights up to 11.5 and 17.5 for sites along the Highway. The subject site currently has no maximum building height applicable.

Maximum Building Heights

J2	9.5
L	11.5
P	17.5
	Site boundary

Floor Space Ratio

Density regulations are expressed as a floor space ratio (FSR), with the objectives of this control being:

- To enable development with a built form and density that is compatible with the size of the land to be developed, its environmental constraints and its contextual relationship
- To provide for floor space ratios compatible with a range of uses.

The LEP generally applies a ratio of 0.3 across the R2 Low Density Residential areas surrounding the subject site, with a reduced ratio of 0.24:1 within the Yarabah Heritage Conservation Area. Sites adjacent to the Highway have additional FSR, ranging up to 1.3:1. There is an additional clause that modifies this requirement, to allow for increased FSR on smaller sites. A formula governs the additional FSR applicable to sites up to 1700m^2, with sites less than 800 m^2 being able to increase their FSR up to 0.4:1. The study site has no current applicable FSR controls.

Maximum Floor Space Ratio

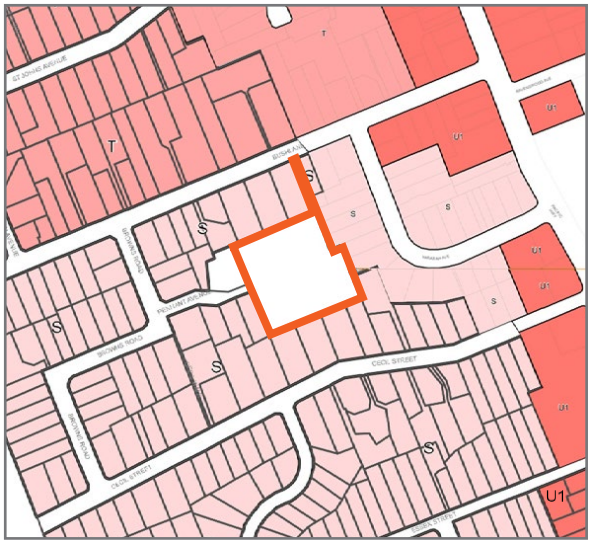
A2	0.24	J	0.8	Q	1.3
A3	0.3	K	0.85		
D	0.5		Site boundary		

Minimum Lot Size

Minimum lot size is established by the LEP and relates to the resultant size of a lot after subdivision. The objectives of this control are:

- To ensure that lot sizes and dimensions are able to accommodate development consistent with relevant development controls and minimise risk to life and property from environmental hazards, including bush fires.
- To ensure that lot sizes and dimensions allow development to be sited to protect natural or cultural features …, and provide for generous landscaping to support the amenity of adjoining properties and the desired character of the area.
- To ensure that subdivision of low density residential sites reflects and reinforces the predominant subdivision pattern of the area.

The minimum lot size for surrounding sites zoned R2 Low Density Residential is 840 m^2. Sites to the north of Bushlands Road have a minimum lot size of 930m^2 with sites fronting the Highway generally having minimum lot sizes up to 1200^2. The study site has no defined minimum lot size.



Minimum Lot Size

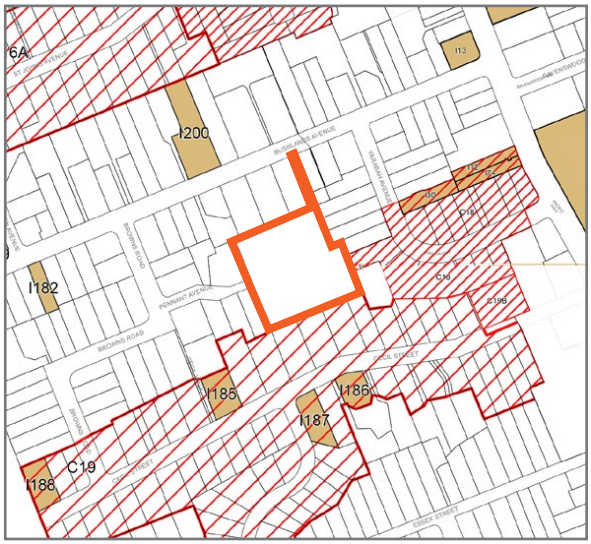
S 840
T 930
U1 1200
Site boundary

Heritage

Another key provision within the LEP is the identification of heritage items and conservation areas. There are two conservation areas that abut the site. One is the Yarabah Conservation Area, focused around the historic house ' Nebraska' located at 17 Yarabah Avenue, 16 Yarabah Avenue, which is one of the properties within this HCA, shares a rear boundary with the site.

The second HCA is the Smith Grant Conservation Area, which comprises an intact portion of the Joseph Smith 40 acre land grant. All the properties sharing the southern boundary of the site are within this HCA, although none are identified heritage items.

The interaction of the site with these conservation areas is expanded on in the associated Heritage Assessment Report produced by John Oultram Heritage and Design.



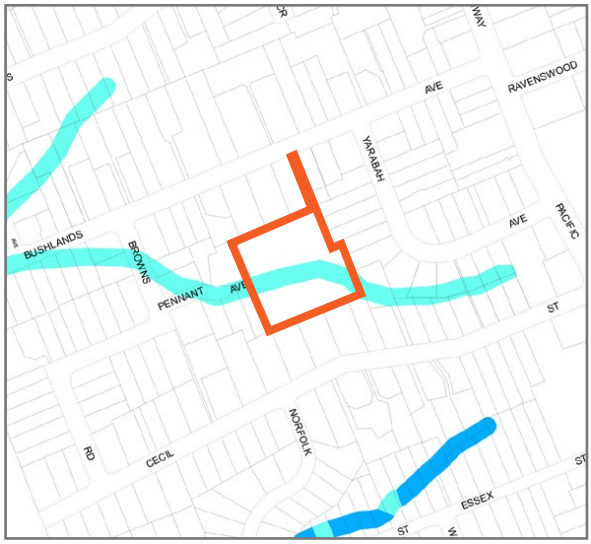
Heritage

Conservation Area - General
Item - General
Site boundary

Riparian Lands and Watercourses

There is a significant drainage corridor through the site, which is classified as a Category 3a, being a piped or channelled drainage system. This watercourse results in the potential for significant flooding risks on the site, and the need to manage water flows in the event of heavy rainfall.

Additional information relating to the drainage and flood management requirements on the site is outlined in the Flood Report produced by Daniel Fedczyna at Catchment Simulation Solutions.

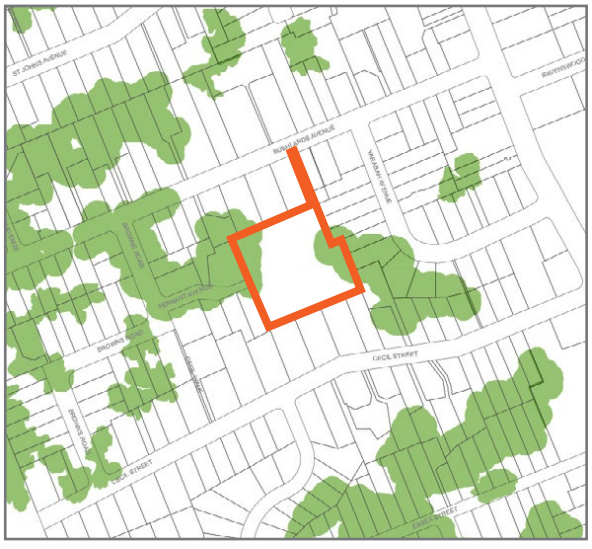


Riparian Lands and Watercourses

- Category 3
- Category 3a
- Site boundary

Terrestrial Biodiversity

The site has two pockets of identified biodiversity, one along the eastern boundary, and a section on the western boundary, that joins with the portion of the bowling club site that is being retained as open space. There are limited existing mature trees generally across the site due to its prior use, so any trees present will be important for the retention of the biodiversity of the identified areas.



Terrestrial Biodiversity

- Biodiversity
- Site boundary

The Ku-ring-gai Development Control Plan

Author: Ku-ring-gai Council (2017)

The Ku-ring-gai Development Control Plan (DCP) 2020 is 'a planning document which provides detailed guidance for the siting, design and assessment of new development'. The intent of this document is to 'provide more detailed provisions for development to achieve the purpose of the KLEP 2015'.

The framework set out in the DCP uses a place-based planning approach, which is supported by design and environmental objectives and detailed controls, and is aimed at 'achieving a high quality built environment, landscape setting and community spaces'. The DCP aims to ensure that future development responds positively to the qualities of the site and the character of the surrounding locality, and does not detract from the area's natural and cultural values. It supports the provision of development that is sustainable, appropriately designed for the climate, of high design standard, accessible and adaptable.

The first section is a general Introduction. It identifies tow the DCP is to be used and then covers general items such as the Purpose of the DCP, the land that is affected by the controls, the aims of the DCP and the relationship of the DCP to the LEP, State Environmental Planning Policies and other DCPs. There is also a Dictionary, setting out the meaning of identified terms.

Section A of the DCP applies to all development. The most relevant parts within this section, for the subject site, are Part 2 Site Analysis, Part 3 Land Consolidation and Subdivision and Part 4 Dwelling Houses.

The objectives of Part 2 Site Analysis in part are to identify existing characteristics of the subject site and the surrounding area, to ensure that any proposed development is compatible with the existing or future desired character of the area, to consider amenity of both the users of the site, and the surrounding locality and to ensure that the design response is well founded and responsive to the site context.

Part 3 deals with controls relating to Land Consolidation and Subdivision. Some of the objectives for this part of the DCP are in the support of the creation of usable and regularly shaped lots that relate to the site conditions and context, ensuring any new lot has sufficient area for private open space, vehicular access etc, providing for new subdivision patterns that respect the characteristic street address rhythm and built form spacing of its locality, and ensuring that the design of residential development encourages engagement with the surrounding community.

The controls relating specifically to Dwelling Houses are set out in Part 4. These are arranged into a series of sub-parts, addressing considerations such as site design, access and parking and building design and sustainability. The objectives of this part address a range of issues, but the most relevant for this review include the support of development which does not dominate, but harmonises with and contributes to the treed landscape and is

sympathetic to the street and locality in which it is located, and the imperative to protect and manage the impact of development on adjoining properties.

The controls relating to site design address local character, building setbacks, including front, side and rear setbacks, built upon area and landscaping with a focus on the retention or replanting of substantial trees. The identified building setbacks identify both minimum and average setbacks for the specific situation and reference the high and low site of the street in recognition of the differing needs of each scenario. The controls governing rear setbacks operate on a sliding scale related to a percentage of the sites average depth to manage the wide variety in lot size and shape.

Access and parking controls relate to the requirement for safe access to the site by vehicles, and to the requirements for provision of parking space on site for a designated number of vehicles. Building design and sustainability encompasses controls relating to the building envelope, facades, the provision of sufficient private open space, fencing and the management of waste.

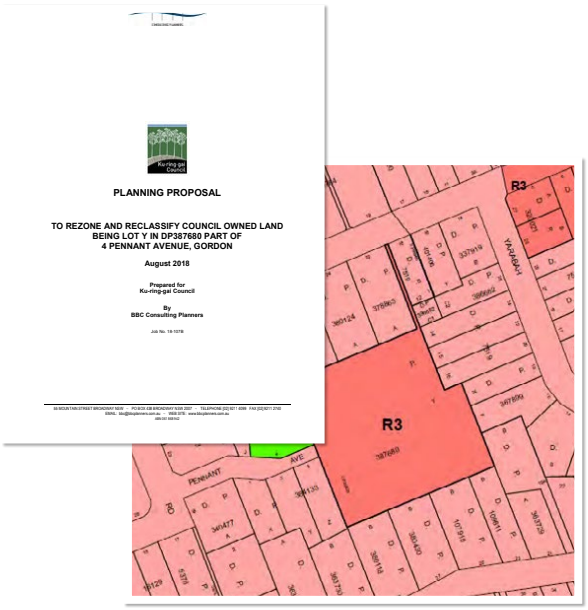
Section B focuses on controls relating to specific situations, such as specific identified sites, or areas containing specific characteristics that require protection, such as riparian lands, areas of biodiversity and sites containing heritage items, or in close proximity to heritage items or areas of heritage conservation value.

Part C sets out the further technical controls relating to elements such as site design, accessway and parking, building design and sustainability and water management which have been considered from a more impact mitigation framework previously. This part also sets out the requirements relating to notification, including advertising of development applications. These technical controls set out what is required for each of these areas to meet certain standards and requirements to ensure that all development is undertaken in accordance with various engineering requirements for safety, longevity, consistency and functionality.

Figure 4 DCP images highlighting 'qualities of visual character' (source: Ku-ring-gai DCP - Part 4A, 2020)

The Planning Proposal

Author: Ku-ring-gai Council (2020)



Planning Proposal Submission

BBC Consulting Planners were engaged in 2018 to produce a planning proposal for the site of the former bowling club, and to seek to reclassify the land from 'community land' to 'operational land'. The planning proposal was submitted to the Department of Planning, Infrastructure and Environment (DPIE) in October 2018, seeking the reclassification and to amend the LEP controls for a significant part of the former bowling club site, being Lot Y DP387680. The changes sought included rezoning of the site from RE1 Public Recreation, to R3 Medium Density Residential, with associated development standards (HOB 11.5m, FSR 0.8:1 and minimum lot size of 1200sqm).

The identified objectives and intended outcomes of the Planning Proposal were 'to:

- Rezone the site so as to enable development of the site for the purposes of residential accommodation;
- Reclassify the site to enable Council greater flexibility in dealing with the land in the future;
- Better provide for the orderly, economic and prompt development of the site; and
- Ensure that development within the Ku-ring-gai LGA appropriately supports the objectives of planning policies and plans namely Council's Community Strategic Plan, the Greater Sydney Regional Plan: A Metropolis of Three Cities and the North District Plan.'

Gateway Determination

DPIE responded to the submitted Planning Proposal with a Gateway Determination in February 2020, which requested that the proposal be amended to meet the following development standards:

- Zoning: R2 Low Density Residential
- FSR 0.3:1
- HoB 9.5 m
- Minimum lot size of 840sqm.

The controls requested by DPIE are in keeping with those operational on immediately adjacent sites. The determination also requested that additional reports and investigations be undertaken:

- Flood risk management assessment / study
- Traffic study to assess the impacts of the proposal and the capacity of the local network
- Concept development scheme demonstrating how a low-density residential development on the site would achieve appropriate setbacks, privacy and a sympathetic built form
- Heritage impact statement addressing the impact of the concept development on the adjoining heritage conservation areas and the local heritage items in the vicinity.

2. Site Analysis

2.1. Site photos

An existing pedestrian link connects the site and Bushlands Avenue to the north. Extending for around 60m, the narrow passage is limited on both sites by the fencing of neighbouring residential properties. The path slopes up towards the north.

As a result of the level difference, the properties facing surrounding streets such as Bushlands Avenue to the north and Cecil Street to the south overlook the former Gordon Bowling Club.

A significant level difference exists between the existing carpark on the north west corner of the site and the former bowling greens.

Adjoining properties to the East of the site have a lesser level difference and utilize fencing and vegetation for screening.

2.2. Local photos

The surrounding area is characterised by one and two storey detached houses, low front fences, large trees and manicured gardens.

The Gordon Golf Club is located on the western edge of Gordon about 500m to the west of the site, on Lynn Ridge Avenue.

The Cecil Street Heritage Conservation Area is located directly south of the site. Identified heritage items are located along Cecil Street and Bushlands Avenue.

Large mature trees are characteristic of the streetscapes in Gordon.

The Gordon Town Centre is located about 500m north of the site along the Pacific Highway, with a range of cafes, shops and services.

Ravenswood School for Girls is located 800m to the east of the site on the eastern side of the Pacific Highway.

Gordon Private Hospital is located 300m to the north of the site on the western side of the Pacific Highway.

The Gordon Railway Station and bus interchange is located 600m to the north of the site. Trains run along the North Shore line connecting Gordon and the Sydney CBD, Chatswood and Hornsby.

2.3. Local context

Gordon is located about 14km north of Sydney CBD, 5km north of Chatswood and 7km south of Hornsby. The area is accessible by car via the Pacific Highway and by train along the North Shore line (T1) connecting Gordon with the Sydney CBD to the south and Hornsby to the north.

Places of interest nearby include the Gordon Town Centre, Gordon Private Hospital, Ravenswood School for Girls, Gordon Golf Club, Killara Public School and Regimental Park.

Gordon is characterised by predominantly low density residential areas to the west of the Pacific Highway and east of the railway line. Commercial and retail spaces are located at Gordon Town Centre and a variety of educational and health services, as well as residential buildings of up to five storeys, are located along the Pacific Highway.

The green space options within the residential areas are mostly in the form of small parks and the Gordon Golf Club.

Streets follow the steep topography of the area creating irregular shaped and often large blocks. The Pacific Highway and railway line are physical barriers that divide the suburb of Gordon.

Figure 5 Local context map

2.4. Landscape and topography

The area is characterised by steep topography with a prominent ridge line running north to south. The Pacific Highway is location along this ridge. Two high points are located within 400m of the site, one located near the intersection of St Johns Avenue and Pacific Highway, and a second point near the intersection of Cecil Street and Pacific Highway.

The terrain slopes down to the west creating natural depressions and low points towards the Gordon Golf Club. East-west streets have a gentle slope near the golf club becoming steeper towards the ridge line.

The site is nestled in a natural depression between Bushlands Avenue and Cecil Street and slopes towards the west. Two naturally occurring overland flow paths run through the site creating potential flood areas of different depth levels across the site.

The surrounding area is populated by large mature trees, both along streets and within private lots characterising the area and screening the built form.

The site lacks any existing mature native trees, due to it's former use. There are existing trees on the boundaries, and in the adjacent open space to the west.

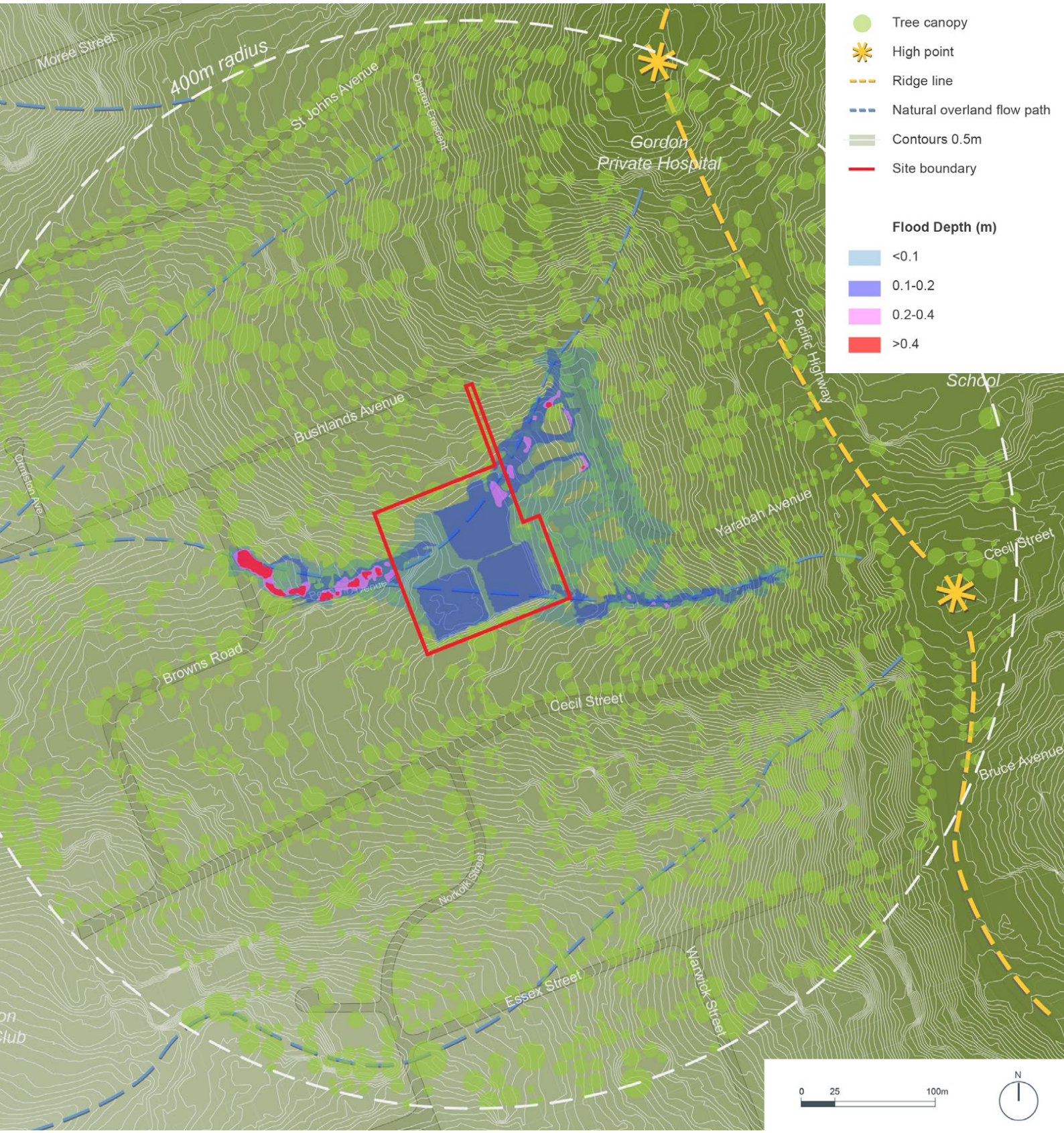
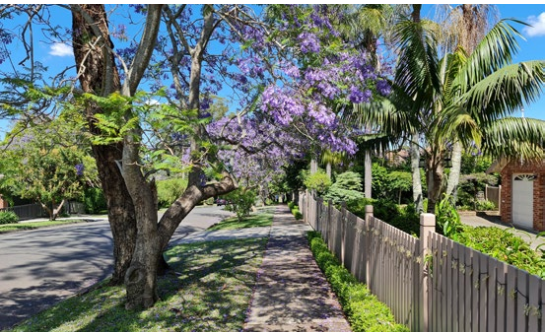


Figure 6 Landscape and topography map

2.5. Access and movement



The urban structure of Gordon is characterised by large blocks irregular in both shape and size and can be up to 700m in length. A number of cul-de-sacs can be found in the area with limited opportunities for intersections.

The Pacific Highway is a major arterial road serving the North Shore area. It creates a significant barrier separating the east and west sides due to its width, traffic levels, concrete divider and limited crossing opportunities.

The Gordon Railway Station and bus interchange is located 600m to the north of the site. Trains run along the North Shore line connecting Gordon and the Sydney CBD, Chatswood and Hornsby.

Bus services in the area are limited to the 565 bus route which only runs once per day (pm), Monday to Friday.

An unmarked cycling route along quiet streets runs past the site along Browns Road.

Footpaths are generally well maintained and are shady and attractive. Walkability in the area is challenged by the steep topography, large irregular blocks, limited number of intersections and crossing opportunities along the Pacific Highway.

The site is located in the centre of a large block. It has two access points, a vehicular access from the west off Browns Road via a cul-de-sac, Pennant Avenue, and a pedestrian only access from the north off Bushlands Avenue, via a narrow path.

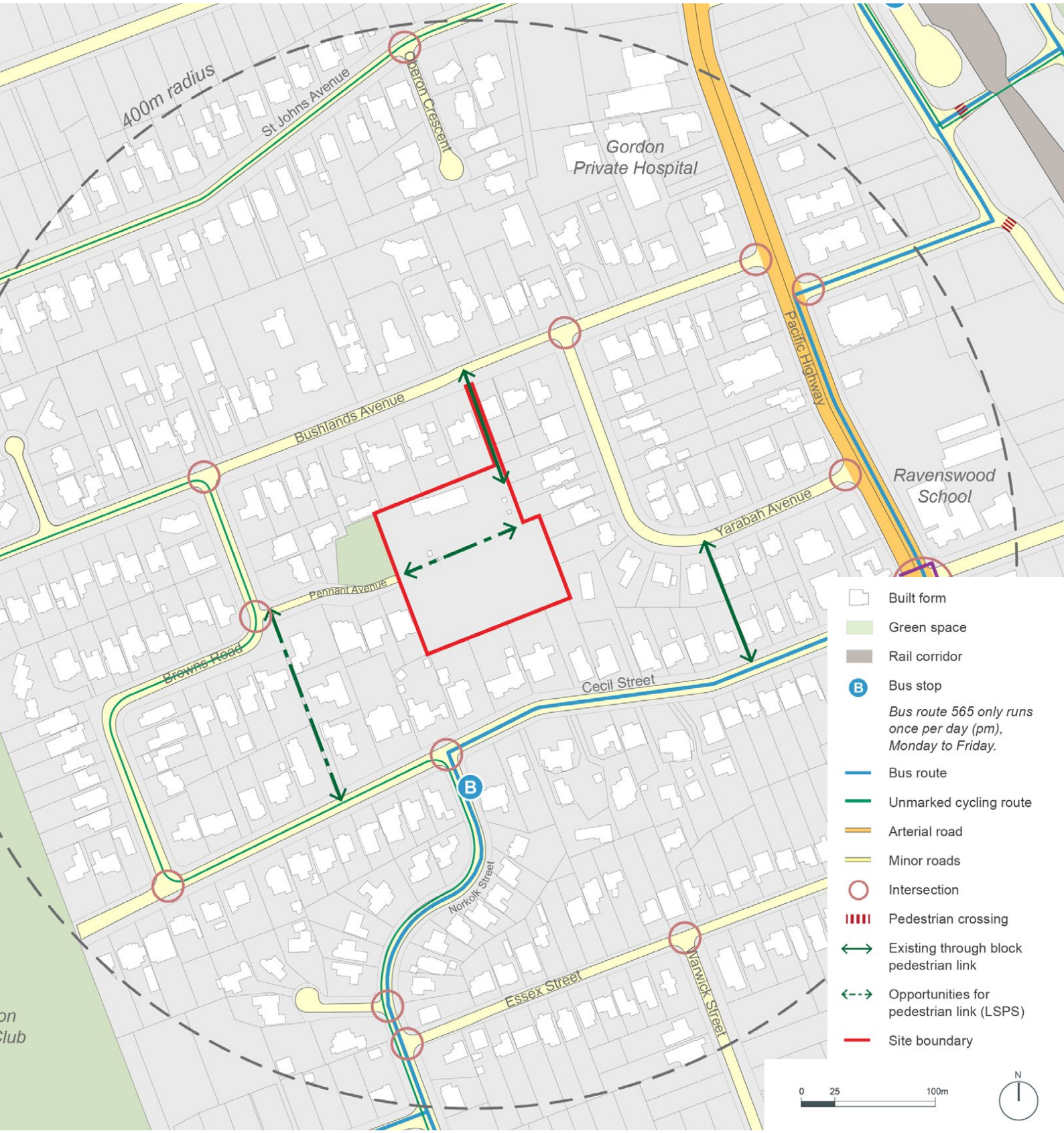


Figure 7 Access and movement map

2.6. Built form and heritage

The overall height of buildings in the area consists of one and two storeys in the form of detached houses on large plots of land with higher buildings located along the Pacific Highway which can be up to five storeys.

The Smith Grant Heritage Conservation Area is located directly south of the site and all properties along the southern boundary are within the HCA. This HCA 'has historic significance as an intact portion of the Joseph Smith 40 acre land grant'. 'The area evidences an overlay of Inter-war subdivision after an earlier land release, including the Open View Estate 1921, and the Fairmont Estate 928. The area has aesthetic significance as a resonably intact and consistent Twentieth Century development'.

The Yarabah Avenue Conservation Area is located to the east of the site, with the adjacent property at 16 Yarabah Avenue being within the HCA. This HCA 'is significant as part of a 1920s subdivision, which retains its character of predominantly single storey Inter-war housing'. There are a number of heritage items located along Cecil Street and Bushlands Avenue.

The site is surrounded by one to two storey detached houses with some utilizing the topography to manage a third storey within the height limit. As a result of the level difference, the properties along surrounding streets such as Bushlands Avenue to the north and Cecil Street to the south overlook the former Gordon Bowling Club. The height limit for properties immediately around the site is set at 9.5m by the Ku-ring-gai LEP.

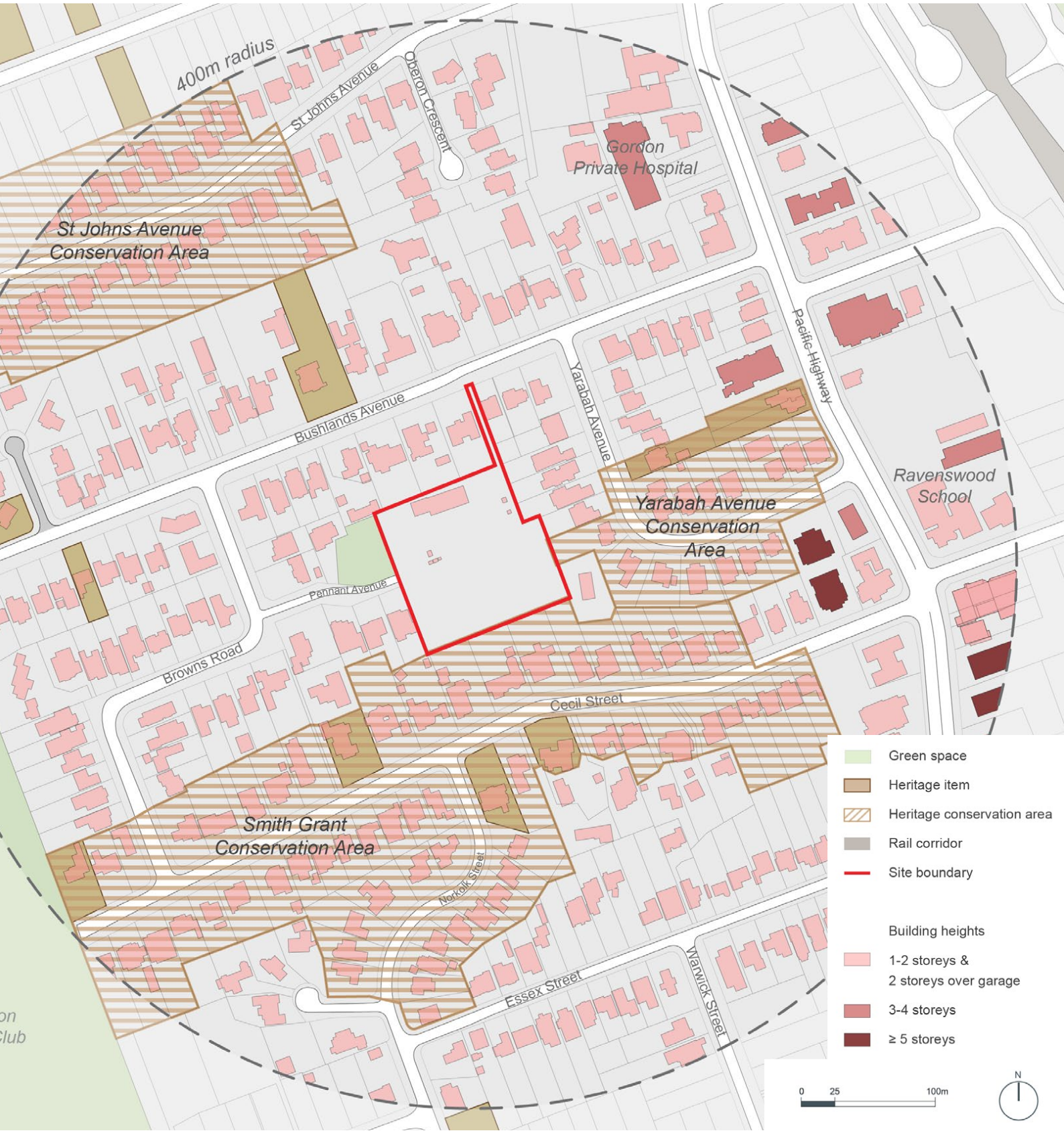


Figure 8 Built form and heritage map

2.7. Opportunities and Constraints Map

A significant constraint to the site is its location nestled in a natural occurring depression where two overland flow paths meet, creating a potential flood zone.

The terrain level difference between the site and the properties surrounding it means that many of the adjoining houses overlook the site. There is an opportunity to improve the visual privacy of existing and future residents by retaining and strengthening the landscaping along the site boundaries.

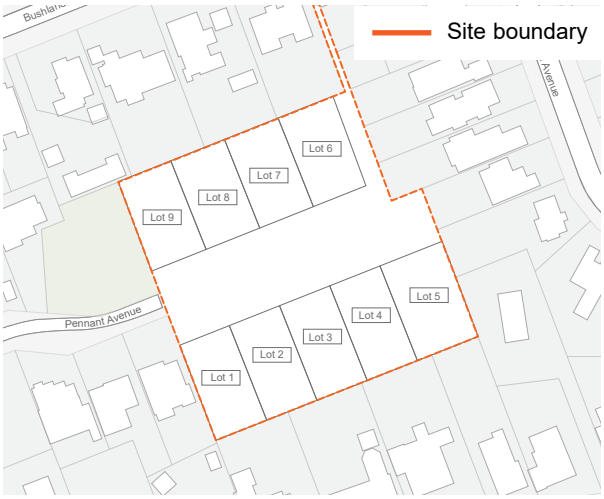
The open space located immediately adjacent to the north west of the site is home to large significant mature trees. The level difference between the site and the open space means there is an opportunity to direct views towards the dense tree canopy.

There is an opportunity to improve the amenity of the pedestrian link to the north of the site as it allows for shorter walking distances to and from Gordon Town Centre, railway station, bus interchange and services located along the Pacific Highway. The constraints for this pathway are its width, the presence of high side boundary fences to each side, and the steepness of the path.

Figure 9 Opportunities and constraints map

3. Concept Scheme 1: R2 Low Density

3.1. Introduction



In developing a concept design for the site of the former Gordon Bowling Club, the intent was to create a contextually appropriate development that would sit within this well established suburban location.

The developed masterplan shows a new loop road, developed as an extension to Pennant Ave. This road loops around a central space that operates as an on-site detention system and provides access into the depth of the site. Designed as a one way loop, the road will also be a shared surface, used by pedestrians and slow speed vehicles. All new lots have direct access of this road, and no lots require an access handle arrangement. The central location of this road, and the size of the required flood mitigation works, results in nine new lots being formed around the perimeter of the site, with each being at or above the minimum lot size of 840m^2.

The nine new lots are located to generally match the orientation of the neighbouring properties, so in almost all cases, the rear of the new lots back onto the rear of adjoining properties. The exception to this are the lots adjacent to the properties fronting Yarabah Ave, where the new lots side on to the existing rear gardens.

The significant topography that exists across the site, and falls from the east towards the western boundary, has been incorporated into the subdivision through a series of stepped levels, that move down the slope with the topography. Future development on the lots will result in stepped built form that adjusts to the slope and reinforces this characteristic of the original site.

The current levels across the site have been significantly modified from the original natural ground line, due to the need to create large, flat surfaces that were utilised as bowling greens.

The general intent in setting the new levels across the site is to reinstate the site so that the levels are compatible with the levels present on adjacent sites, so as to minimise any requirement for retaining. This is evidenced in the new sections that show the proposed ground line, against the existing (previously modified) ground line. A general sense of the possible original ground line can be gained by extrapolating between the levels present on adjoining sites, which have not been heavily modified.

3.2. Site Plan

Controls	
Site area (approx)	1.15 ha
Zoning	R2 Low Density Residential
Max. building height	9.5m
Max FSR (per lot):	0.3:1
Min lot size:	840m^2

Figure 10 Illustrative plan - low density option

3.3. Site Views

Figure 11 Indicative birds eye view

Figure 12 Indicative view east down new street

3.4. Site Sections

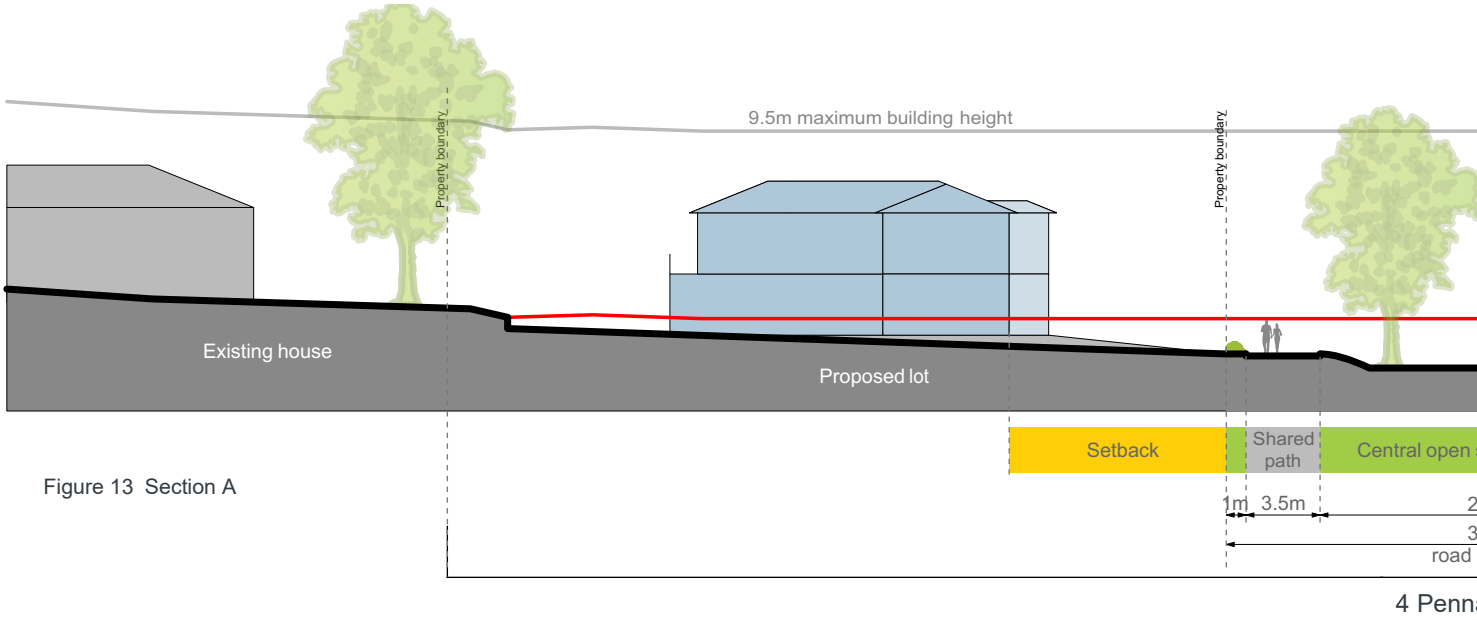


Figure 13 Section A

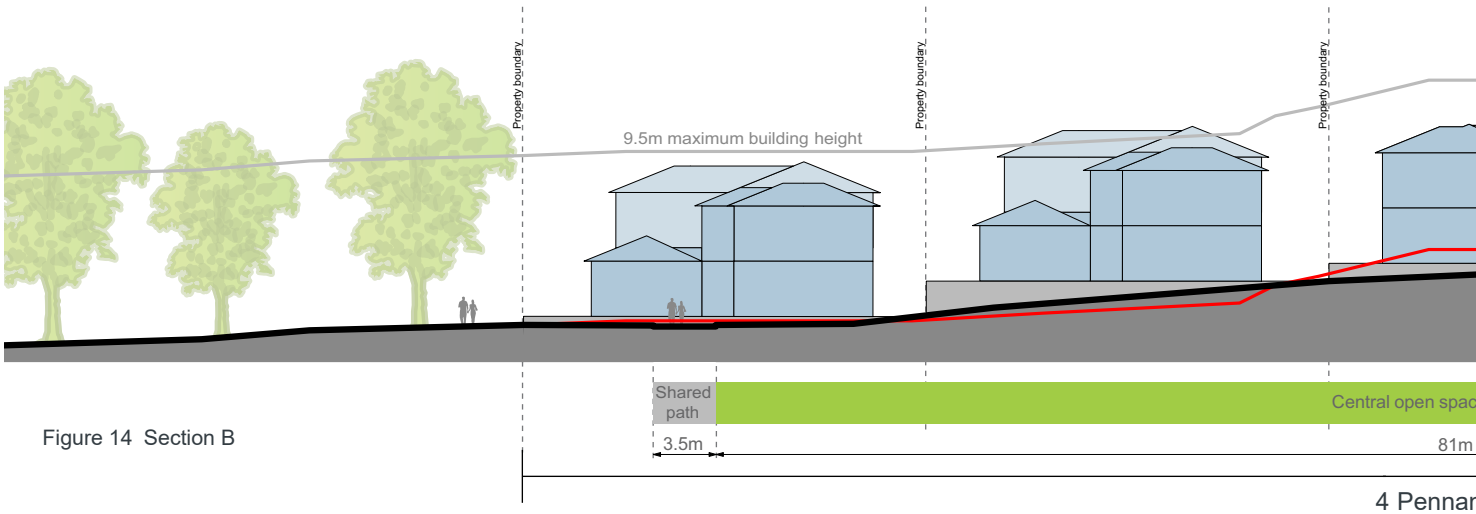
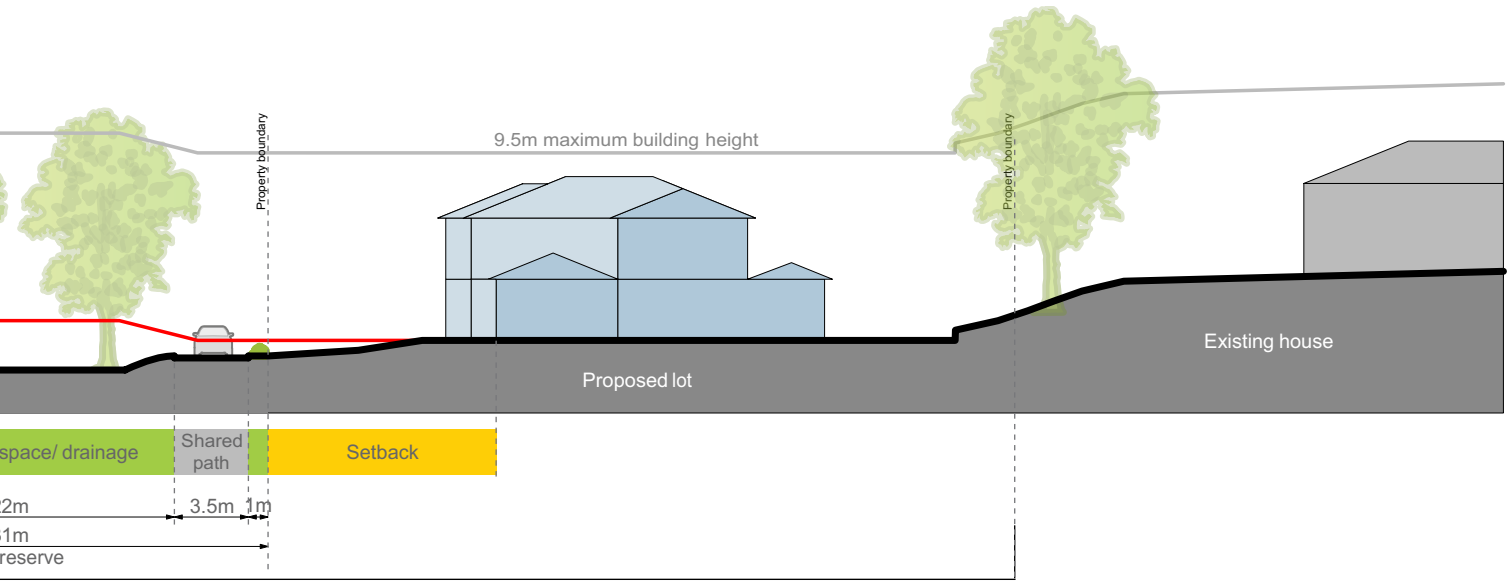
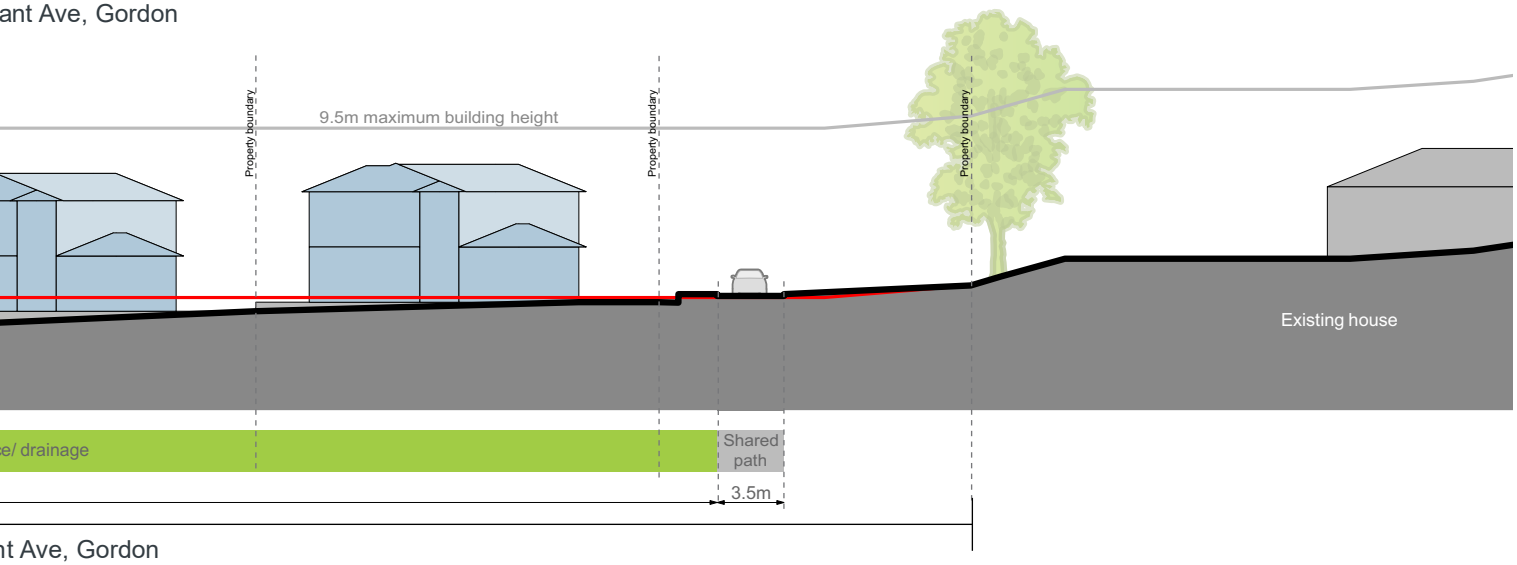


Figure 14 Section B

Figure 15 Section plan



ant Ave, Gordon

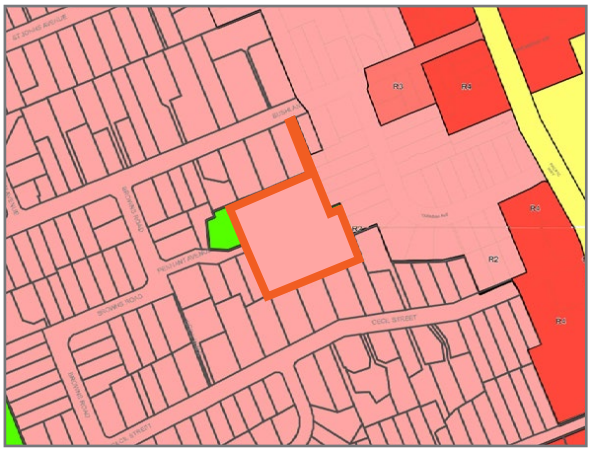


nt Ave, Gordon

Figure 16 Technical plan - low density option

3.5. Proposed LEP Controls

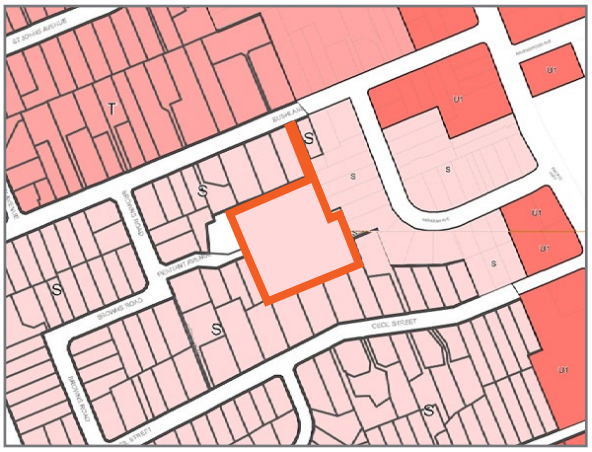
The proposed modifications to the LEP controls are in alignment with the controls operational on surrounding sites and will make the site congruous with its neighbours.



Land Zone

R2	Low Density Residential	B1	Neighbourhood Centre
R3	Medium Density Residential	E2	Environmental Conservation
RE1	Public Recreation	E4	Environmental Living
SP2	Infrastructure		Site boundary

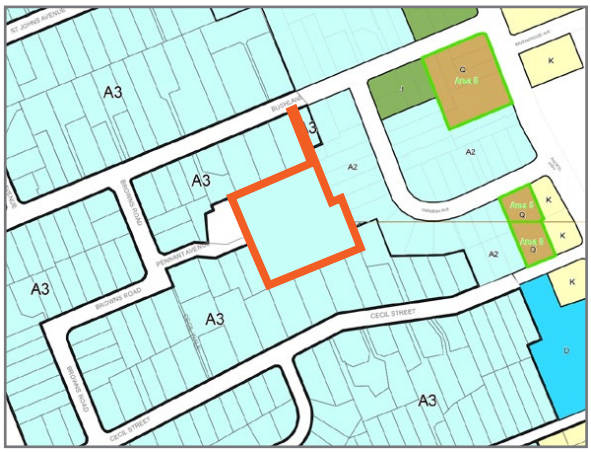
The proposed zoning is R2 Low Density Residential. Allowable uses include, but is not limited to individual dwelling houses, boarding houses and community facilities. SEPP allows Seniors Living developments.



Minimum Lot Size (sq m)

S	840
	Site boundary

The proposed minimum lot size is 840m^2 to match the controls that are operational on surrounding sites. This ensures that the lot has sufficient space for landscaping.



Maximum Floor Space Ratio

A3	0.3
I	0.75
	Site boundary

The proposed FSR for the site is 0.3:1. Clause 4.4 2(A) allows for this control to be modified for lots smaller than 1700m^2, with a sliding scale utilising a formula, that allows for an FSR of up to 0.39:1 for sites of 840m^2.

Maximum Building Heights

J2	9.5
	Site boundary

The proposed building height is 9.5m. This control allow for up to a two storey development and roof form within the allowable building height.

Figure 17 Artist Impression of Concept Design

3.7. Urban design integration

Setbacks

The integration of the new lots into the surrounding context has been designed to minimize impacts on neighbouring properties. With the centralized road system and the new lots fronting the road, there is consistency whereby the new lots back on to the rear of existing neighbouring lots.

The front setback has been set at a minimum of 9m, in line with the minimum allowable under the existing DCP for a two storey dwelling. The lots are of a good depth, being 37m to 40m, allowing ample space for landscaping to both the front and rear of the lots, with sufficient space at the rear for the required private open space.

The setbacks proposed for the side and rear of the new lots are generally in keeping with those set out in the Ku-ring-gai LEP. There is an additional 5m landscape buffer zone, that excludes excavation, proposed along the majority of the existing boundaries of the entire site. This is to ensure retention and protection of existing trees along the boundary line, both within the site and adjoining the site boundary.

A setback of 6m is proposed for the southern section of the eastern boundary. This is to be a designated drainage buffer to allow water to flow through this part of the site unimpeded. Specific controls may need to be developed to manage and maintain this area so that it functions correctly.

Privacy

Privacy concerns are alleviated by the orientation and adjacencies of the new lots to the neighbouring properties. The rear of the new lots are generally facing the rear of adjacent lots, with an exception on the east boundary, where the new lot will side on to the rear of properties facing Yarabah Ave. The substantial rear setbacks, that are 9m or greater, provide sufficient space for extensive landscaping and the planting of large canopy trees in line with the tree replenishment requirements within the DCP. The provision of new trees on the new lots will greatly improve tree coverage within the site, which is currently generally devoid of any substantial trees.

Sympathetic built form

The built-form of any development on the site is to be in keeping with contributory items in the adjacent conservation areas, and in line with the Ku-ring-gai DCP. The maximum building height will The built form of the new developments is to be in keeping with the Ku-ring-gai DCP. The maximum building height will be consistent with surrounding development, and the bulk and scale applicable to the site is also consistent, so new development of a consistent style and scale is expected. Roof forms will be pitched and hipped or gabled, with articulation via the use of some single storey elements. Materiality is to be consistent with the requirements of the DCP, and adjacent development, to maintain a cohesive character throughout this area. Cues should also be taken from contributory items within the adjoining conservation areas, to ensure the new development is sympathetic.

3.6. Yield analysis

The concept identifies a yield for the site of nine lots, with four lots being 840m^2, four lots being 850m^2 and one lot being 1030 m^2. The lots are laid out around a central green space, that acts as on-site detention to manage the drainage requirements of this watercourse and to mitigate potential flood risks. This space is terraced to hold water back in a series of smaller basins. When not inundated, this space would be accessible. Planting within this space would be focused on species able to withstand occasional flooding, and would generally be grasses and low ground cover, with trees that would mature into large specimens. To maintain sufficient water storage capacity, the planting would be sparse to avoid ‘filling up’ the capacity.

The single lane, one way road loops around this green space, providing access to all lots, and also enabling public access from the access path in the north east corner, to Pennant Ave. This road would operate as a shared surface, for both pedestrians and vehicles. All lots have direct road frontage, with access to double garages, and space for additional parking in the driveway.

3.8. Planned Future Character

Objectives

1. To ensure new built form is cohesive with the streetscape and contextual character.
2. To ensure new development responds appropriately to adjacent Heritage Conservation Areas
3. To extend Pennant Avenue to service individual lots within the site.
4. To ensure future development retains the scale and character of the surrounding low density residential developments.
5. To enhance the amenity of the streetscape and surrounding residential sites.
6. To replenish trees on a site that was previously cleared of most vegetation, including mature trees.

Controls

The site at 4 Pennant Ave, Gordon is located at the end of Pennant Ave and terminates the existing cul-de-sac. The site is the location of the former Gordon Bowling Club. The site is surrounded by low density residential housing and is west of the Pacific Highway.

The planned future character of the site is in keeping with the existing character of the surrounding context.

1. All development within the site is to be designed to support and enhance the existing character of surrounding sites. This is to be done through compliance with these site specific requirements within Part 14D of the DCP, and compliance with other relevant parts of Section A, B, C of the DCP.
2. New development is to include the following key elements:
    i. Ensure new development is cohesive with the street character along Pennant Ave, and surrounding low density residential dwellings.
    ii. Ensure new development is sympathetic to the character of adjacent Heritage Conservation Areas.
    iii. Ensure new development is appropriately sited and designed to minimise amenity and visual impacts to adjoining residential properties.
    iv. Ensure new development supports tree replenishment across the site in accordance with Part 4A.4 of the DCP.

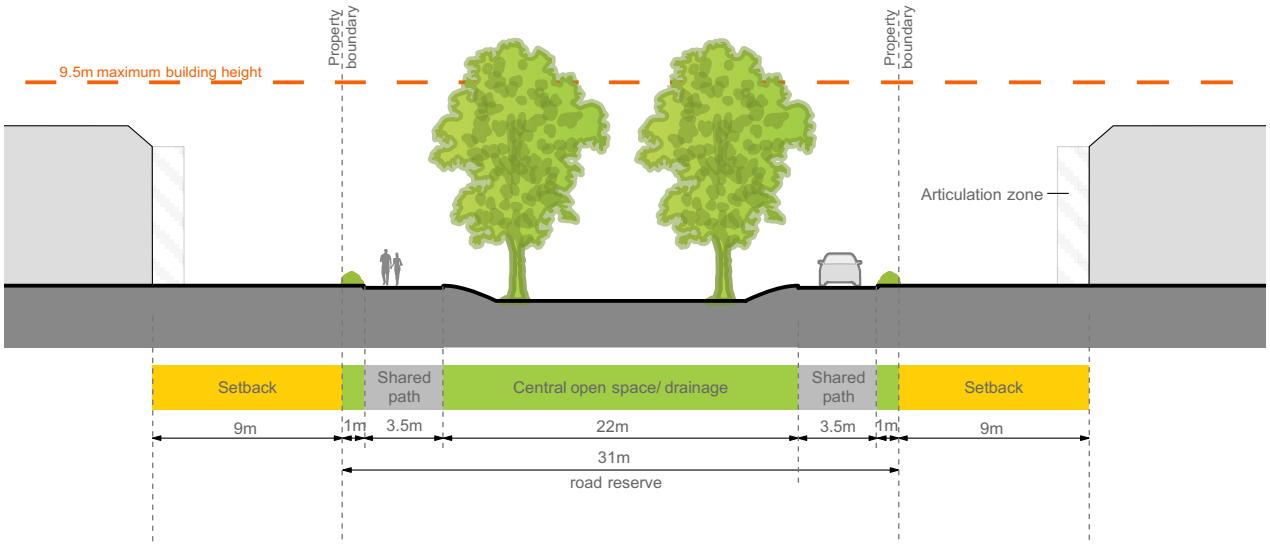


Figure 18 Section through the proposed road

3.9. Pedestrian and Vehicular Access

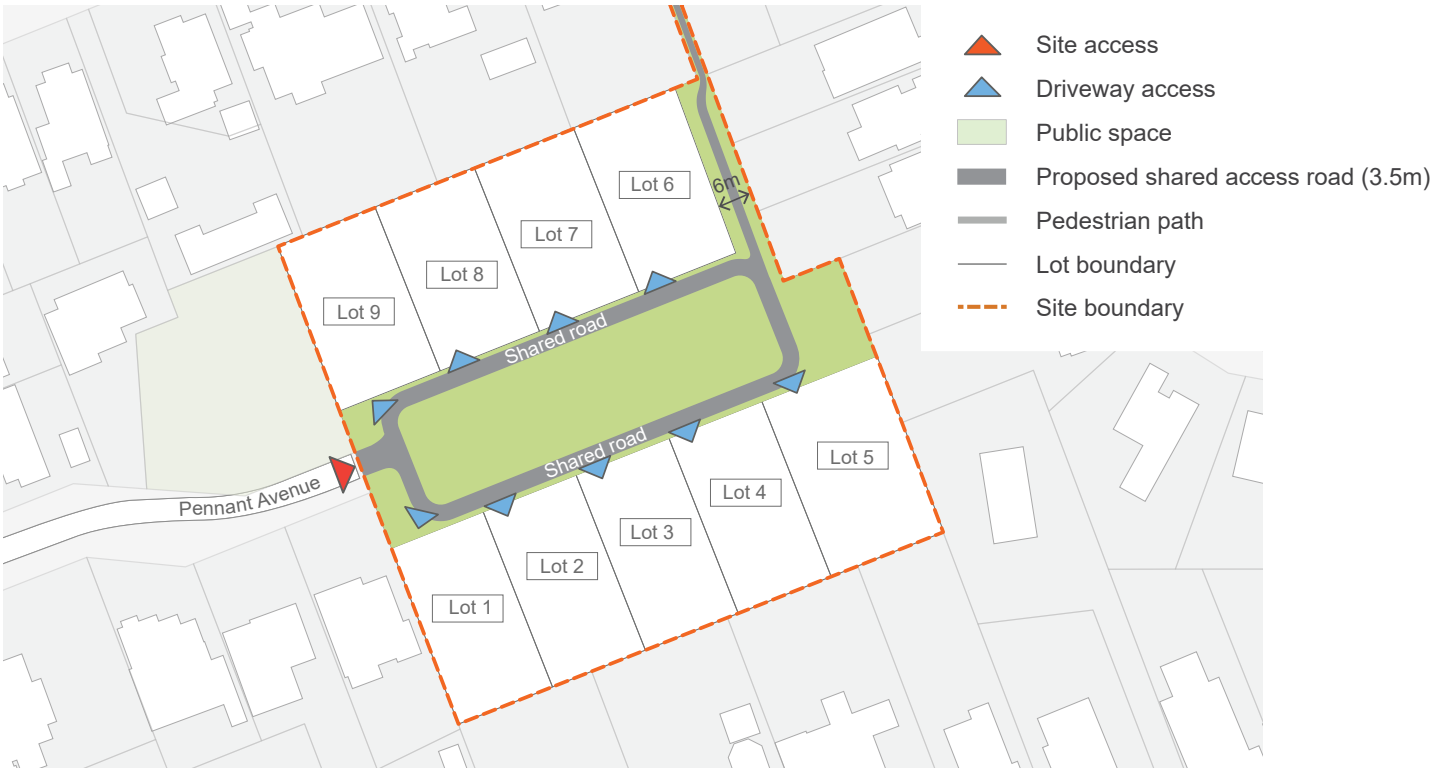


Figure 19 Plan indicating proposed vehicular and pedestrian access

Objectives

1. To provide vehicle access for residents and visitors via a new loop shared surface road.
2. To extend pedestrian amenity into and through the site, to support access to all lots.
3. To connect the existing pedestrian access path, from Bushlands Ave, to Pennant Ave.
4. To provide adequate and accessible on-site parking.

Controls

1. A shared surface access road (10km/h) is to be provided into the site, in accordance with Council's requirements. This road will be relinquished to Council upon completion of the development.
2. The new loop road is to be centrally located within the site, ensuring all new lots have a road frontage. No lot is to be developed with a battle-axe access handle.
3. The new road is to be a one-way shared surface loop, for use by pedestrians and vehicles, and sized to enable access by larger vehicles, including garbage trucks and removalist trucks.
4. Pedestrian access is to be maintained off Bushlands Avenue and provided throughout the site via the shared surface road loop.
5. A 6m wide pathway reserve is to be provided with a minimum 1.5m pathway, as an extension of the public path from Bushlands Ave to the site. This pathway will connect ot the road and enable access to Pennant Ave
6. Parking will be contained to on-site only within identified lots, no street parking will be provided.
7. Provision of all parking will be in accordance with Part 4B of the DCP.

3.10. Landscape

Figure 20 Plan indicating proposed landscape controls

Objectives

1. To retain and protect existing trees on site.
2. To protect existing trees on neighbouring sites.
3. To ensure adequate area to enable landscaping within setbacks where appropriate, in keeping with the landscaped character of the surrounding context.
4. To ensure adequate provision for drainage of potential flood water.
5. Manage movement of water across the site and ensure no additional downstream impacts.

Controls

1. Provision of a 5m wide landscape buffer as indicated.
2. Existing stone retaining wall located in Lots 1,2 and 3 is to remain.
3. Nil excavation within the landscape buffer.
4. No modification of levels within the landscape buffer.
5. Lot 5 to have a 6m wide zone for drainage as indicated
6. This drainage zone is to be developed and watered in accordance with agreed controls to ensure correct operation.
7. Provide a central terraced basin of a size and design suitable to ensure acceptable downstream impacts as per flood engineering requirements.

3.11. Building Setback

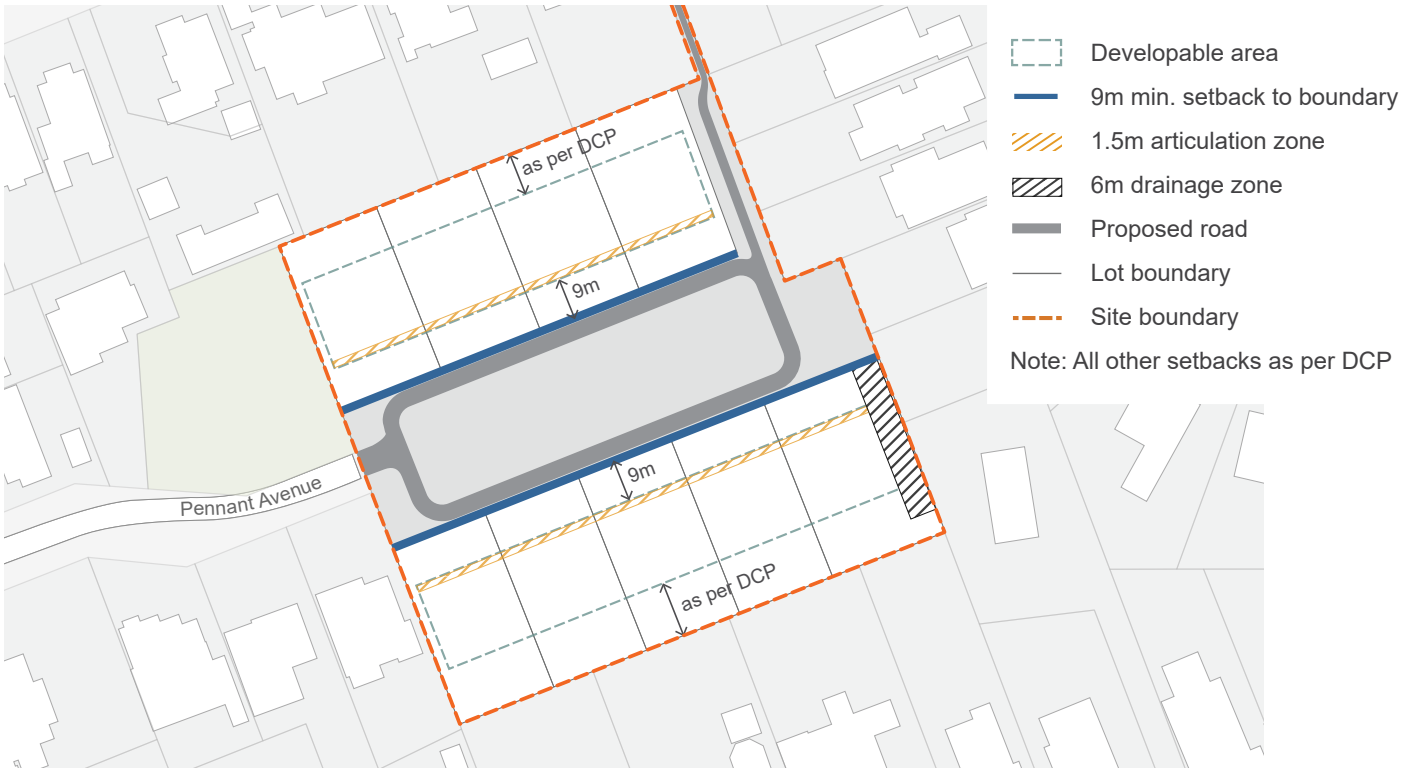


Figure 21 Plan indicating proposed DCP controls

Objectives

1. To create a cohesive streetscape with consistent building alignments and setbacks.
2. To protect the privacy and amenity of adjoining residential land uses.
3. To ensure adequate area to enable landscaping within setbacks where appropriate, in keeping with the landscaped character of the surrounding context.

Controls

1. All building setbacks are to be in accordance with Figure 21.
2. All new development is to front the new road.
3. The front setback to the new road is to be a minimum of 9m.
4. The side and rear setback are to be in accordance with Part 4A of the DCP.

3.12. Building Form

Figure 22 Plan indicating proposed built form controls

Objectives

1. To ensure that buildings are designed to be consistent with other residential dwellings in the area.
2. To ensure future development is compatible with the height and roof form of surrounding buildings to produce a cohesive streetscape and context.

Controls

1. The site layout is to minimise impact on neighbouring residential properties.
2. The siting of buildings is to demonstrate clear visible entry points to dwellings to contribute to the streetscape along the new road.
3. The style and pitch of new roofs should relate sympathetically to neighbouring buildings.
4. New development is to provide a high standard of external finishes and appropriate level of architectural detail.
5. Front setbacks are to be appropriately landscaped.

4. Concept Scheme 2: R2 Seniors Living

4.1. Built form analysis

Studio GL were also asked to create a concept design for this site under the State Environmental Planning Policy (Housing for Seniors or People with a Disability) which can apply to land that has been zoned for an urban purpose and where, as is the case of this site, dwelling-houses are permitted.

Under this State Environmental Planning Policy (SEPP) a number of different types of residential accommodation are permitted including a residential care facility, a hostel, a group of self-contained dwellings, or a combination of these. The controls for the different types of accommodation vary.
For the purposes of the concept design, and after consultation with Council, the decision was made to provide a design for self-contained dwellings (ILU's). These were considered to be most in keeping with the constraints of the location, such as the adjacent heritage conservation areas.

Under the SEPP Seniors Living Policy a “self-contained dwelling” is a dwelling or part of a building (other than a hostel), whether attached to another dwelling or not, housing seniors or people with a disability, where private facilities for significant cooking, sleeping and washing are included in the dwelling or part of the building. The dwellings also provide individual clothes washing facilities.

The dwellings are “in-fill self-care housing” which, under the SEPP Seniors Living Policy, is seniors housing on land zoned primarily for urban purposes that consists of 2 or more self-contained dwellings where none of the following services are provided on site as part of the development: meals, cleaning services, personal care, nursing care.

The scheme presented is only one possible option allowable under the SEPP. There is a possibility that other types of more intense development could be provided on the site.

There are a number of locational provisions under the SEPP that have not been tested. Compliance with these would need to be established as a part of future development application. These locational provisions relate to issues such as flooding, limited road frontage, slope across the site, limited access to transport options and proximity to heritage conservation areas.

State Environmental Planning Policy (Housing for Seniors or People with a Disability)

Author: NSW Government (2004)

The following table identifies some of the key standards within the SEPP and comments on how the current concept design meets these standards.

Part of SEPP	Relevant Detail	SGL Comment
Chapter 1 6) Land to which Policy does not apply. This Policy does not apply to (a) land described in Schedule 1 (Environmentally sensitive land), or	Schedule 1 - Environmentally sensitive land Land identified in another environmental planning instrument by any of the following descriptions or by like descriptions or by descriptions that incorporate any of the following words or expressions — (d) environment protection, (g) floodway, (h) high flooding hazard, (l) water catchment,	While this site is not identified by any of the descriptions listed in Schedule 1, parts of the site are identified in the Ku-ring-gai LEP as Riparian Lands and Watercourses and Terrestrial Biodiversity. It therefore could be argued that the site is located on land to which the policy does not apply.
Part 2 Site-related requirements	1) A consent authority must not consent to a development application made pursuant to this Chapter unless the consent authority is satisfied, by written evidence, that residents of the proposed development will have access that complies with subclause (2) to— (a) shops, bank service providers and other retail and commercial services that residents may reasonably require, and (b) community services and recreation facilities, and (c) the practice of a general medical practitioner.	The Gordon Town Centre, which is located to the north of the site along the Pacific Highway, provides access to shops, community services and a general medical practitioner.

Part 2 Site-related requirements	2) Access complies with this clause if— (a) the facilities and services referred to in subclause (1) are located at a distance of not more than 400 metres from the site of the proposed development that is a distance accessible by means of a suitable access pathway and the overall average gradient for the pathway is no more than 1:14, although the following gradients along the pathway are also acceptable— (i) a gradient of no more than 1:12 for slopes for a maximum of 15 metres at a time, (ii) a gradient of no more than 1:10 for a maximum length of 5 metres at a time, (iii) a gradient of no more than 1:8 for distances of no more than 1.5 metres at a time, or	The Gordon Town Centre starts at the corner of St Johns Rd and Pacific Highway which is a distance of 445m from the site (measured from the end of the access handle and along Bushlands Avenue and the Pacific Highway). The existing access pathway from Bushlands Road to the site has a gradient of 1:10 for a distance of 62m. This does not meet the standard.
Part 2 Site-related requirements	(b) in the case of a proposed development on land in a local government area within the Greater Sydney (Greater Capital City Statistical Area)— there is a public transport service available to the residents who will occupy the proposed development— (i) that is located at a distance of not more than 400 metres from the site of the proposed development and the distance is accessible by means of a suitable access pathway, and (ii) that will take those residents to a place that is located at a distance of not more than 400 metres from the facilities and services referred to in subclause (1), and (iii) that is available both to and from the proposed development at least once between 8am and 12pm per day and at least once between 12pm and 6pm each day from Monday to Friday (both days inclusive), and the gradient along the pathway from the site to the public transport services (and from the public transport services to the facilities and services referred to in subclause (1)) complies with subclause (3), or	Bus route 565 only runs once per day (pm), Monday to Friday. The bus stop is within 400m of site.

Key Requirements		Concept Design
Schedule 3 Standards concerning accessibility and useability for hostels and self-contained dwellings **Part 1 Standards applying to hostels and self-contained dwellings**		
Slope	(2) If the whole of the site does not have a gradient of less than 1:10— (a) the percentage of dwellings that must have wheelchair access must equal the proportion of the site that has a gradient of less than 1:10, or 50%, whichever is the greater, and (b) the wheelchair access provided must be by a continuous accessible path of travel (within the meaning of AS 1428.1) to an adjoining public road or an internal road or a driveway that is accessible to all residents. (3) Common areas Access must be provided in accordance with AS 1428.1 so that a person using a wheelchair can use common areas and common facilities associated with the development.	General gradient across site is 1:15. Detailed design could be required to confirm compliance with this standard. Access to common areas to be determined at detailed design to AS1428.1.
Car Parking	If car parking (not being car parking for employees) is provided — (a) car parking spaces must comply with the requirements for parking for persons with a disability set out in AS 2890, and (b) 5% of the total number of car parking spaces (or at least one space if there are fewer than 20 spaces) must be designed to enable the width of the spaces to be increased to 3.8 metres, and	All units in the concept design have a 3.5m wide garage and a single car space in front of the garage. All non-garage car spaces can be increased to 3.8m wide by incorporating the pathway to the front door into the width, which would then be 5.1m.

Bedroom	At least one bedroom within each dwelling must have — (a) an area sufficient to accommodate a wardrobe and a bed sized as follows— (ii) in the case of a self-contained dwelling—a queen-size bed, and	All units in the concept design have a ground floor bedroom able to accommodate a queen size bed.
Bathrooms	(1) At least one bathroom within a dwelling must be on the ground (or main) floor and have the following facilities arranged within an area that provides for circulation space for sanitary facilities in accordance with AS 1428.1	All units in the concept design have one bathroom on the ground floor and sufficient space for this to be accessible.
Part 2 Additional standards for self-contained dwellings		**Concept Design**
17 Access to kitchen, main bedroom, bathroom and toilet	In a multi-storey self-contained dwelling, the kitchen, main bedroom, bathroom and toilet must be located on the entry level.	All units in the concept design have a kitchen, main bedroom, bathroom and toilet must be located on the entry level.

Key Requirements		Concept Design
Part 4 Development standards to be complied with **Division 1 General**		
40 Development standards—minimum sizes and building height	(1) General A consent authority must not consent to a development application made pursuant to this Chapter unless the proposed development complies with the standards specified in this clause. (2) Site size The size of the site must be at least 1,000 square metres. (3) Site frontage The site frontage must be at least 20 metres wide measured at the building line. (4) Height in zones where residential flat buildings are not permitted If the development is proposed (a) the height of all buildings in the proposed development must be 8 metres or less, and Note. Development consent for development for the purposes of seniors housing cannot be refused on the ground of the height of the housing if all of the proposed buildings are 8 metres or less in height. See clauses 48 (a), 49 (a) and 50 (a). (b) a building that is adjacent to a boundary of the site (being the site, not only of that particular development, but also of any other associated development to which this Policy applies) must be not more than 2 storeys in height, and Note. The purpose of this paragraph is to avoid an abrupt change in the scale of development in the streetscape. (c) a building located in the rear 25% area of the site must not exceed 1 storey in height.	(1) The concept design complies with the standards. (2) The site is 11,500m^2. (3) The site frontage to Pennant Avenue is currently 9.1m. Detailed design of the connection to the site to Pennant Avenue could amend this to be compliant. (4) (a) All buildings are less than 8m high. (4) (b) All buildings are not more than 2 storeys in height. (4) (c) All buildings located in the rear 25% of individual lots do not exceed 1 storey in height.

Part 4 Development standards to be complied with Division 4 Self-contained dwellings		
50 Standards that cannot be used to refuse development consent for self-contained dwellings	A consent authority must not refuse consent to a development application made pursuant to this Chapter for the carrying out of development for the purpose of a self-contained dwelling (including in-fill self-care housing and serviced self-care housing) on any of the following grounds— (a) building height: if all proposed buildings are 8 metres or less in height (and regardless of any other standard specified by another environmental planning instrument limiting development to 2 storeys), (b) density and scale: if the density and scale of the buildings when expressed as a floor space ratio is 0.5:1 or less, (c) landscaped area: if— (i) in the case of a development application made by a social housing provider—a minimum 35 square metres of landscaped area per dwelling is provided, or (ii) in any other case—a minimum of 30% of the area of the site is to be landscaped, (d) Deep soil zones: if, in relation to that part of the site (being the site, not only of that particular development, but also of any other associated development to which this Policy applies) that is not built on, paved or otherwise sealed, there is soil of a sufficient depth to support the growth of trees and shrubs on an area of not less than 15% of the area of the site (the deep soil zone). Two thirds of the deep soil zone should preferably be located at the rear of the site and each area forming part of the zone should have a minimum dimension of 3 metres,	(a) All buildings are less than 8m high. (b) The density of the concept design is 0.22:1 which is less than 0.5:1. (c) 62% of the site is to be landscape area which is more than the 30% minimum landscaped area. (d) Well over 15% of the site is a deep soil zone with a minimum area of 3m. Two thirds of the deep soil zone is not located at the rear but the standards express this as a preference not a requirement.

50 Standards that cannot be used to refuse development consent for self-contained dwellings (cont)	(e) solar access: if living rooms and private open spaces for a minimum of 70% of the dwellings of the development receive a minimum of 3 hours direct sunlight between 9am and 3pm in midwinter, f) private open space for in-fill self-care housing: if— (i) in the case of a single storey dwelling or a dwelling that is located, wholly or in part, on the ground floor of a multi-storey building, not less than 15 square metres of private open space per dwelling is provided and, of this open space, one area is not less than 3 metres wide and 3 metres long and is accessible from a living area located on the ground floor, and (ii) in the case of any other dwelling, there is a balcony with an area of not less than 10 square metres (or 6 square metres for a 1 bedroom dwelling), that is not less than 2 metres in either length or depth and that is accessible from a living area, Note. The open space needs to be accessible only by a continuous accessible path of travel (within the meaning of AS 1428.1) if the dwelling itself is an accessible one. See Division 4 of Part 4 (h) parking: if at least the following is provided— (i) 0.5 car spaces for each bedroom where the development application is made by a person other than a social housing provider, or (ii) 1 car space for each 5 dwellings where the development application is made by, or is made by a person jointly with, a social housing provider.	(e) In the current concept design 11 out of 17 of the dwellings have living rooms that receive the minimum 3 hours of sunlight. This is just below 70%. This standard could be met during detailed design. (f) an open space of at least 15 square metres is provided and, of this open space, one area is not less than 3 metres wide and 3 metres long and is accessible from a living area located on the ground floor. (h) at least 0.5 car spaces for each bedroom is provided. As the ILUs are 3 bedrooms 1.5 spaces are required. This has been provided as one space in front of the garage and a single garage.

4.2. Site Plan

Controls	
Site area (approx)	1.15 ha
Zoning	R2 Low Density Residential
Max. building height	8.0m (as per SEPP)
Max FSR (per lot):	0.5:1

Figure 23 Illustrative plan - low density option

4.3. Site Sections

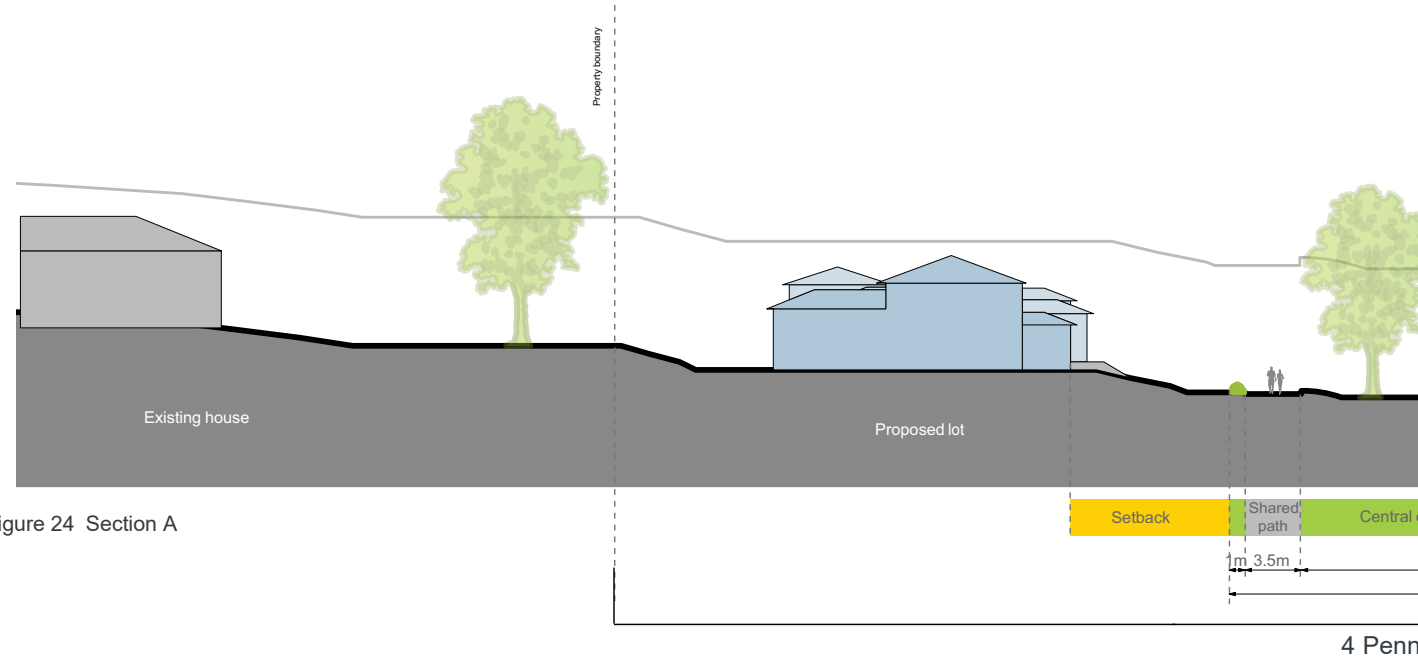


Figure 24 Section A

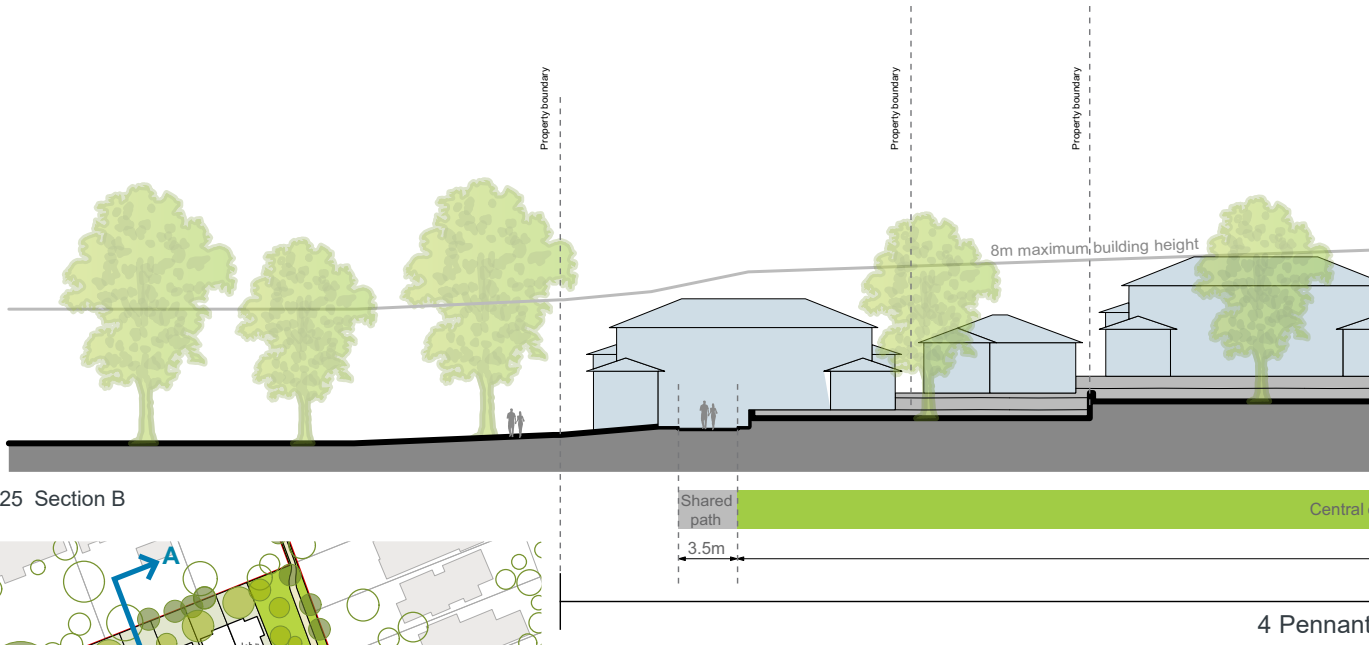
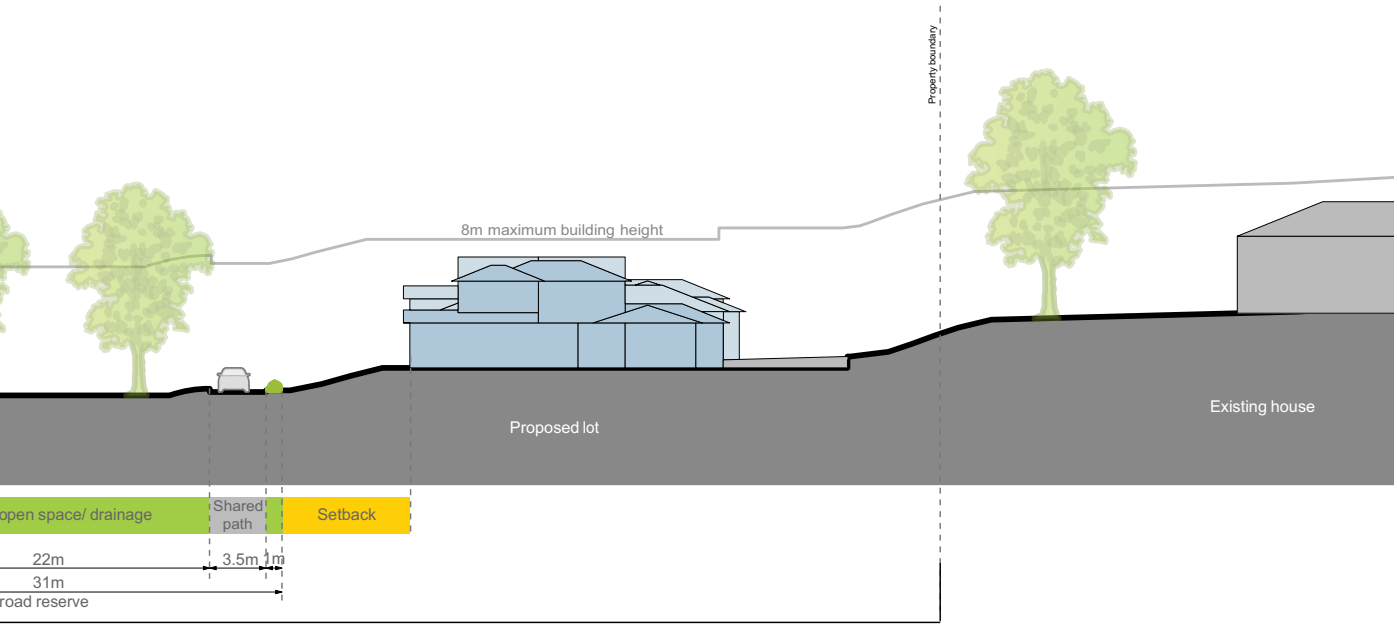
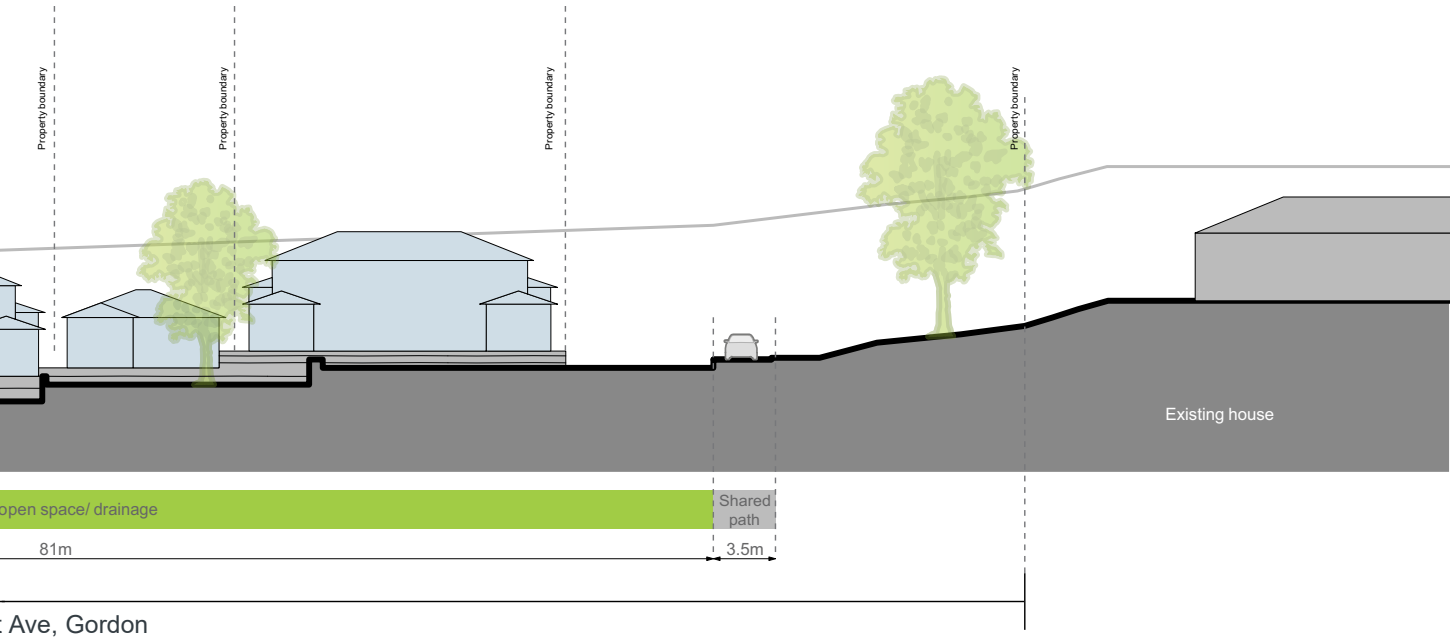


Figure 25 Section B

Figure 26 Section plan



nant Ave, Gordon



t Ave, Gordon

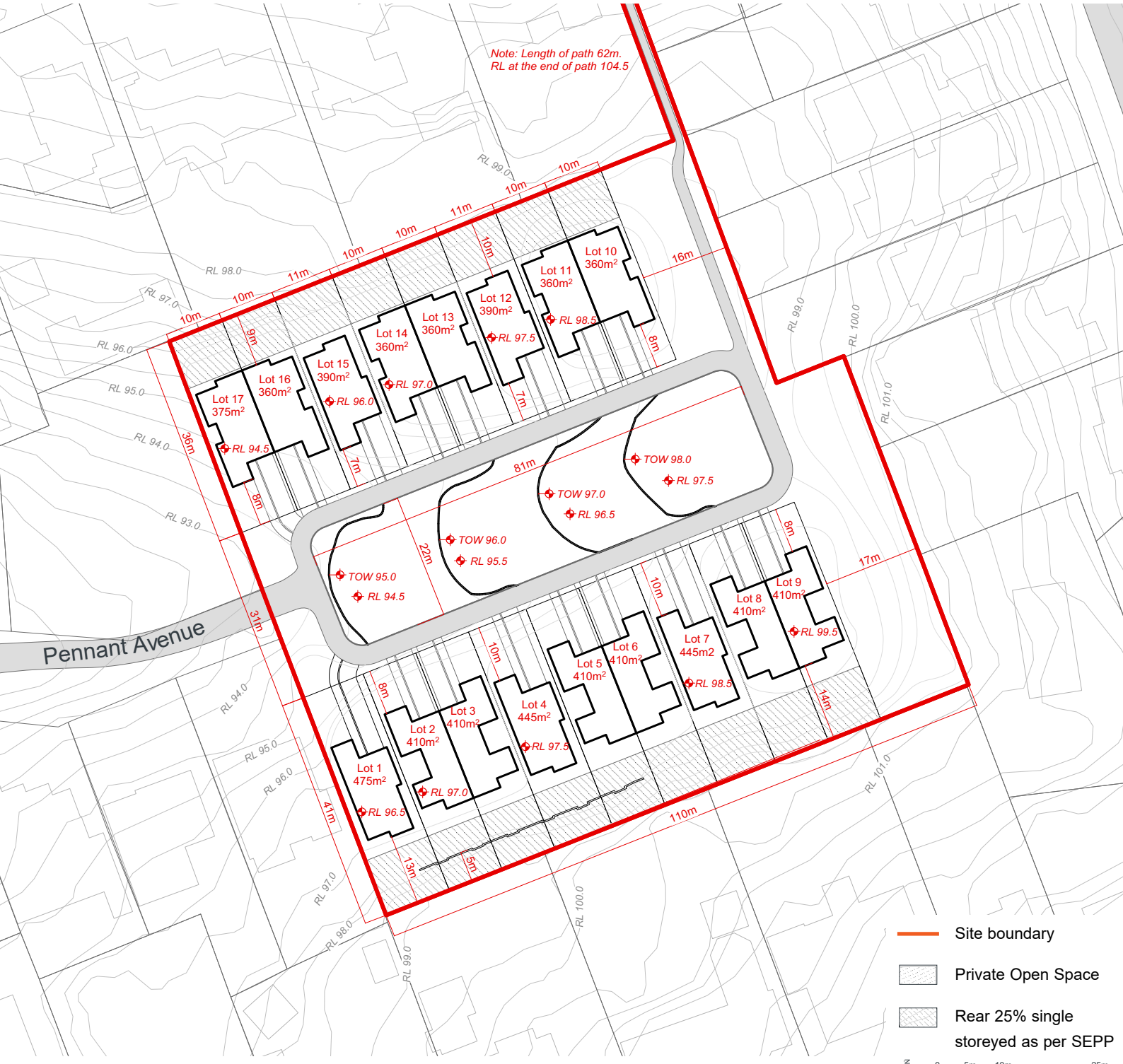


Figure 27 Technical plan - low density option

4.4. Site Views

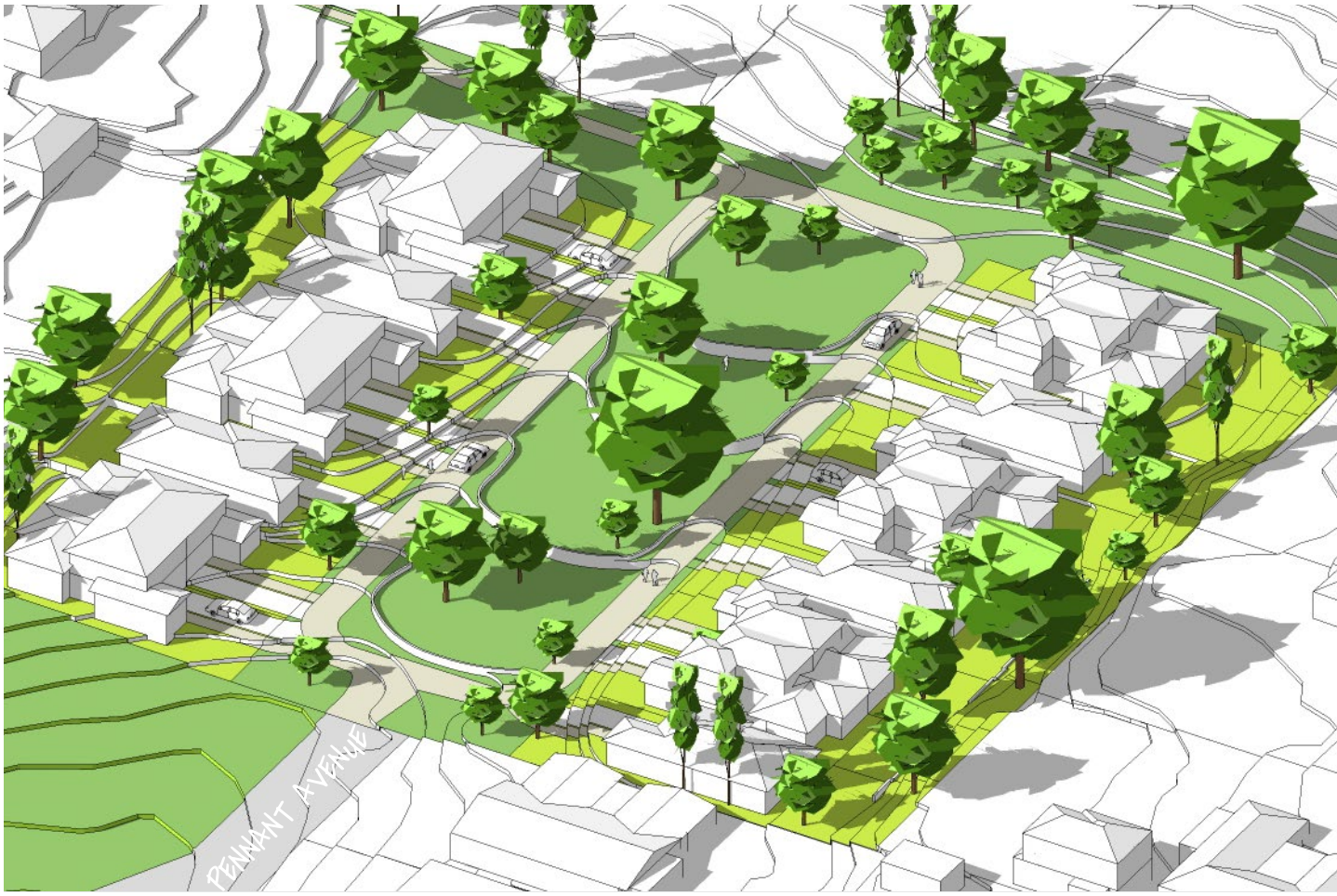


Figure 28 Indicative birds eye view

Figure 29 Indicative view east down new street

Figure 30 Artist Impression of Concept Design

Annexure One

1. Detached - Type A
2. Detached - Type B
3. Detached - Type C

This page is intentionally left blank.

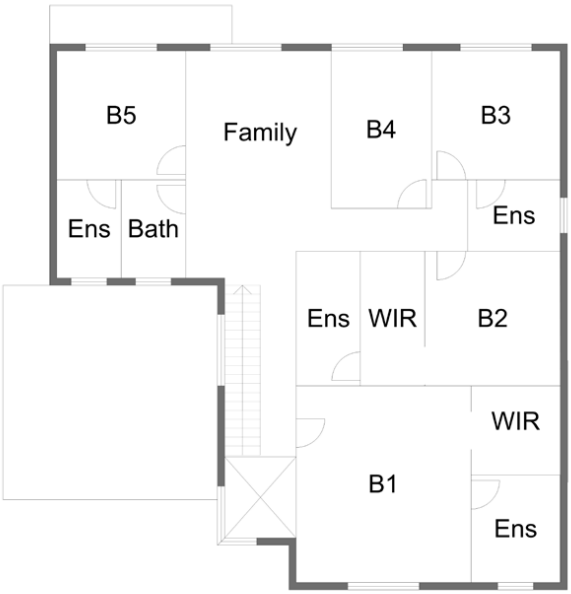
1. Detached - Type A

Lot information

Lot:	3 8 9
Lot area (min):	840 m²
Access:	single access, single frontage
Total GFA:	330 m²
Achieved density:	0.39:1 FSR
Site coverage:	38%

Figure 31 Indicative 3D view - Detached A (Lot 1)

Ground Floor Plan



Note: Side and Rear Setbacks are in accordance with the DCP

Upper Floor Plan

Figure 32 Detached Type A - Floor Plans

2. Detached - Type B

Lot information

Lot:	1 2 4 6 7
Lot area (min):	840 m²
Access:	single access & frontage
Total GFA:	330 m²
Achieved density:	0.39:1 FSR
Site coverage:	36%

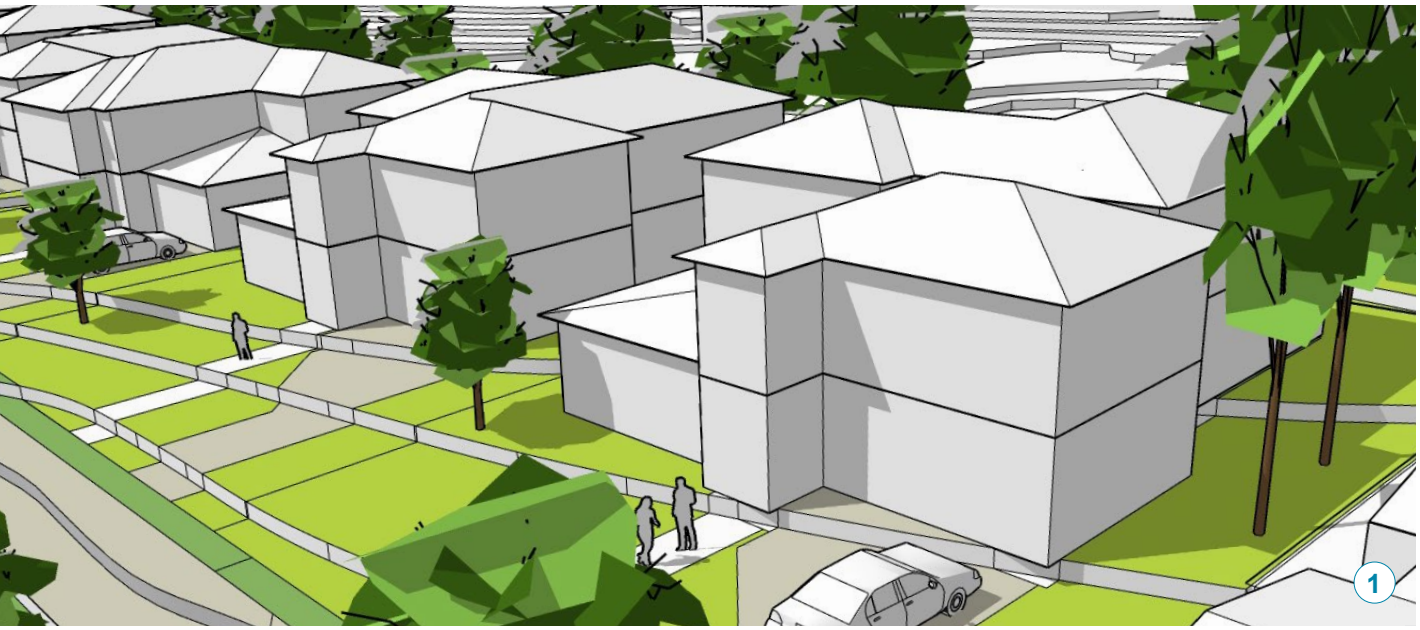
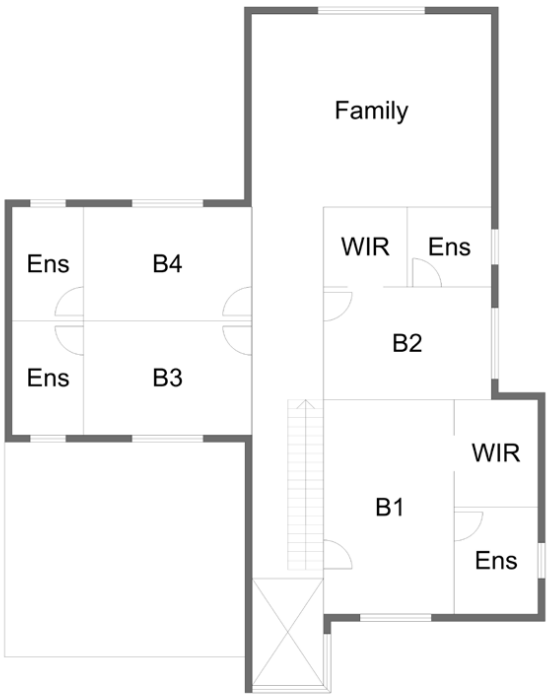


Figure 33 Indicative 3D view - Detached B (Lot 2)

Ground Floor Plan

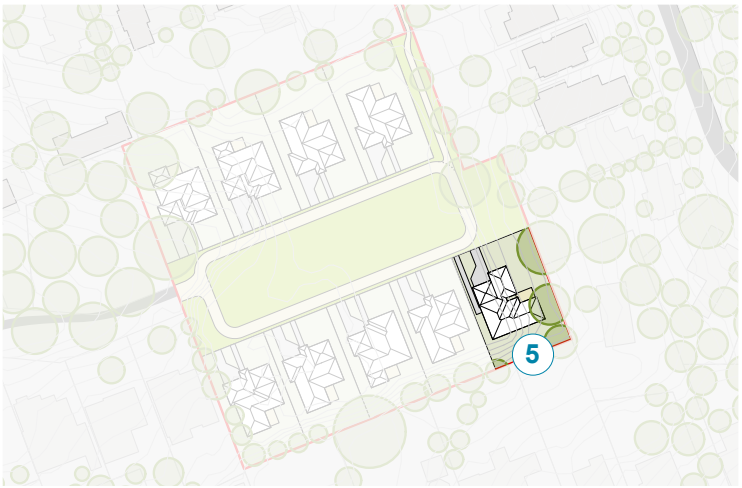


Note: Side and Rear Setbacks are in accordance with the DCP

Upper Floor Plan

Figure 34 Detached Type B - Floor Plans

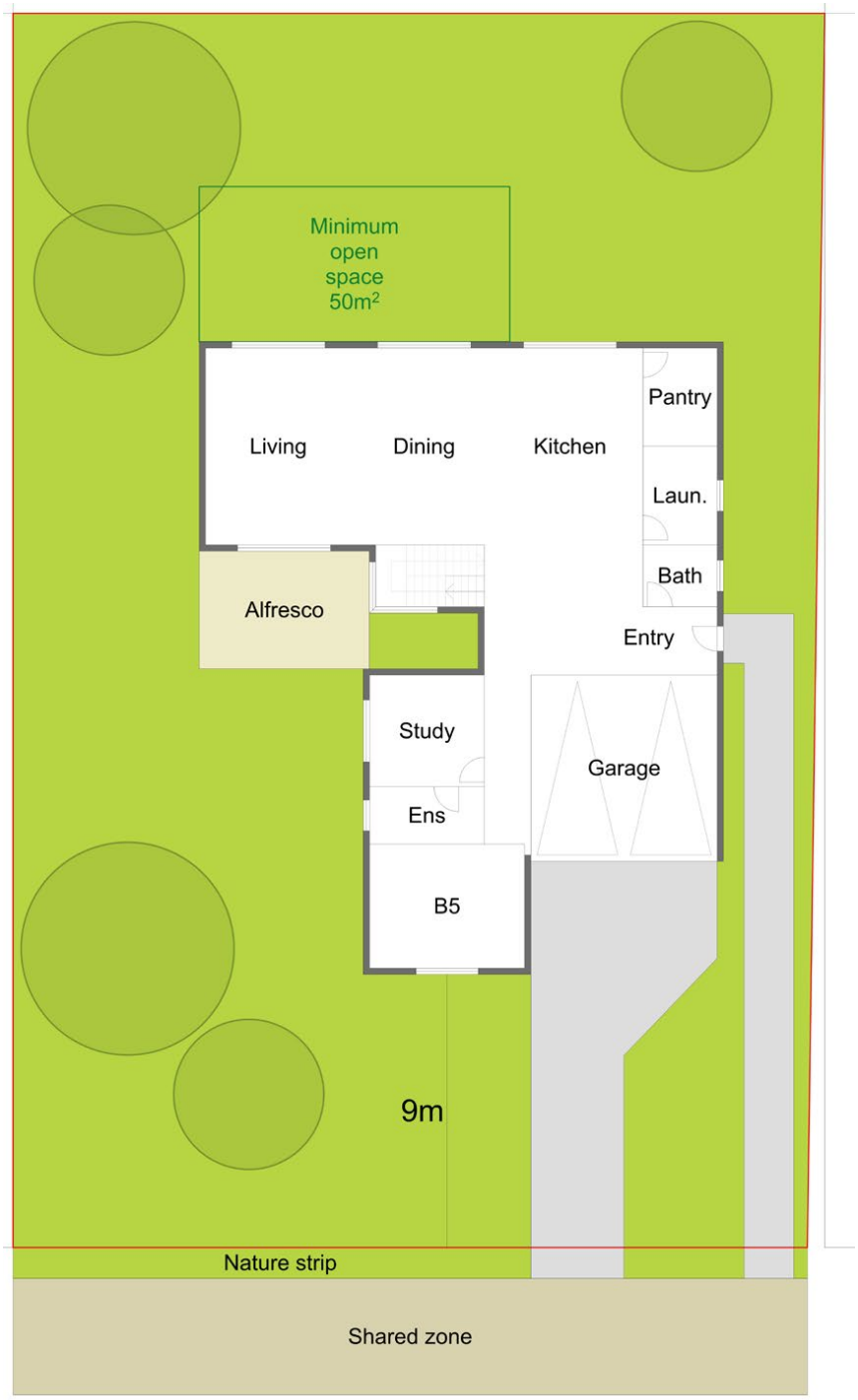
3. Detached - Type C

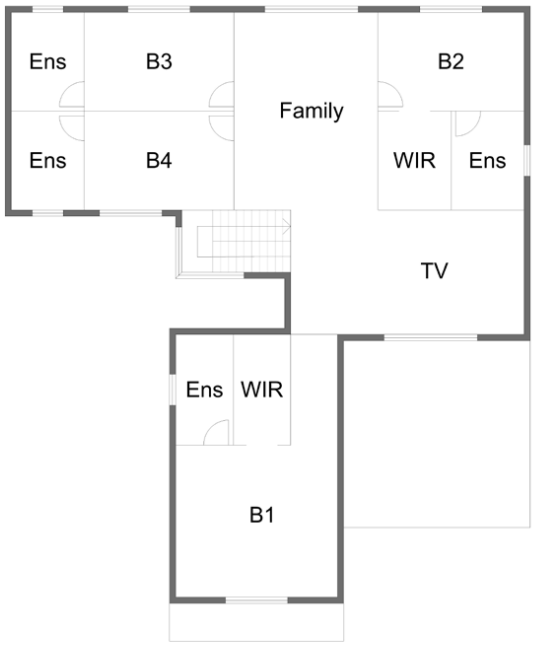


Lot information

Lot:	5
Lot area (min):	1030 m^2
Access:	single access & frontage
Total GFA:	376 m^2
Achieved density:	0.36:1 FSR
Site coverage:	33%

Figure 35 Indicative 3D view - Detached C (Lot 5)





Note: Side and Rear Setbacks are in accordance with the DCP

Ground Floor Plan

Upper Floor Plan

Figure 36 Detached Type C - Floor Plans

Annexure Two

1. Semi detached (Type A)
2. Villas (Type B)
3. Semi detached (Type C)

This page is intentionally left blank.

1. Semi detached (Type A)

Lot information

Lot:	10 11 13 14 16 17
Lot area:	360 m^2 minimum
Access:	single access & frontage
Total GFA:	157 m^2
Achieved density:	0.44:1 FSR maximum
Site coverage:	48% maximum

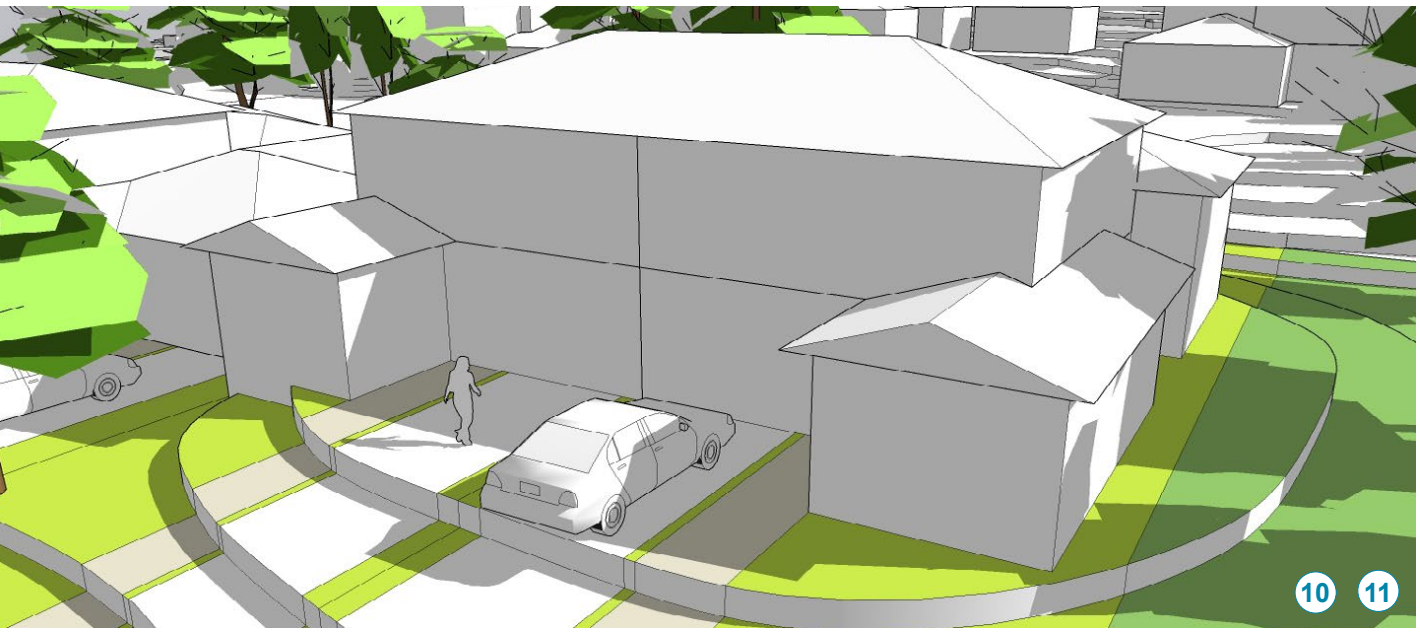


Figure 37 Indicative 3D view - Detached A (Lot 1)

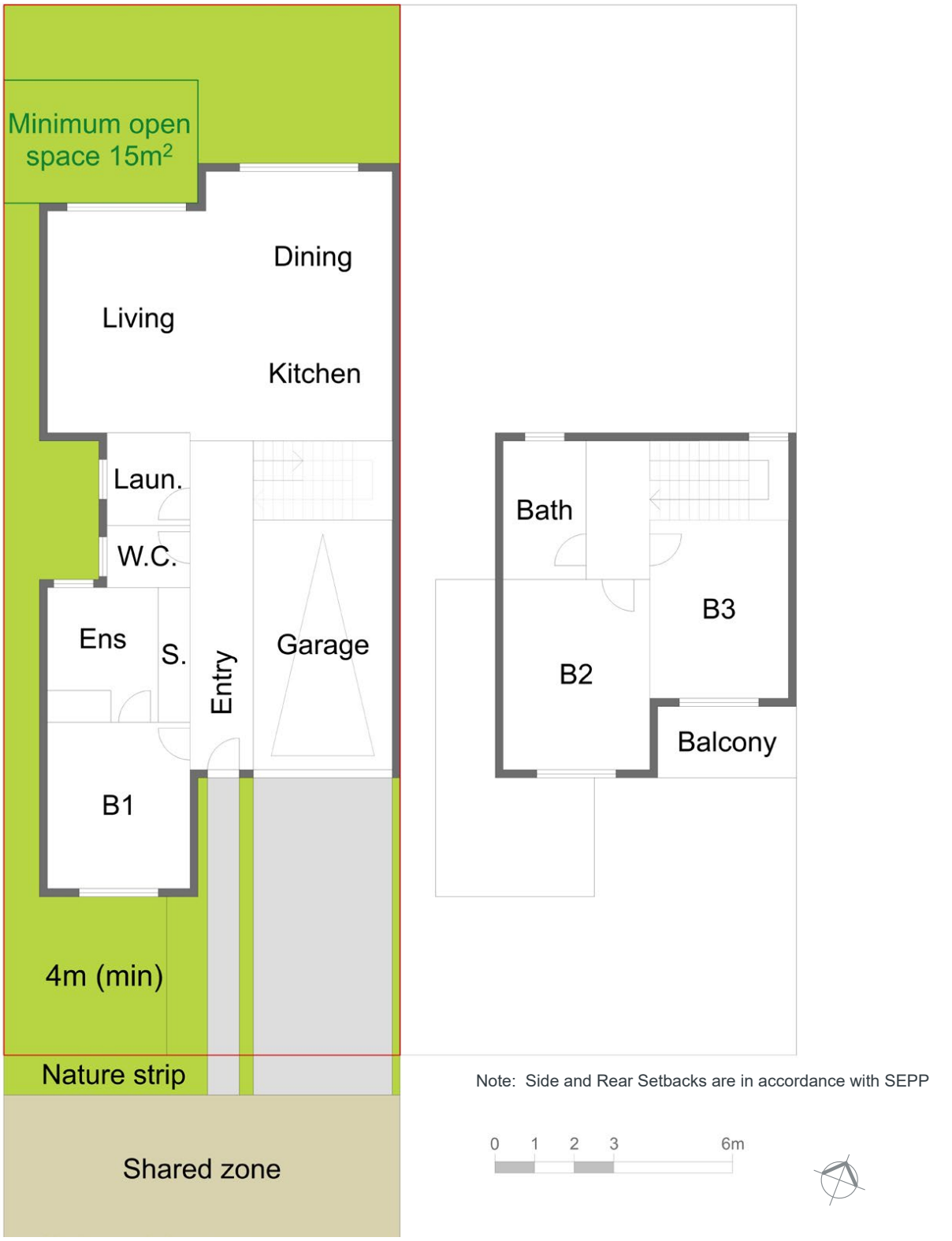
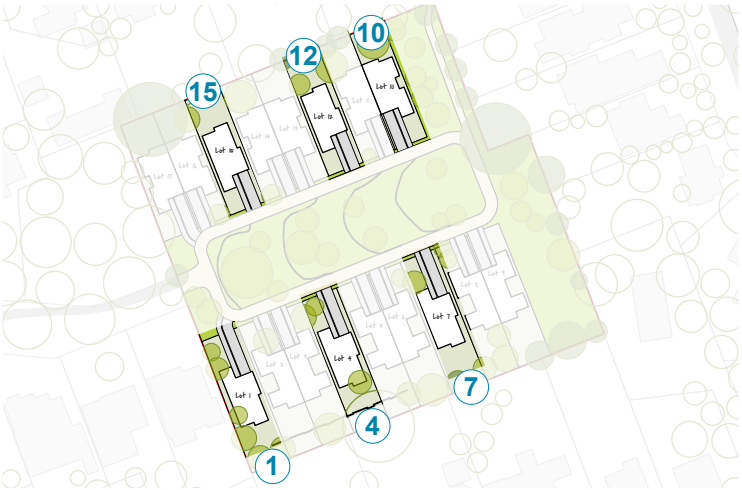


Figure 38 Seniors Living Type A - Floor Plans

2. Villas (Type B)



Lot information

Lot:	1 4 7 10 12 15
Lot area:	360 m² minimum
Access:	single access & frontage
Total GFA:	105 m²
Achieved density:	0.29:1 FSR maximum
Site coverage:	48% maximum

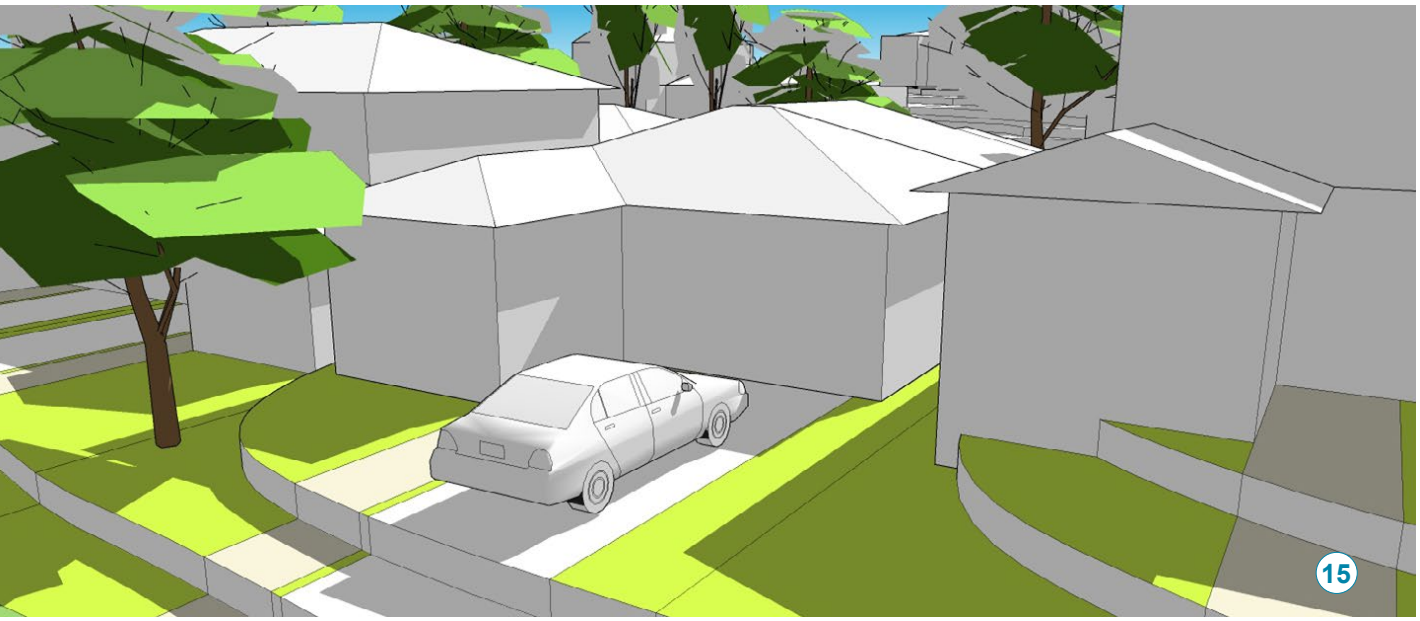
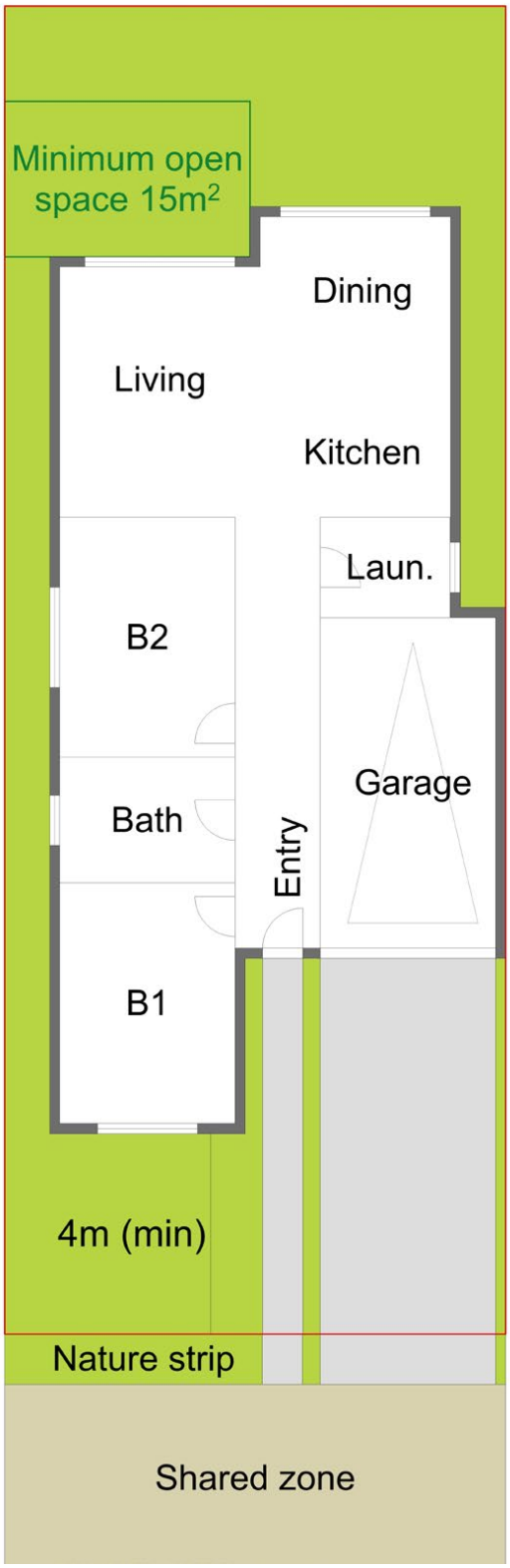


Figure 39 Indicative 3D view - Detached A (Lot 1)



Ground Floor Plan

Note: Side and Rear Setbacks are in accordance with SEPP

0 1 2 3 6m

Figure 40 Seniors Living Type A - Floor Plans

3. Semi detached (Type C)

Lot information

Lot:	2 3 5 6 8 9
Lot area:	410 m² minimum
Access:	single access & frontage
Total GFA:	148 m²
Achieved density:	0.36:1 FSR maximum
Site coverage:	40% maximum

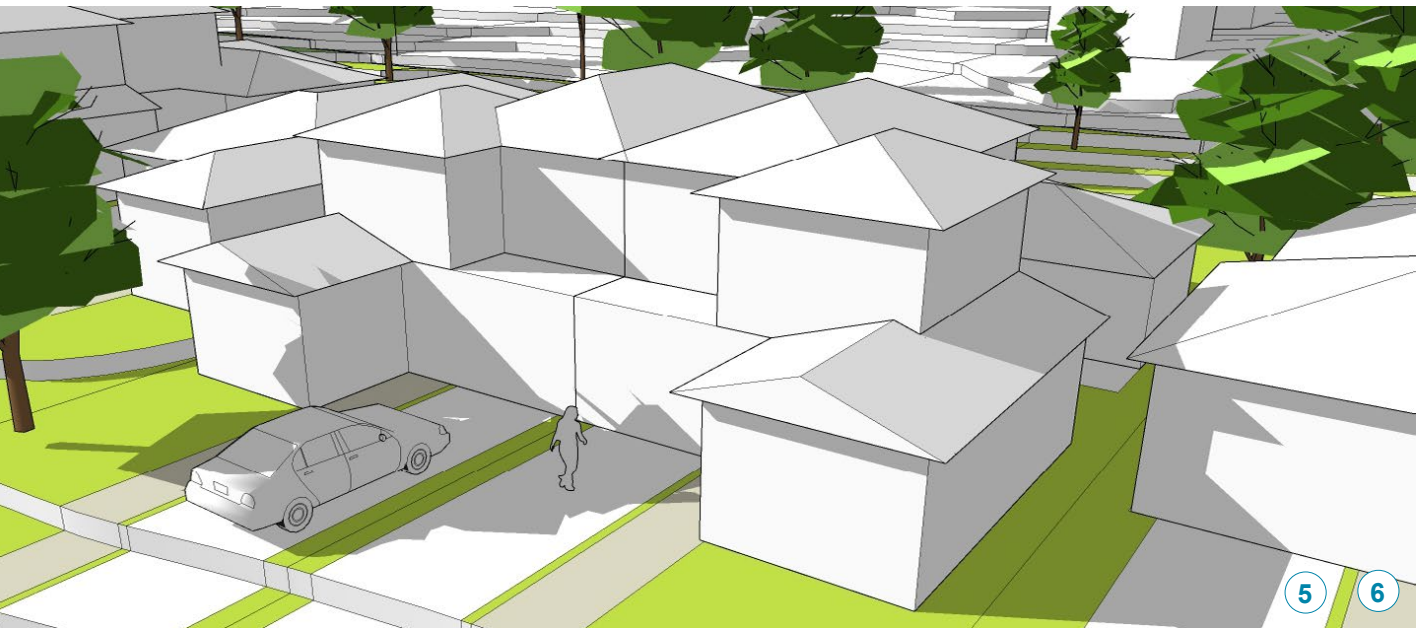


Figure 41 Indicative 3D view - Detached A (Lot 1)

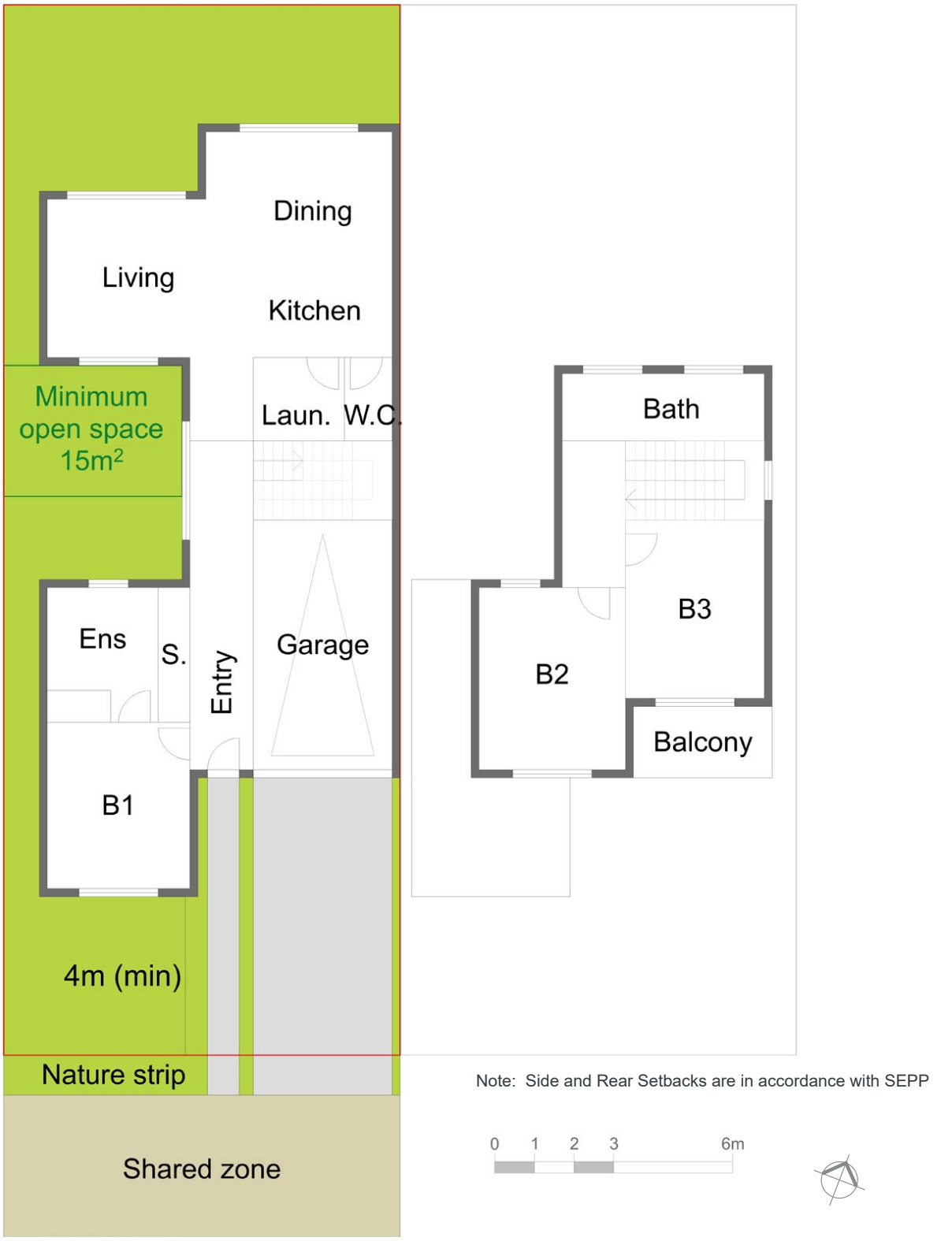


Figure 42 Seniors Living Type A - Floor Plans