URBAN DESIGN STUDY

47 WARRANE ROAD, ROSEVILLE CHASE

Concept Development Scheme - R2 Low Density Residential

March 2021

Prepared for Ku-ring-gai Council

by Studio GL

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1. Introduction

1.1. Background

Studio GL has been appointed by Ku-ring-gai Council to prepare conceptual designs for the site of the former East Roseville Bowling Club in Roseville Chase. The site at 47 Warrane Road, Roseville Chase is owned by Council and was leased by the bowling club until October 2017.

Currently zoned RE 1 Public Recreation under the Ku-ring-gai Local Environmental Plan (LEP) 2015, and classified as 'operational land', the site is not considered appropriate for on-going use as recreational land and its future under the current zoning is not considered highest and best use. Council considers the site an opportunity for asset recycling, with future divestment to be invested into new assets, or used to revitalise existing assets.

In order to pursue this opportunity, Council resolved to prepare a planning proposal to support rezoning of the site to R3 Medium Density Residential, with associated development standards of HOB 11.5m, FSR 0.8:1 and a minimum lot size of 1200sqm.

The planning proposal was submitted to the Department of Planning, Industry and Environment (DPIE) in October 2018, with a Gateway Determination issued in February 2020. The determination included a number of conditions which require amendments to the planning proposal prior to public exhibition, relating to the development standards (R2 Low Density, FSR 0.3:1, HOB 9.5m and minimum lot size of 790sqm). A traffic study for the site, assessing the impacts of the proposal and the capacity of the local road network was also required, along with a concept development scheme incorporating an urban design study demonstrating how a low density residential development on this site will achieve appropriate setbacks, privacy and a sympathetic built form.

Council resolved to proceed with the preparation of an R2 Low Density zoning option for public exhibition.

1.2. Report structure

This report is divided into the following chapters:

1. Introduction

Provides background on the site and reviews relevant planning documents.

2. Site analysis

This chapter presents an analysis of the existing site conditions, and the site context, and identifies opportunities and constraints that will inform the concept scheme.

3. Concept Scheme– R2 Low Density

This chapter presents the concept plan for development of the site as an R2 Low Density Residential sub-division, including built form, yield, and urban design analysis.

1.3. Study area

The site, owned by Council, was occupied by the former East Roseville Bowling Club which had continuously leased the site from Council since the lots were acquired by Council in 1948. The lease was terminated and the site vacated in October 2017, when the bowling club relocated to Lindfield Bowling Club.

Currently zoned RE1 Public Recreation under the Ku-ring-gai LEP, the site is no longer required as a recreation facility, and does not form part of Council's plans for on-going recreation within the Local Government Area (LGA).

The site has an area of 10,110 m^2 comprising four lots, being Lots 33 and 34 of DP 3285, Lot 3 of DP 26343 and Lot B of DP 403780. There is an easement over Lot A of DP 403780, for the drainage of water to the north of the site.

The site has been heavily modified to provide suitably flat locations for three bowling greens, with vehicular access along the northern boundary to a parking area in the north east corner. There are two structures on site, being a single storey cottage in the south west corner, fronting Warrane Road, and a two storey brick club building centred in the site towards the northern boundary.

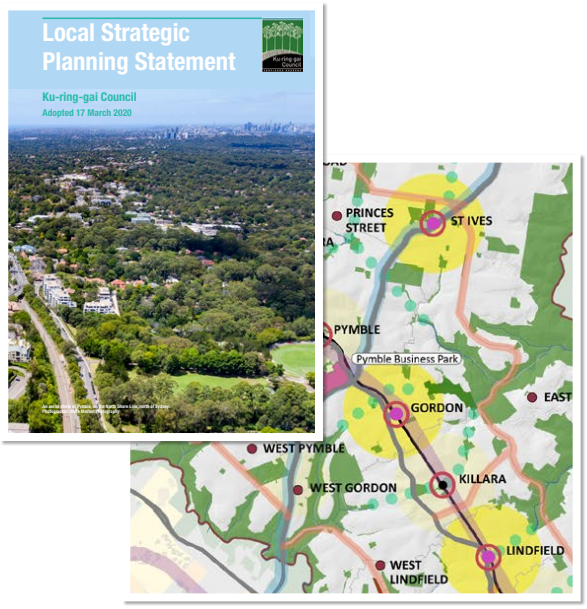
The extents of the former Bowling Club, and associated greens, form the study area boundary for this investigation.

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)



The Ku-ring-gai Council Local Strategic Planning Statement (LSPS), is a strategic document that provides a 20 year vision for the future of Ku-ring-gai LGA. It sits within the planning framework established by the NSW State Government's State Region Plan 'A Metropolis of Three Cities' and the North District Plan. The LSPS also needs to be considered in conjunction with the Ku-ring-gai Community Strategic Plan. The over-arching vision statement for the area states: 'Strategically located in the heart of Sydney's North District, Ku-ring-gai is an area of socially connected, healthy, sustainable communities that support vibrant local centres, live in harmony with the unique natural environment, and conserve our local assets for future generations.'

The purpose of the LSPS in additional to providing the vision, is to identify the special characteristics and community values that need to be preserved, to outline how growth and change will be managed, to inform the content and reasoning for changes to the Local Environmental Plan (LEP) and Development Control Plan (DCP), and to deliver key state and regional planning objectives.

The LSPS identifies four primary Local Centres, being Turramurra, St Ives, Gordon and Lindfield and Local Planning Priorities are developed within the framework of the four focus areas identified in the District Plan: Infrastructure and Collaboration, Liveability, Productivity and Sustainability.

Roseville Chase is classified as a 'Neighbourhood Centre'. It is identified as being suitable for additional housing over a 16-20 year timeframe (2031-2036), although this suitability is provisional on the provision of priority bus services from Mona Vale to Macquarie Park and Dee Why to Chatswood.

Located on the boundary of the LGA, Roseville Chase is equidistant from Lindfield and Chatswood. The suburb is not on the primary train line that services much of the LGA, instead it is serviced by Warringah Road, which cuts the Pacific Highway and travels to the Northern Beaches.

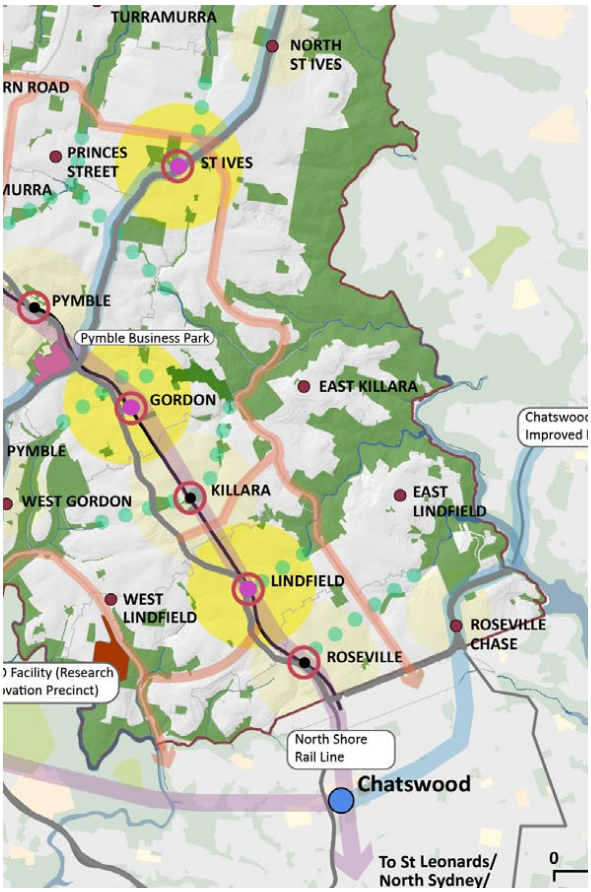
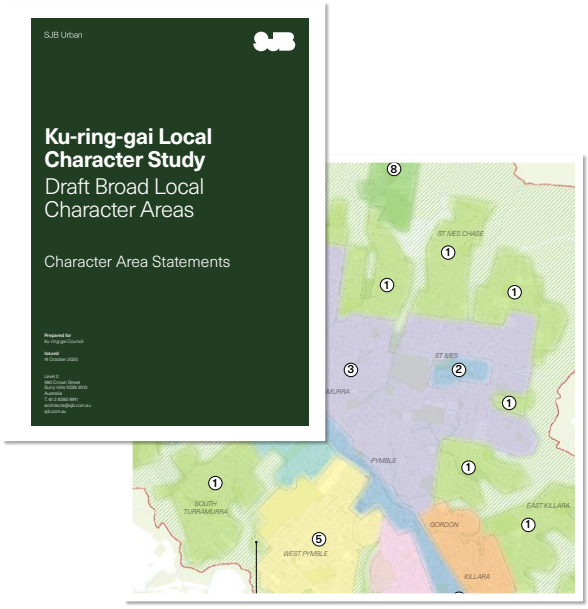


Figure 2 Roseville Chase in relation to the strategic local centre of Lindfield - annotated by SGL (source: Ku-ring-gai Local Character Study, SJB Urban 2020)

Draft 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 47 Warrane Road, Roseville Chase lies within the 'Heritage Core' Local Character Area, but is located at the far eastern edge, abutting the 'Green Fingers' Character Area, with which it shares more key characteristics.

Whilst the 'Heritage Core' is dominated by heritage items and areas of heritage conservation value, this pocket of Roseville Chase, in close proximity to Warringah Road, tends more towards the characteristics of the 'Green Fingers' area, with significant topography, as the land falls away towards the vegetated gullies. The diverse built form and architectural nature of this area is also more in keeping with the characteristics of the 'Green Fingers' area.

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 key characteristics of the 'Green Fingers' are listed as:

- Limited access
- Extends into bushland
- Flatter along ridge-line
- Streets follow topography
- Diverse built form and styles

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.

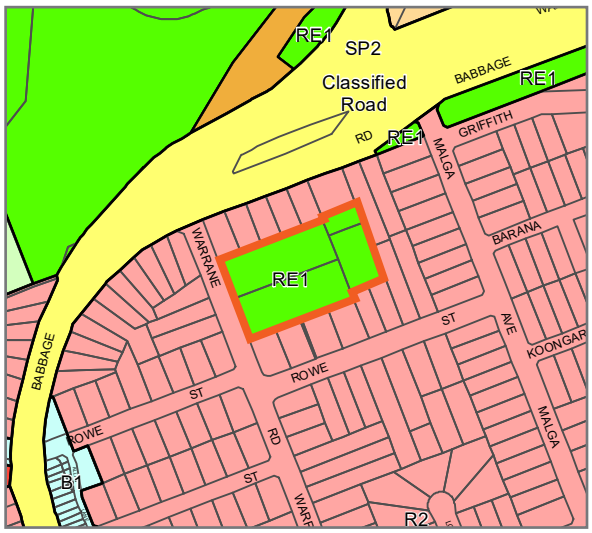
In relation to the proposed development of 47 Warrane Road, Roseville Chase, the key planning controls set out within the LEP are land use zoning, limits to the permissible floor space ratio (density), minimum lot size, maximum building height and the identification of heritage listed items and conservation zones.

LEP	Site	Surrounds
Land Zoning	RE1 Public Recreation	R2 Low Density Residential
Max. FSR	N/A	0.3:1
Max. Building Height	N/A	9.5m
Min. Lot Size	N/A	790m^2
Heritage	Nil	Nil
Riparian Lands	No	Limited
Biodiversity	No	Limited

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.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.



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

- 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. Warringah Road and Babbage Road to the north are zoned SP2 Classified Road, and there is a small collection of sites on Babbage Road, to the west, zoned Neighbourhood Centre. There is extensive land north of Warringah Road that is zoned RE1 Public Recreation, as well as portions of land zoned E2 Environmental Conservation and E4 Environmental Living.

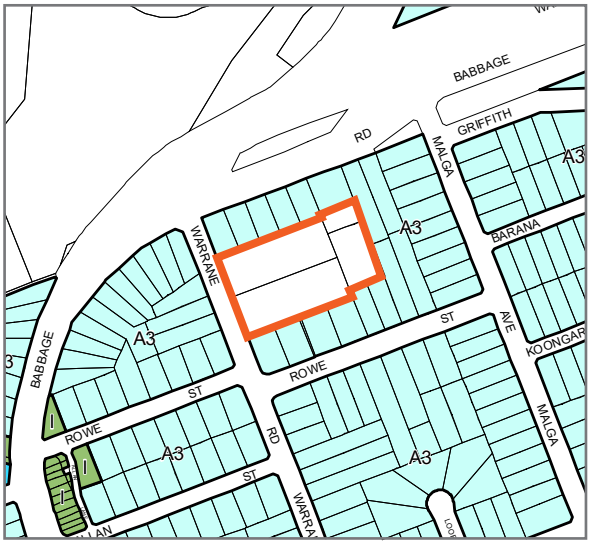
Height of Buildings

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, including the sites within the neighbourhood centre, facing Babbage Road. The subject site currently has no maximum building height applicable.



Maximum Floor Space Ratio

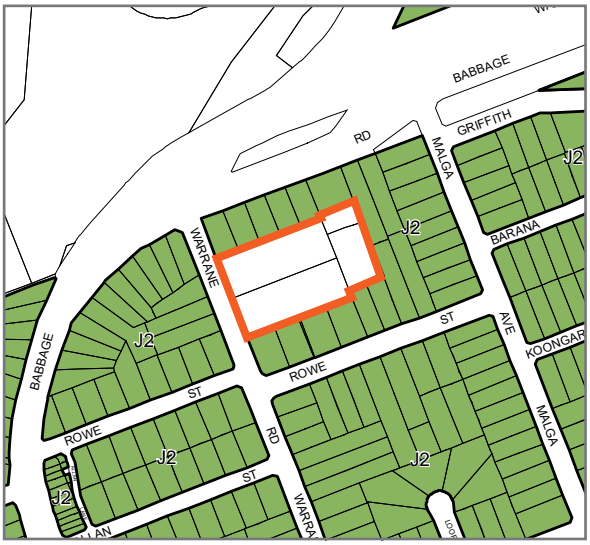
A3	0.3
I	0.75
	Site boundary

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 applies a ratio of 0.3 across the R2 Low Density Residential areas surrounding the subject site, and a ratio of 0.75 to the sites zoned B1 Neighbourhood Centre. 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 Building Heights

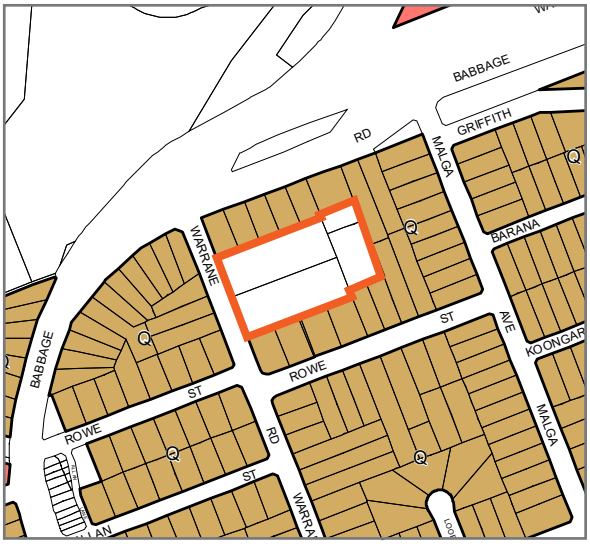
J2	9.5
	Site boundary

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 790 m^2, the study site has no defined minimum lot size.

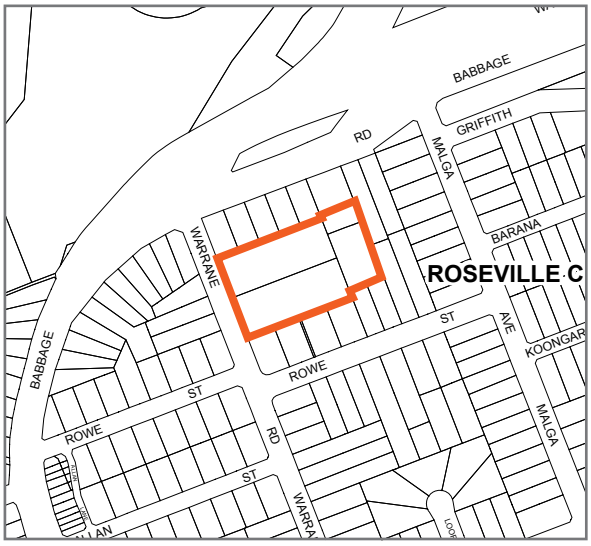


Heritage

Another key provision within the LEP is the identification of heritage items and conservation zones. There are no identified heritage items or heritage conservation areas within the vicinity of the site.

Riparian Lands and Biodiversity

There is an area designated as a Category 3A under the Riparian Lands and Watercourses control, located north of the site, on Babbage Road. The drainage easement from the site drains towards this zone. The nearest identified biodiversity zone to the site is on the northern side of Warringah Road.



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 how 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. 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.

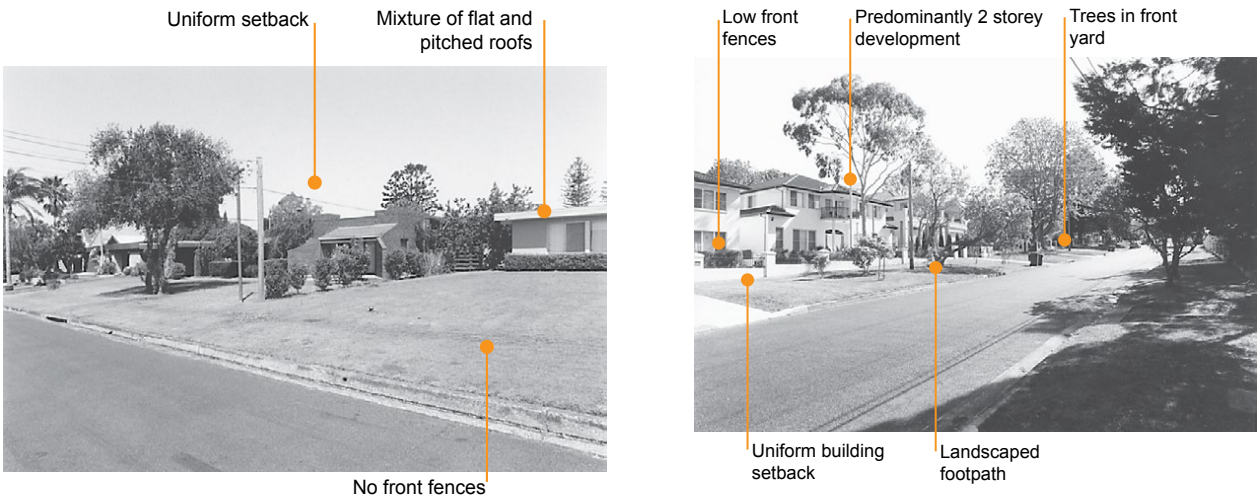


Figure 4 DCP images highlighting 'qualities of visual character' (source: Ku-ring-gai DCP - Part 4A, 2020)

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, setting out information relating to the proposed change of planning controls, including zoning, floor space ratio, height of buildings and minimum lot size.

The proposed changes were as follows:

- Zoning: R3 Medium Density Residential
- FSR: 0.8:1
- HoB: 11.5 m
- Min. lot size: 1200 m^2

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

- Rezone the site so as to enable redevelopment of the site for the purposes of residential accommodation;
- 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 2038, the Greater Sydney Regional Plan: A Metropolis of Three Cities, and the North District Plan.

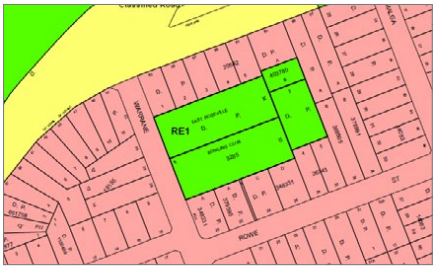
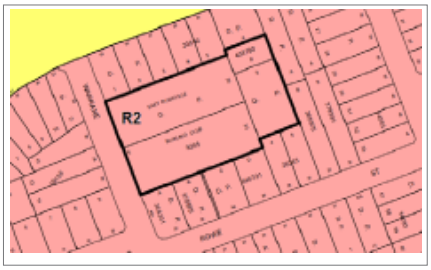
This proposal was submitted to the Department of Planning, Industry and Environment (DPIE) in October 2018.

Gateway Determination

In response to the submitted Planning Proposal, DPIE released a Gateway Determination in February 2020. This determination only supported the proposal progressing with the following amendments:

- Zoning: R2 Low Density Residential
- FSR: 0.3:1
- HoB: 9.5m
- Minimum lot size: 790 m^2

The controls requested by DPIE are in keeping with those operational on adjacent sites. Additional conditions of the determination required a traffic study that assessed the impacts of the proposal and the capacity of the local road network, as well as the preparation of 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.

Existing Planning Controls	Proposed Controls
Zoning	
RE1 Public Open Space	R2 Low Density
	
Floor Space Ratio (FSR)	
N/A	0.3:1
	
Height of Building	
N/A	9.5m
	
Minimum Lot Size	
N/A	790m^2
	

2. Site Analysis

2.1. Site photos

Access to the site is off Warrane Road and driveway follows the terrain slope towards a carpark. At the rear an existing two storey brick building is located by the northern edge of the central bowling green. Due to the level difference, the upper level of the building relates to the greens while the lower level faces the carpark.

An existing single storey house is located in the south western corner of the site, the highest point of the site. A few mature trees are located along the site frontage to Warrane Road, and along the southern boundary.

Due to the level difference between the site and surrounding properties, houses to the south of the site overlook the former bowling greens. Mature trees provide a level of privacy, to most of the surrounding lots.

Views from the site are mainly to the north east towards the greenery of Roseville Chase Oval and Roseville Golf Club. As a result of the level difference between the site and surrounding properties, the former bowling club site overlooks the rear of houses located to the north east.

2.2. Local photos

The built form of the area is predominantly one and two storey detached houses stepping down with the topography, characterised by hipped and gabled roofs and low fences and front gardens screened with greenery. Rear gardens are large.

The Roseville Chase Oval is located 800m north of the site across Warringah Road, adjacent to the Roseville Golf Club. It is accessible via Cardigan Road with paths connecting to the golf club.

The Roseville Golf Club is located on the western side of Warringah Road about 700m north west of the site. The club is accessible via Links Avenue and provides large areas of green space.

Roseville Chase is characterised by sloping streets with large nature strips and shady street trees. On-street parking is commonly found on both sides of the street.

The Roseville Chase Neighbourhood Centre is located 200m west of the site along Warringah Road with a mix of businesses including a pharmacy, food shops and services.

The Castle Cove Public School is located 1km south of the site near the Castle Cove Library. Roseville Chase is part of the catchment area for the Castle Cove Public School.

Echo Point is located 1.3km south east of the site, a popular park overlooking Middle Harbour and the marina. Walking tracks connect the area to Gordon and St Ives to the north.

The area is accessible by bus to and from Sydney CBD, Chatswood and the Northern Beaches. Bus stops are located along Warringah Road. The closest bus stop is 200m north of the site near the Ormonde Road overpass.

2.3. Local context

Roseville Chase is located about 10km north of Sydney CBD and 3km north of Chatswood. The area is accessible by car via Warringah Road and by bus from Wynyard Station, Chatswood and the Northern Beaches.

Places of interest nearby include Roseville Chase Oval, Roseville Gold Club, Roseville Chase Memorial Community Centre Hall, Roseville Public School, Castle Cove Public School, Middle Harbour, Echo Point and Marina, and Castle Cove Park.

Roseville Chase is characterised by predominantly low density residential areas to the east and south of Warringah Road. Large areas of open space with pockets of low density residential areas are located north of Warringah Road.

South of Warringah Road green open space options are located near Middle Harbour.

Blocks are generally regular in shape varying in size, becoming more irregular closer to Middle Harbour as streets follow the steep topography.

Roads form a regular, but broken grid, generally west of the site. East of the site, towards Middle Harbour, the road network becomes more organic as it responds to the topography.

Warringah Rd bisects the area just north and west of the site, further disrupting the local road network. The built form varies in style from California Bungalows to modern and contemporary development.

Original houses are often of a modest size situated on larger blocks, so there is evidence of infill and extension of the original fabric which is increasing the built form.

Figure 5 Local context map

2.4. Landscape and topography

The area is characterised by the topography sloping down eastwards to Middle Harbour with a prominent ridge line running north to south and then east. Three high points are located within 400m of the site, one located near Roseville Chase Oval north of the site, and two others located to the south and east.

From these high points, the terrain slopes down to the east creating natural depressions and low points. Blocks located south and east of Warringah Rd are regular in shape and vary in size, but becoming more irregular closer to Middle Harbour as streets respond to the steeper topography.

The site is nestled in a natural depression surrounded by the ridge line. This valley becomes steeper as it heads north east, Warringah Road follows this topograhy before it crosses Middle Harbour. A naturally occurring overland flow path runs through the north eastern part of the site before continuing north east.

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

Council draininage infrastructure and a drainage easement are located on the site and head in a north east direction.

There are few native trees generally on the site due to it's prior use, but these are trees along the boundary and in neighbouring properties.

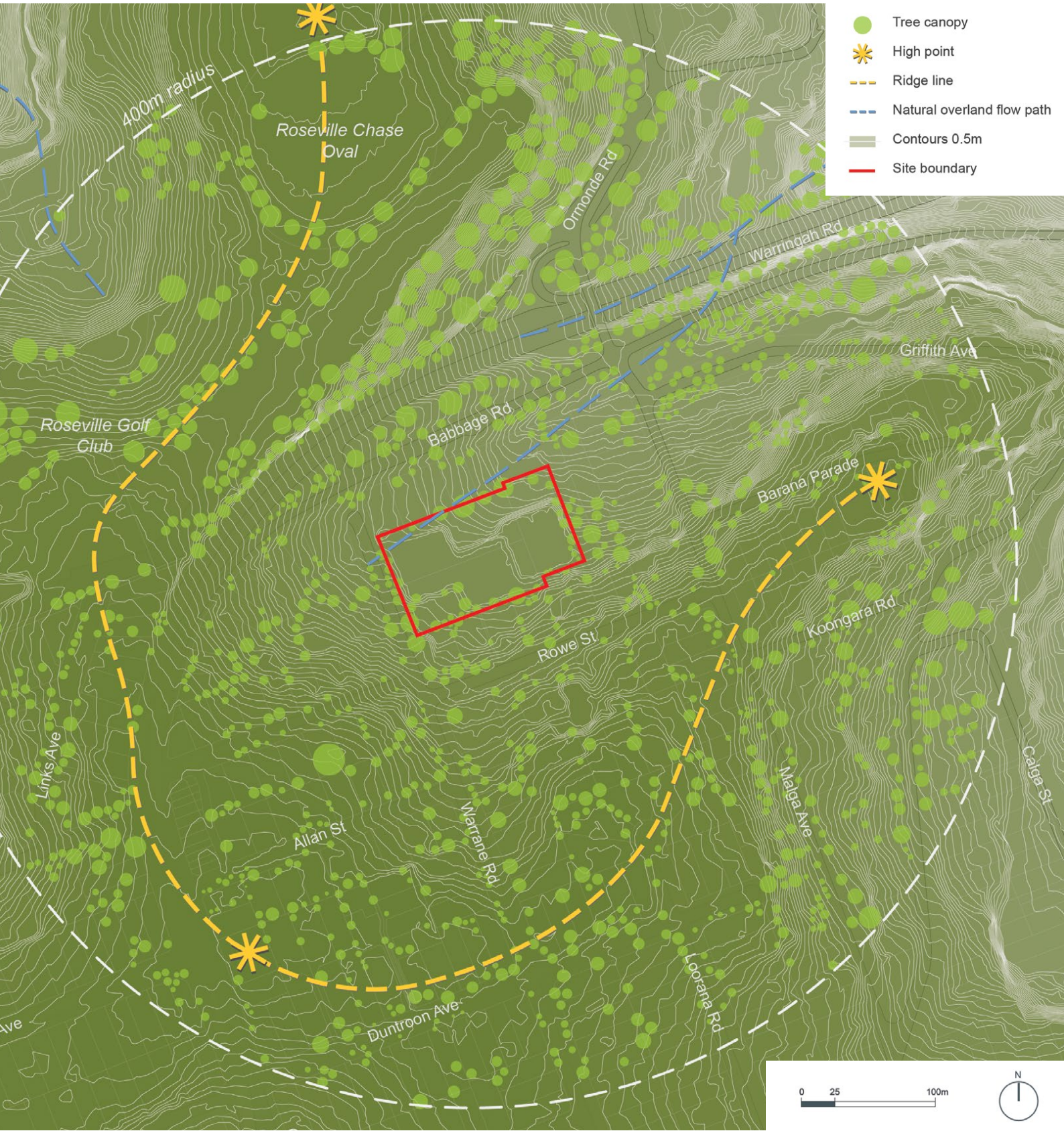


Figure 6 Landscape and topography map

2.5. Access and movement

The urban structure of Roseville Chase is characterised by blocks regular in shape but varying in size, becoming more irregular closer to Middle Harbour as streets follow the steep topography.

Warringah Road is a major arterial road connecting Roseville Chase to the Pacific Highway to the west and the Northern Beaches to the east. Crossing opportunities are found in the form of an overpass to the north of the site and two signalised crossings to the west of the site where the local shops are located.

Bus stops are located along Warringah Road near the overpass to the north of the site and to the west near the local shops. Bus routes connect Roseville Chase with the Northern Beaches, Chatswood and the Sydney CBD.

An unmarked cycling route along quiet streets runs along Babbage Road, Warrane Road and Allan Street connecting the site with Middle Harbour to the east and Roseville to the West.

Footpaths are generally well maintained and paths are shady and attractive. Walkability in the area is challenged by the steep topography and limited crossing opportunities along the Pacific Highway.

The site is nested in the centre of a large block. The site's frontage is located along Warrane Road.

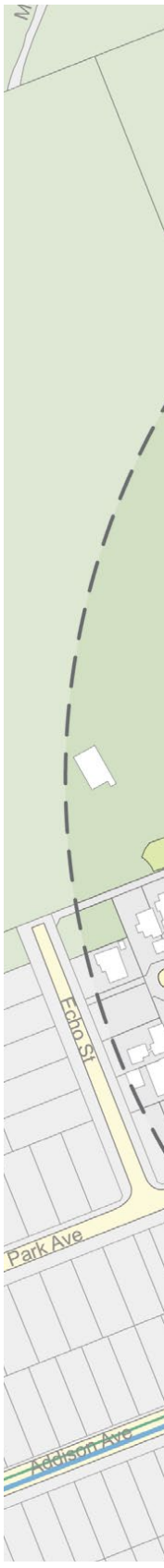


Figure 7 Access and movement map

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 in large plots of land.

There are no heritage conservation areas located in the immediate context. Two lots with heritage items are located within a 400m radius of the site, one located north of Warringah Road and another south of the site on Duntroon Ave.

The site is surrounded by one to three storey detached houses. As a result of the level difference, the properties along the south boundary overlook the former East Roseville Bowling Club, while properties located along the north boundary are overlooked by the site. Height limit for properties immediately around the site is set at 9.5m by the Ku-ring-gai LEP.

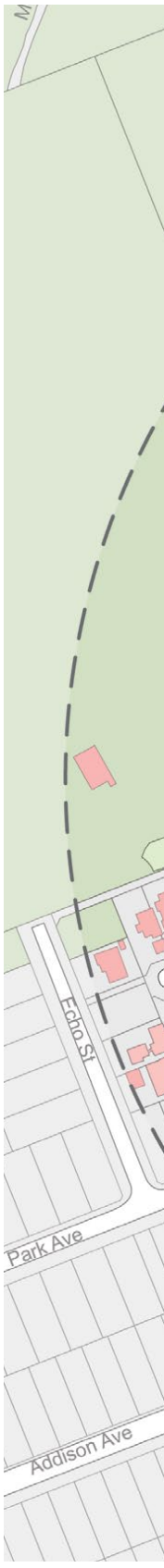


Figure 8 Built form and heritage map

2.7. Opportunities and Constraints Map

The terrain level difference between the site and the properties surrounding it means that houses located to the south overlook the site, while the site overlooks the properties located to the north. The is an opportunity to improve the visual privacy of existing and future residents by retaining and strengthening the landscaping along the site boundary.

The accessibility to the site facilitated by direct bus routes connecting to the Northern Beaches, Chatswood and the Sydney CBD, as well as the location of the local shops to the west of the site create an opportunity to explore higher density options for the site.

Figure 9 Opportunities and constraints map with sun path diagram

3. Concept Option- Low Density

3.1. Introduction

In developing a concept design for the site of the former East Roseville 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 cul-de-sac, centrally located within the site, that runs parallel to existing roads to the north and south and provides access into the depth of the site, from Warrane Road. This road will be a two way roadway, within a 15m road reserve, that allows for grassed verges, a footpath on both sides and street trees to be planted to provide shade and amenity to pedestrians. There is a turning head at the end of this cul-de-sac, to enable the turning of delivery and waste vehicles. The central location of this road also allows for the efficient subdivision of the site into 9 new housing lots, with a minimum lot size of 790m^2, with no lot requiring an access handle arrangement.

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 two new lots adjacent to Warrane Road become corner sites. In this instance Warrane Road has been designated the secondary road, with proposed new development fronting the new road. This is consistent with most properties along Warrane Road, that generally side on to Warrane Road and front on to the perpendicular road, such as Rowe Street.

The significant topography that exists across the site, and falls from the south west corner to a low point in the north east corner of the site, has been incorporated into the subdivision through a series of stepped levels, that move down the slope with the topography. Future development on the sites 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 operated as bowling greens.

The general intent in setting the potential 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 minimize 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 the adjoining sites, which have not been heavily modified.

3.2. Site Plan

Controls	
Site area (approx)	1.0 ha
Zoning	R2 Low Density Residential
Max. building height	9.5m
Max FSR:	0.3:1
Min lot size:	790m^2

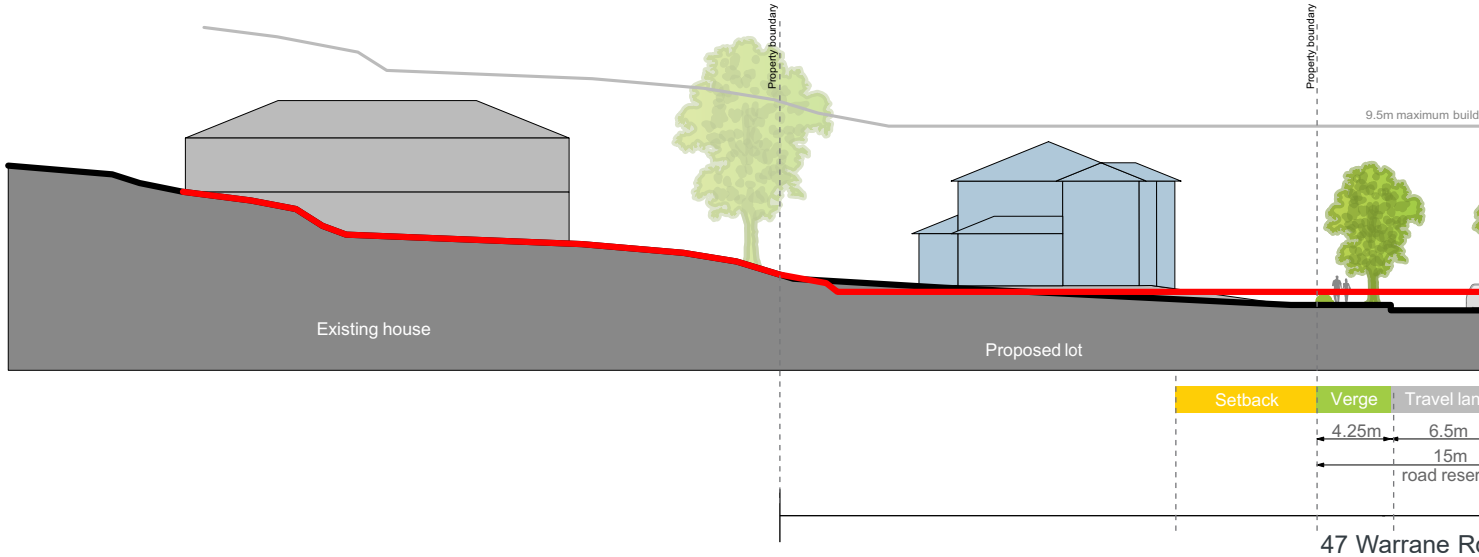
Figure 10 Illustrative plan - low density option

3.3. Site Views

Figure 11 Indicative birds eye view

Figure 12 Indicative view east down new street

3.4. Site Sections



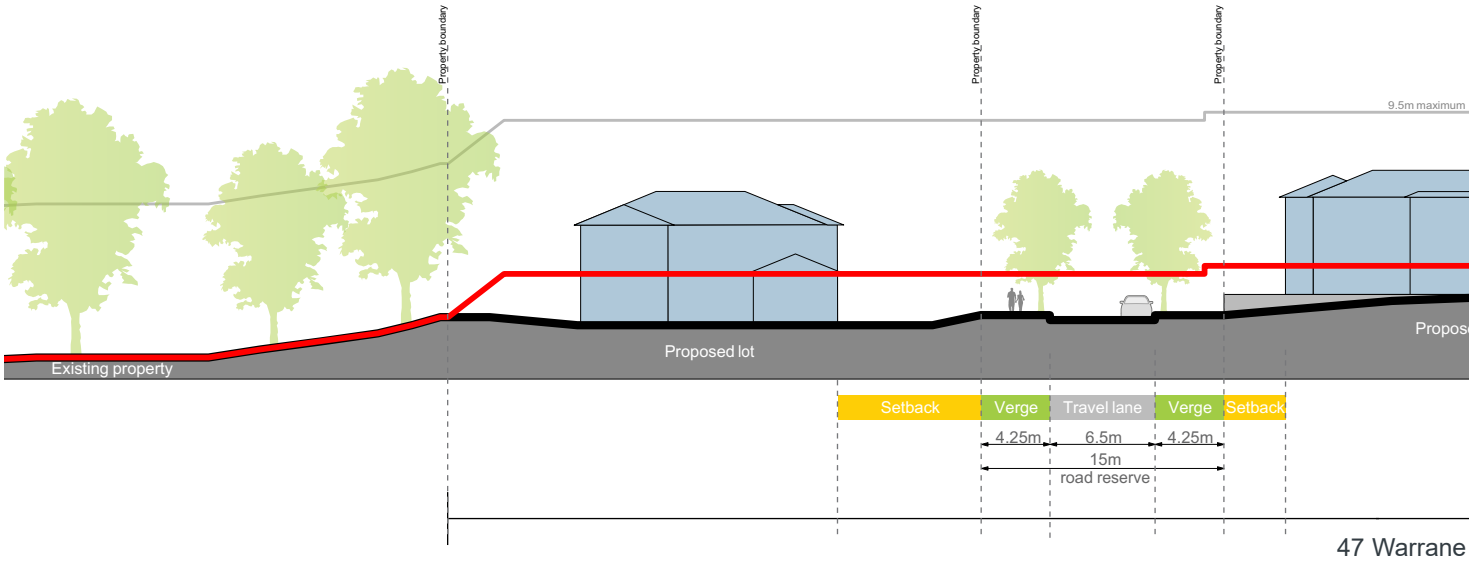


Figure 13 Section plan

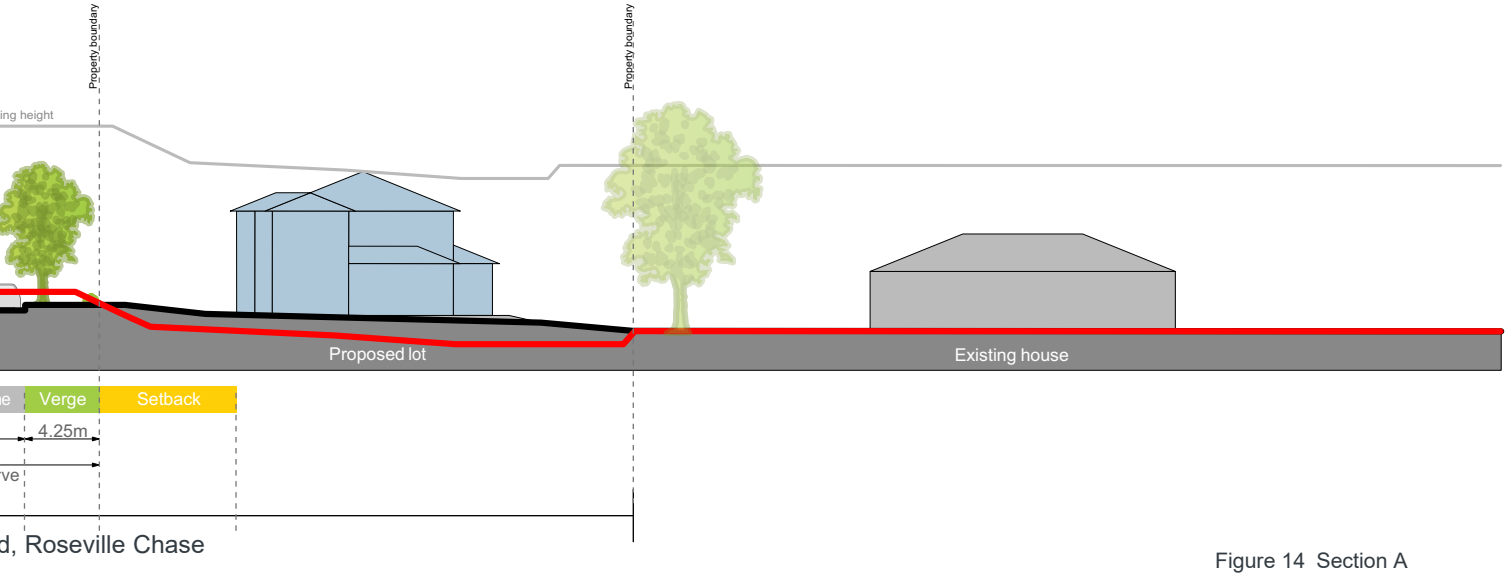


Figure 14 Section A

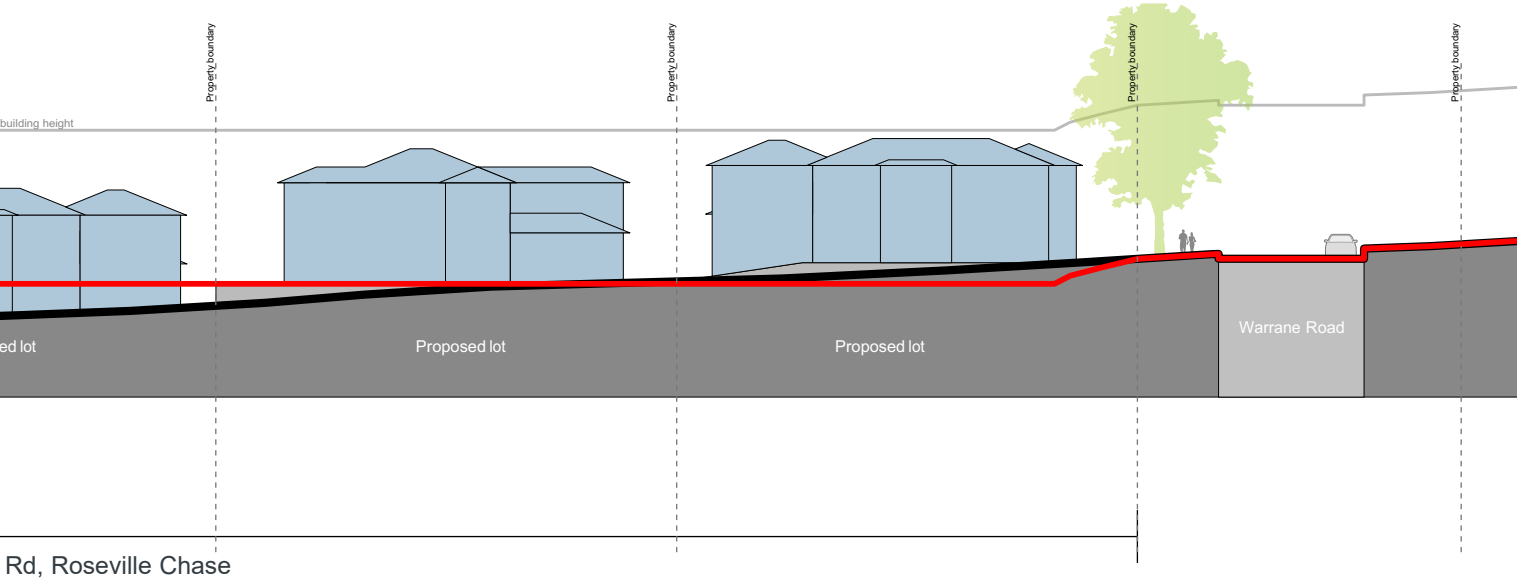


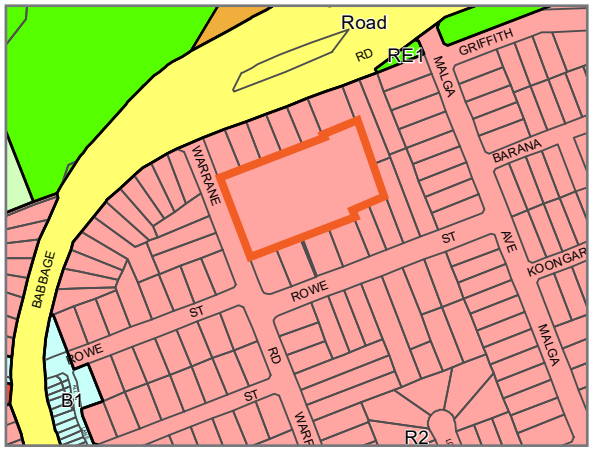
Figure 15 Section B

CONCEPT OPTION- LOW DENSITY

Figure 16 Technical plan - low density option

3.5. Proposed LEP Controls

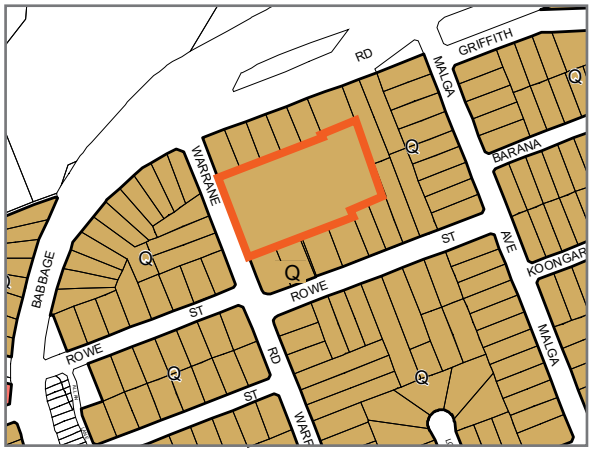
The proposed modifications to the LEP controls are all in alignment with the controls operational on surrounding sites and will make the site congruous with its neighbours.



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

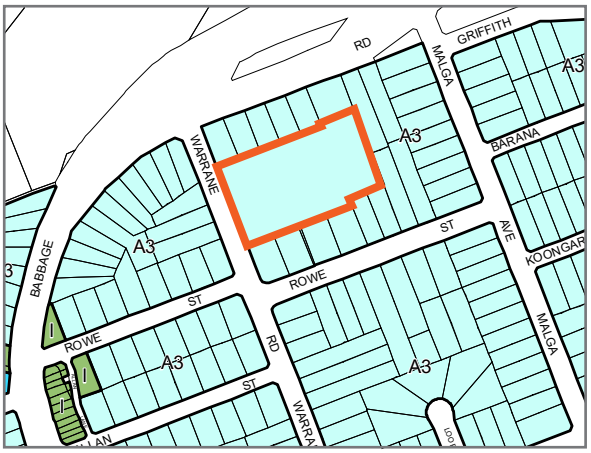
The proposed land use zoning is R2 Low Density Residential. This allows for the site to be sub-divided into lots containing individual dwelling houses.



Minimum Lot Size

Q	790
	Site boundary

The proposed minimum lot size is 790m^2, to match the control that is operational on surrounding sites.



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 utilizing a formula, that allows an FSR of up to 0.4:1, for sites smaller than 800m^2.

Maximum Building Heights

J2	9.5
	Site boundary

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

CONCEPT OPTION- LOW DENSITY

Figure 17 Artist Impression of Concept Design

3.6. Urban design integration

Setbacks

The integration of the new lots into the surrounding context has been designed to minimize impacts on neighbouring properties. With a centralized road, and the new lots fronting the road and generally backing onto adjacent properties, there is a consistency of adjacencies.

The front setbacks have been set at 9m, which is the minimum allowable under the DCP for a two-storey dwelling. The new lots are relatively shallow for their width, being 31m deep for the north south oriented lots, and 33m deep for the east west oriented lots. A 9m front setback, with a 1.5m articulation zone, ensures ample space for landscaping to both the front and rear of the lots, and sufficient space at the rear for the required private open space. This setback is also in keeping with the general front setback to parallel roads within the surrounding area.

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 3m landscape buffer zone that excludes excavation, and is proposed for the side and rear 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.

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 some minor exceptions due to the geometry of the site. The substantial rear setbacks, that are approximately 8m 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 the new developments is to be in keeping with the DCP. The maximum building height will be consistent with surrounding development, and the bulk and scale applicable to the site is also consistent, so the dwellings erected are expected to be of similar style and scale. Roof forms will be pitched and hipped, with articulation via the use of some single storey elements. The provision of an articulation zone within the front setback has been proposed to encourage articulation of the front façade to support an attractive streetscape. Materiality is to be consistent with the requirements of the DCP, and adjacent development, to maintain a cohesive character throughout this area.

3.7. Yield analysis

The concept option identifies a yield for the site that is nine lots, with three lots of 790 m^2, two lots of 840 m^2 and four lots of 900 m^2. The overall site is narrow for its depth with the most efficient layout utilizing a central road within a fifteen metre road reserve. All lots have road frontage, with no lots with a battle-axe configuration. The new road provides access to the full depth of the site, allowing the development of three lots across the rear boundary, accessible off the turning head. The turning head also requires a fifteen metre width, which is extended to the boundary to the north and south to provide an opportunity for planting within a common space.

To confirm the capacity of the site to carry the proposed yield, a conceptual design for a four bedroom dwelling has been provided for each new lot. These designs are generic only, but confirm that a dwelling of the identified size, bulk and scale is possible on the lot, whilst meeting the applicable DCP controls that ensure minimal impact on adjacent properties. Refer to Annexure One for information relating to these conceptual designs.

3.8. Proposed DCP Amendments

The following site specific Development Controls are proposed to ensure any development on the site is in keeping with the context of the surrounding neighbourhood. These controls have been developed to provide clear guidelines on the objectives behind the controls, and ways that these objectives can be realized, given the opportunities and constraints of the site.

With a focus on the planned future character of this large site, as a new residential sub-division that will retain the character and scale of the surrounding development, these controls also seek to manage the interface between the newly created lots and the neighbouring existing lots.

The location and nature of a proposed new road has been included to ensure minimal impact on neighbours, and to continue the existing subdivision layout of surrounding sites. Controls have also focused on the provision of suitable landscape outcomes, making allowance for a landscaped buffer to protect existing trees on site and also to ensure any works do not disturb the ground level so as to minimize impacts on trees on adjacent properties.

The controls relating to building setbacks and the built form of new dwellings are intended to minimize issues of overlooking and loss of privacy, for both the new lots and the neighbouring lots. The relationship of new dwellings to Warrane Road is also addressed, as these will be effectively on ‘corner’ lots, fronting the new road as well as Warrane Rd. In fronting the new road, they are consistent with other dwellings along Warrane Rd. All these controls, proposed for this site, seek to ensure the harmonious integration of the new development.

The provision of infill development is often most successful when it integrates well with surrounding development. These site specific controls have been developed to encourage this outcome for this significant site within the current context of Roseville Chase.

Planned Future Character

Objectives

1. To ensure new built form is cohesive with the streetscape and contextual character.
2. To establish a new road perpendicular to Warrane Road, to service individual lots within the site.
3. To ensure future development retains the scale and character of the surrounding low density residential developments.
4. To enhance the amenity of the streetscape and surrounding residential sites.
5. To increase tree canopy on a site that was previously cleared of most vegetation, including mature trees.

Controls

The site at 47 Warrane Road, Roseville Chase fronts Warrane Road. The site is the former location of the East Roseville Bowling Club. The site is surrounded by low density residential housing and is just south of Babbage Road and Warringah Road.

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 the surrounding area. 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 Warrane Road, and surrounding low density residential dwellings.
   - ii. Ensure new development is appropriately sited and designed to minimise amenity and visual impacts to adjoining residential properties.
   - iii. Ensure new development supports tree replenishment across the site in accordance with Part 4A.4 of the DCP.

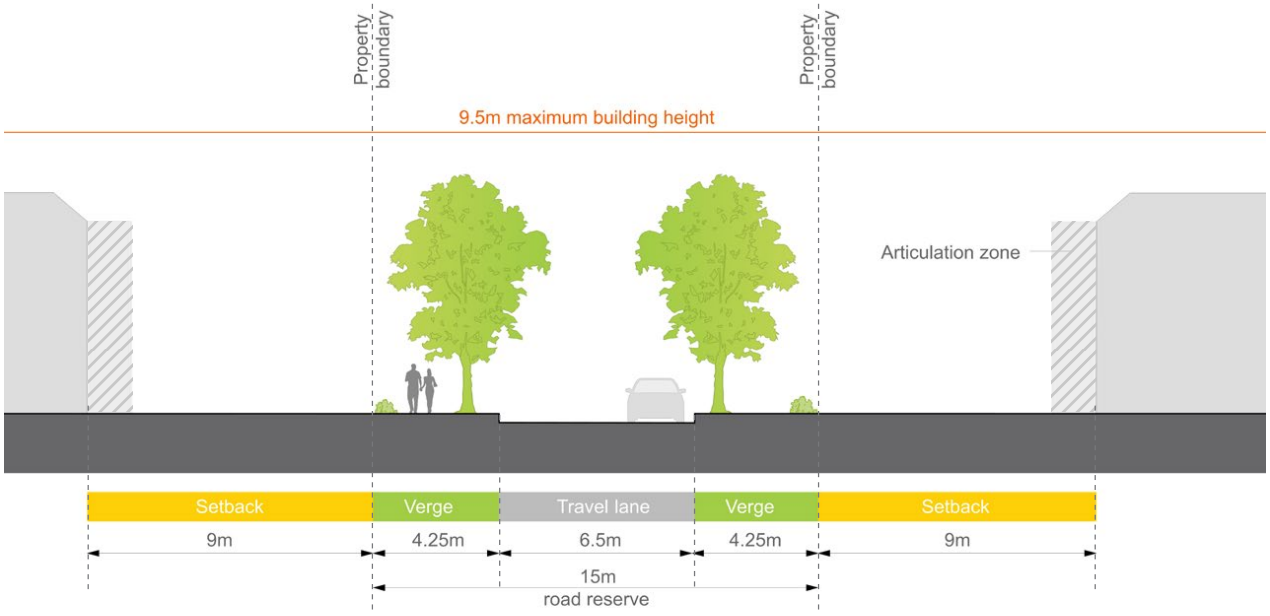


Figure 18 Section through the proposed road

Pedestrian and Vehicular Access

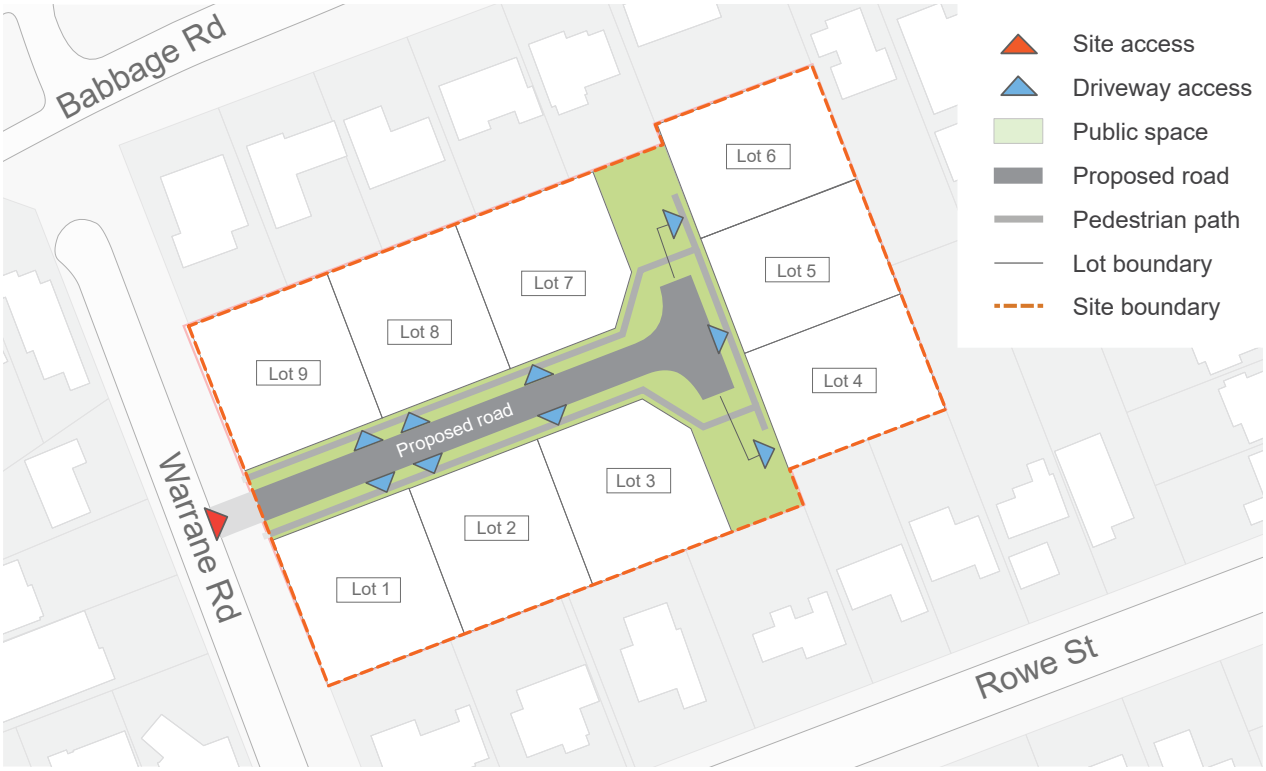


Figure 19 Plan indicating proposed vehicular and pedestrian access

Objectives

1. To provide vehicle access for residents and visitors via a new road that is integrated into the surrounding road network.
2. To extend pedestrian amenity into and around the site, to support access to all lots.
3. To minimise the number of vehicular access points required off Warrane Road.
4. To provide adequate and accessible on-site parking.

Controls

1. A road is to be provided into the site, in accordance with Council's requirements. This road will be dedicated to Council upon completion of the development.
2. The new 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 contain a suitably sized turning head to enable turning of vehicles, including garbage trucks and removalist trucks.
4. Pedestrian access is to be maintained off Warrane Road and provided throughout the site via footpaths in accordance with Council's footpath policy.
5. Parking will be contained to on-site only within identified lots, no street parking will be provided.
6. Provision of all parking will be in accordance with Part 4B of the DCP.

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.

Controls

1. Provide a 3m wide landscape buffer along all side and rear boundaries of the site as indicated.
2. Nil excavation within the landscape buffer.
3. No modification of levels within the landscape buffer.
4. Identify Tree Protections Zones (TPZ) for all large trees both within the site and adjoining the site boundaries. The design of new road, buildings and landscaping is to consider these TPZ in order to retain and protect existing trees on site and existing trees on neighbouring sites.

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.

Controls

1. All building setbacks are to be in accordance with Figure 21.
2. All new development is to front the new road.
3. Development that fronts both the new road and Warrane Road is to treat Warrane Road as the secondary road, in keeping with the surrounding context.
4. The front setback to the new road is to be a minimum of 9m, with a 1.5m articulation zone for the entry to the dwelling.
5. The front setback requirement is to disregard the splay required for the turning head of the new road.
6. The side and rear setback are to be in accordance with Part 4A of the DCP, except if they conflict with the required 3m landscape buffer.

Building form

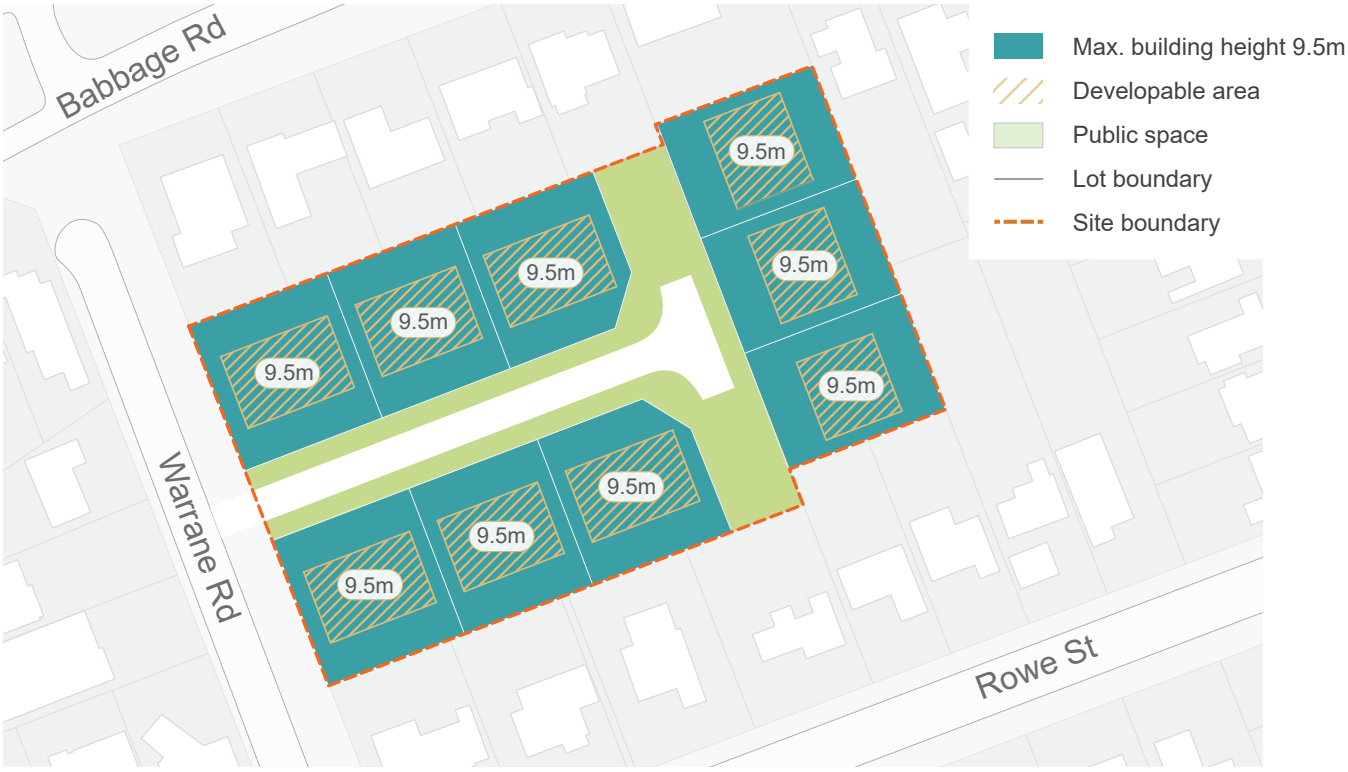


Figure 22 Plan indicating proposed built form controls

Objectives

1. To ensure that buildings are designed to be consistent with other residential dwellings in the area.
2. To ensure that corner buildings respond appropriately to the characteristics of the two streets they address.
3. 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 side and rear of new lots is to be consistent where possible with the side and rear of adjoining properties.
3. The siting of buildings is to demonstrate clear visible entry points to dwellings to contribute to the streetscape along the new road.
4. Roofs are to be pitched and hipped. The style and pitch of new roofs should relate sympathetically to neighbouring buildings.
5. New development is to provide a high standard of external finishes and appropriate level of architectural detail.
6. Front setbacks are to be appropriately landscaped.

Annexure One

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

1. Detached - Type A

Lot information

Lot:	1 3 7 9
Lot area:	860 m²
Lot width:	29 m²
Lot depth:	30 m²
Access:	single access, dual frontage
Total GFA:	355 m²
Achieved density:	0.23:1 FSR

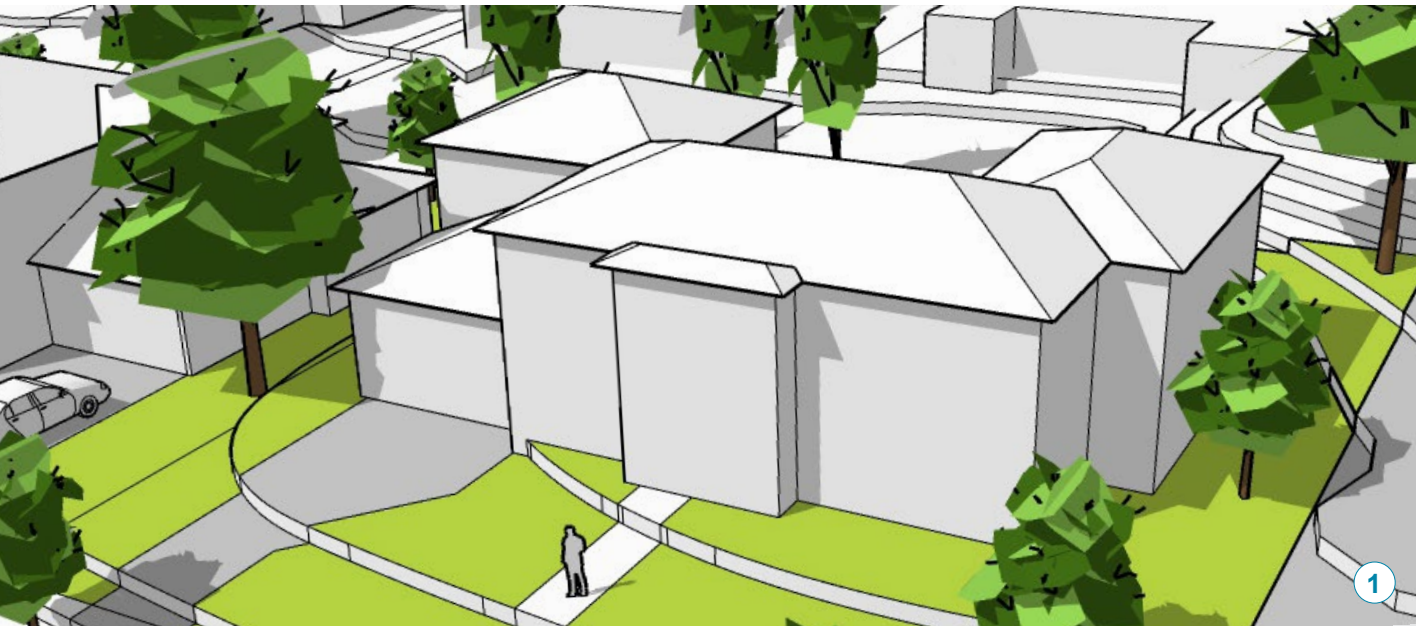
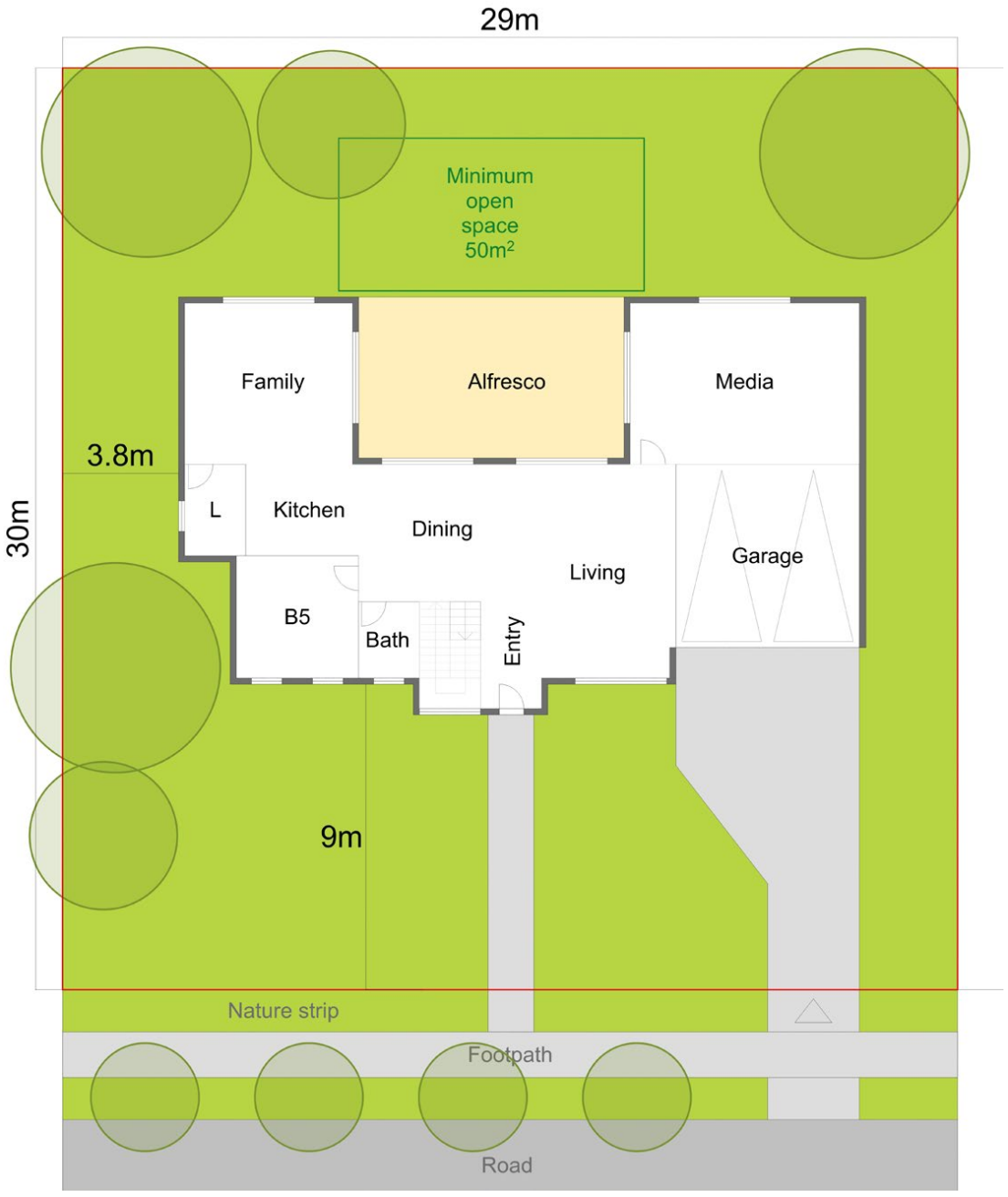


Figure 23 Indicative 3D view - Detached A (Lot 1)



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

Ground Floor Plan

Upper Floor Plan

Figure 24 Detached Type A - Floor Plans

2. Detached - Type B

Lot information

Lot:	2 8
Lot area:	830 m²
Lot width:	27 m
Lot depth:	30 m
Access:	single access & frontage
Total GFA:	320 m²
Achieved density:	0.39:1 FSR

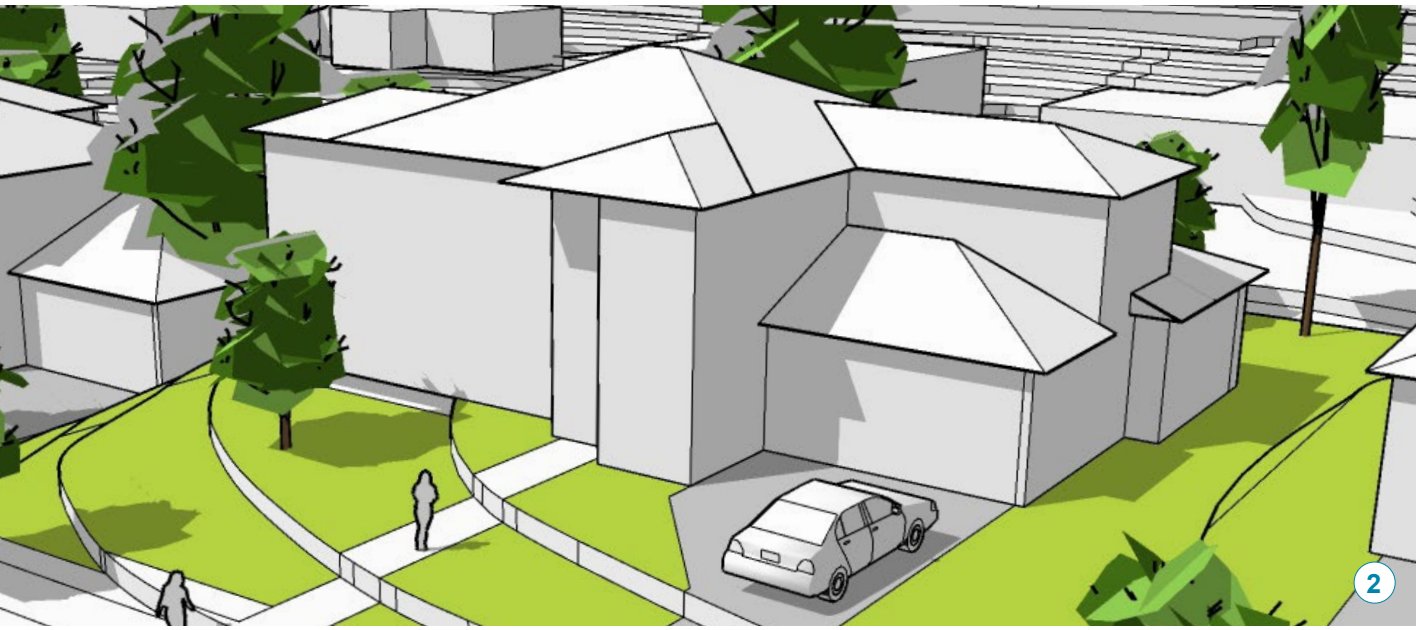
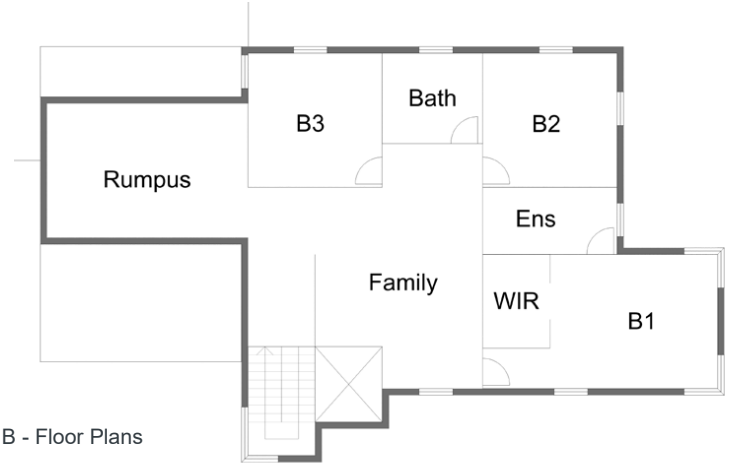


Figure 25 Indicative 3D view - Detached B (Lot 2)

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

Ground Floor Plan



Upper Floor Plan

Figure 26 Detached Type B - Floor Plans

3. Detached - Type C

Lot information

Lot:	5 6
Lot area:	805 m²
Lot width:	24 m
Lot depth:	33 m
Access:	single access & frontage
Total GFA:	315 m²
Achieved density:	0.4:1 FSR

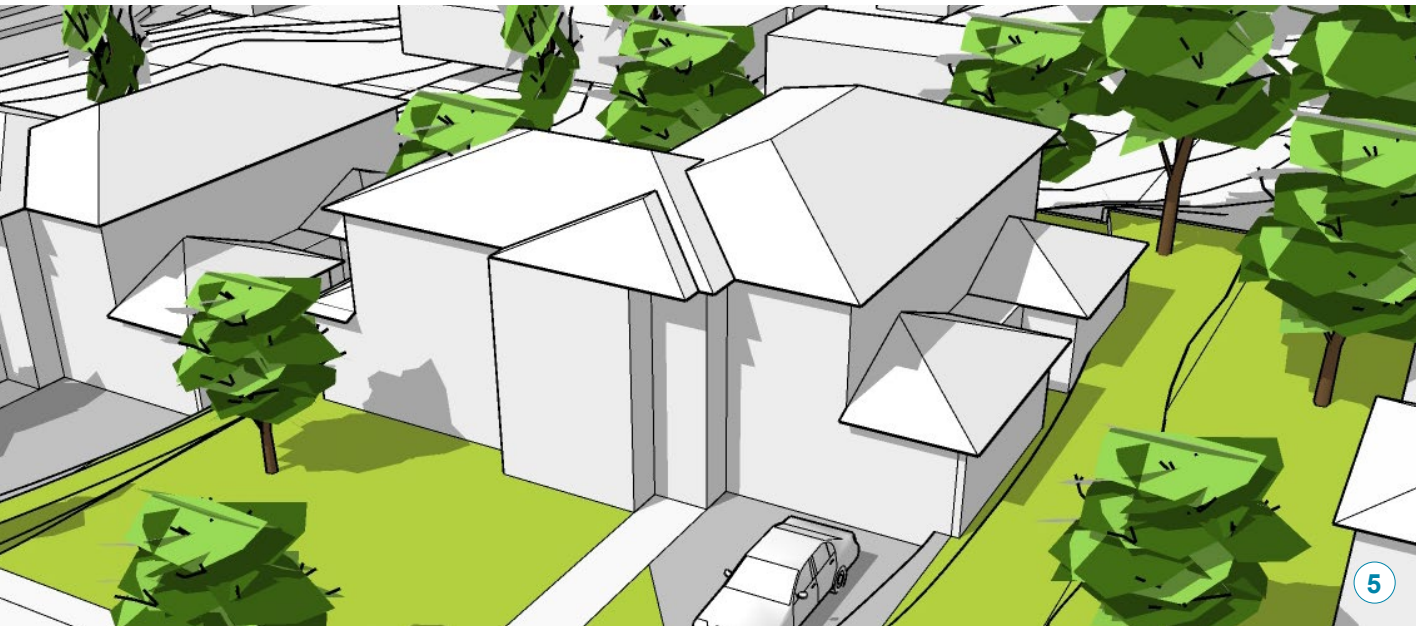


Figure 27 Indicative 3D view - Detached C (Lot 5)

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

Figure 28 Detached Type C - Floor Plans

4. Detached - Type D

Lot information

Lot:	4
Lot area:	810 m^2
Lot width:	24 m
Lot depth:	33 m
Access:	single access & frontage
Total GFA:	315 m^2
Achieved density:	0.39:1 FSR

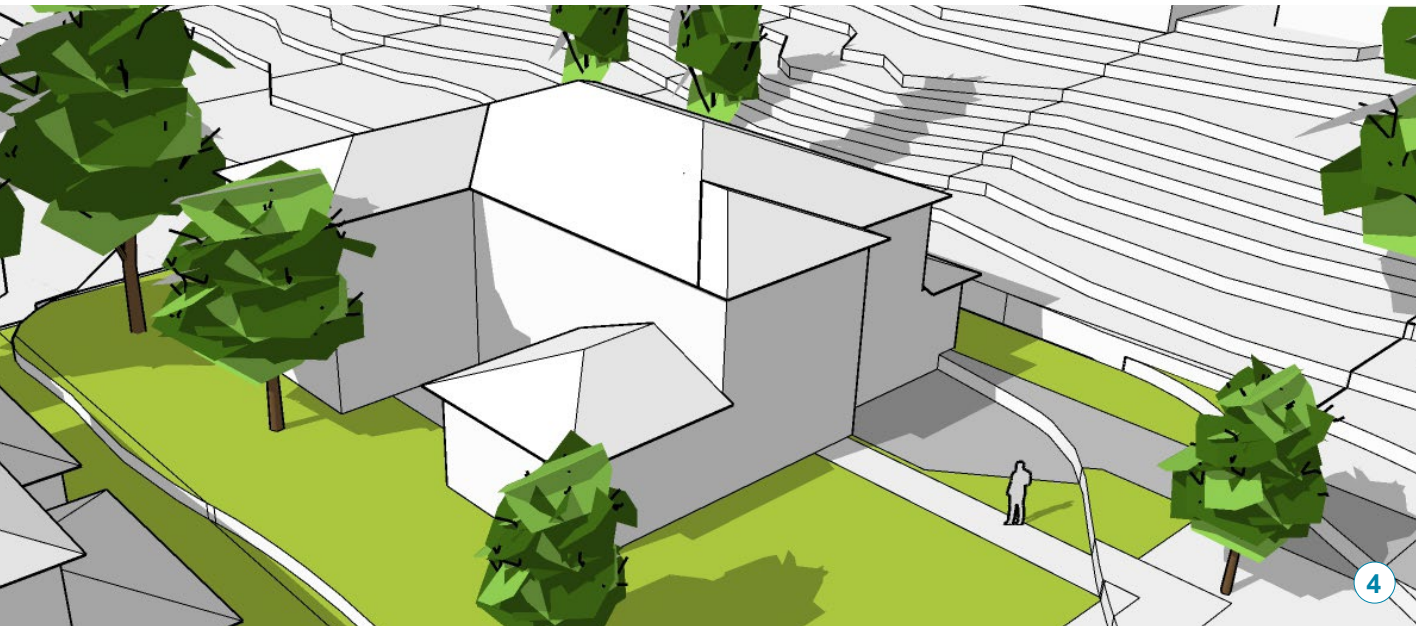


Figure 29 Indicative 3D view - Detached D (Lot 4)

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

0 1 2 3 6m

Figure 30 Detached Type D - Floor Plans