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100 Edinburgh Road, Castlecrag - State Significant Development Application

Urban Design and Architectural Statement

fjcstudio / architecture / interiors / landscape / urban / place

We would like to acknowledge the Cammeraygal of the Eora Nation, the traditional custodians of this land and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.

Project Name		100 Edinburgh Road, Castlecrag, 2068. Proposed Mixed Use, Residential	
Project Code		ER100	
Document Name		Development Application Architectural Design Statement	
Document ID		ER100 SSDA Report	
Revision	Date	Comment	Approved
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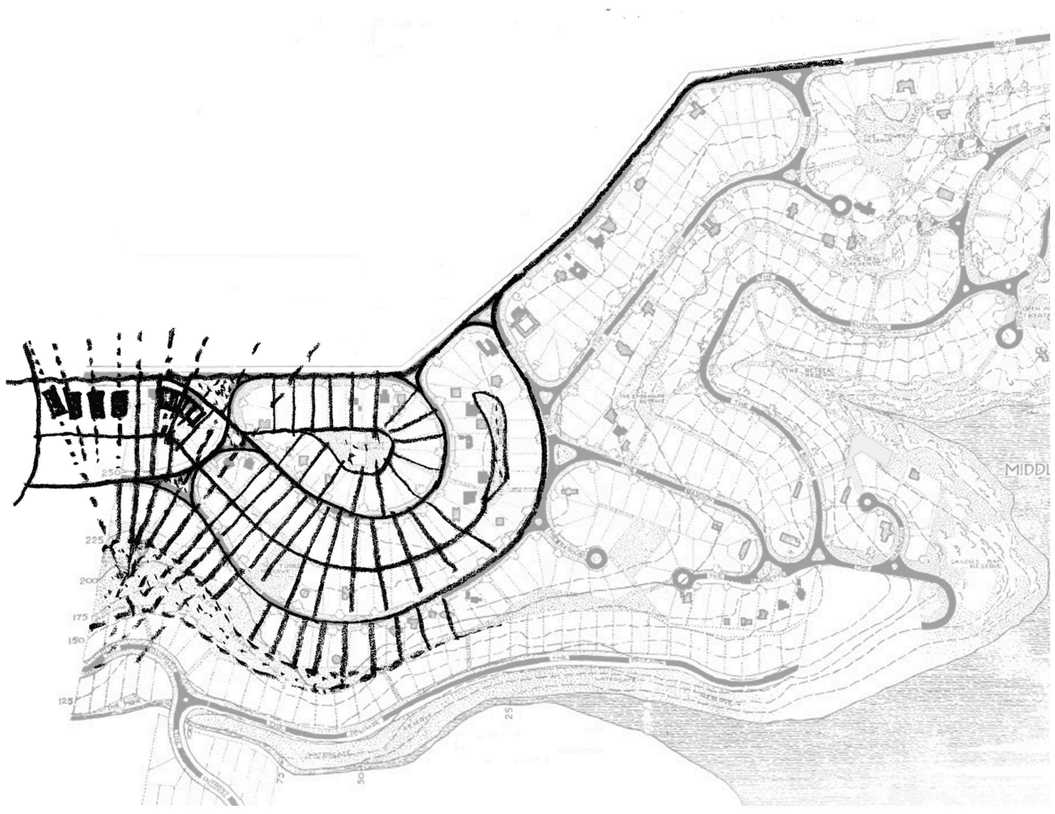
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Design Verification Statement

12 February 2026

NSW Department of Planning & Environment

Housing Delivery Authority

100 Edinburgh Road, Castlecrag
State Significant Development Application

DESIGN VERIFICATION STATEMENT

The SSDA seeks approval for:
- Demolition of existing structures to enable redevelopment;
- Site preparation works, including excavation and remediation;
- Site infrastructure works, including civil and utility upgrades to support the redevelopment;
- Construction and use of a new mixed-use residential tower, including:

    - Residential apartments incorporating a mix of 1- bedroom, 2-bedroom, 3-bedroom units, penthouse units and Affordable Housing;
    - Ground floor retail activating Edinburgh Road frontage and Lower Ground supermarket;
    - Ground level lobby providing access and connectivity;
    - Podium-level landscaped communal open space and building services;
    - Tower floors comprising residential apartments arranged around a central core; and
    - Basement levels incorporating car parking, loading, and associated building services.

Pursuant to Clause 29 of the Environmental Planning and Assessment Regulation 2021, I hereby declare that I am a qualified designer, which means a person registered as an architect in accordance with the Architects Act 1921, as defined by Clause 3 of the Environmental Planning and Assessment Regulation 2021.

I directed the design of the residential apartment component of the State Significant Development Application approval as described above, and I confirm that the design achieves the design quality principles set out in Schedule 9 of the State Environmental Planning Policy (Housing) 2021.

Yours sincerely,



David Haseler,
Principal

SEPP (Housing) 2021 Schedule 9

15.1 Compliance Statement

Principle 1
Context and Neighbourhood Character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

100 Edinburgh Road, Castlecrag, is a residential development within the Willoughby LGA. Located in a low-density suburb of strong heritage and landscape value, the site forms part of the Castlecrag Heritage Conservation Area, originally planned by Walter Burley Griffin. The design responds sensitively to the suburb's defining characteristics; its steep topography, mature vegetation, and landscape-led planning philosophy—where built form remains secondary to the natural environment.

The proposal follows the natural contours of the land, retains significant vegetation, and utilises natural materials such as sandstone to ensure visual integration with the bushland setting. Building siting and scale preserve key view corridors and the landscaped rhythm of the Edinburgh Road streetscape, reinforcing the area's environmental and cultural identity.

In alignment with the NSW Housing SEPP, the development supports housing diversity and contributes to the delivery of new and potentially affordable housing within Castlecrag, while maintaining the suburb's distinctive landscape character.

Principle 2
Built Form and Scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

The building form has been carefully designed to transition to the scale of a local centre. The proposal achieves a balanced architectural composition through well-articulated façades that break down bulk and create a series of interconnected indoor and outdoor spaces. Building height, setbacks, and massing have been shaped by the site's natural topography, allowing the form to sit comfortably within the landscape and maintain a cohesive relationship with its context.

The architecture adopts a simple, landscape-responsive form, with upper levels stepped back to minimise visual impact when viewed from the street and adjoining properties. The use of natural materials and muted colour tones further integrates the development within its bushland setting and reduces overall visual prominence.

However, the site presents an opportunity to accommodate a increase in height and density in line with the evolving housing needs of the locality. The proposal can make a meaningful contribution to housing supply in New South Wales and deliver an increased proportion of affordable housing under the provisions of the Housing SEPP.

Overall, the design achieves a cohesive and contextually responsive built form that respects the existing character of Castlecrag while anticipating future growth and change.

Principle 3
Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

The proposed development comprises a connected podium articulated by a landscaped terrace, creating a strong visual and functional link between the building elements. Above the podium, the built form is separated into two distinct building volumes, each with a centrally located core that facilitates efficient vertical and horizontal circulation. The lower ground level accommodates a supermarket, while the ground level provides active street frontages through retail tenancies, enhancing engagement with the public domain. The upper levels include a mix of one-, two-, and three-bedroom apartments, including premium penthouse units that take advantage of views and natural light. Sleeved residential units at the rear create a sensitive interface with adjoining properties.

The separation between the two building volumes meets the ADG minimum requirement ensuring adequate privacy, natural light, and cross-ventilation. The building layout promotes a balance between privacy and community interaction. Landscaped terraces and internal communal areas provide opportunities for informal social connection and active use by residents, fostering a sense of belonging within the development.

The proposed density appropriately responds to the site's strategic location within Castlecrag, supporting the area's evolving role as a local centre for residential, retail, and recreational activity. Through efficient spatial planning and flexible apartment design, the proposal caters to a range of household types and lifestyle needs, achieving an outcome that enhances housing diversity without compromising livability. Overall, the development embodies a cohesive, contextually responsive design that aligns with contemporary urban and housing objectives.

Principle 4
Sustainability

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs.

The design strategically integrates principles of environmental sustainability with social and economic performance, with passive design initiatives and efficient spatial planning. Natural cross-ventilation is a key driver of the apartment planning strategy, with building orientation and internal layouts optimised to facilitate effective airflow and maintain thermal comfort throughout the year. Ample daylight penetration across residential levels enhances internal amenity, supports occupant wellbeing, and reduces dependence on artificial lighting and mechanical systems.

Sustainable principles are embedded within the building envelope through the careful selection of façade materials, shading elements, and high-performance glazing systems that effectively control solar gain and improve energy efficiency. These measures collectively minimise operational energy demands and ongoing costs for residents and tenants, contributing to the long-term environmental and economic sustainability of the development.

In achieving this, the proposal exemplifies a balanced and forward-looking approach to urban living—one that harmonises liveability, environmental responsibility, and enduring economic resilience.

SEPP (Housing) 2021 Schedule 9

Principle 5
Landscape

Good design recognises that landscape and buildings operate together as an integrated and sustainable system, resulting in development with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

The proposal integrates built form and landscape as a cohesive and sustainable system, reinforcing the green character that defines Castlecrag. Landscape design is central to the concept, reflecting the suburb's enduring principle of buildings set within a continuous natural setting. The development retains significant existing trees where possible and introduces native and endemic plantings to enhance ecological value and visual continuity across the site.

Generous deep soil zones along site boundaries support mature canopy growth, improve stormwater infiltration, and maintain visual softness between properties. The landscape treatment works with the site's natural topography, allowing the built form to merge seamlessly with the surrounding bushland rather than dominate it. This approach aligns with the Housing SEPP's landscape principles and the Griffin heritage philosophy that places landscape as the organising framework of Castlecrag.

Together, the architectural and landscape elements soften the urban edge, promote passive environmental performance, and enhance the public realm experience along Edinburgh Road. Through sensitive materiality, layered planting, and an appropriate scale, the proposal contributes to a cohesive streetscape and supports Castlecrag's ongoing evolution as a highly liveable urban environment.

Principle 6
Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.

The proposed development prioritises amenity through a design that balances spatial efficiency with comfort, accessibility, and quality of life. Internal layouts have been carefully resolved to provide appropriate room proportions, maximise access to natural light and ventilation, and ensure a high level of acoustic and visual privacy.

Externally, the development enhances resident and neighbour amenity through the integration of communal open spaces between the tower forms. Communal spaces at the roof level offer views and improves solar access and ventilation.

Ground plane treatments, accessible entries and clear wayfinding ensure inclusivity for people of all ages and mobility levels. The design achieves a considered balance between density and liveability, resulting in a positive residential environment that contributes to health, well-being and social connection.

Principle 7
Safety

Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.

The proposal has been designed to optimise safety and security through clear spatial organisation, passive surveillance, and well- defined transitions between public, communal, and private zones. Entries to the communal open spaces are legible and secure, with dedicated access points that are visible from the public domain and supported by lighting and clear sightlines.

At ground level, the building interfaces with Edinburgh Road and Eastern Valley Way through activated frontages and landscape treatments that support permeability without compromising safety. Active frontages minimise blank walls, while durable materials, strategic lighting, and legible wayfinding reinforce security.

Communal areas such as terraces and internal communal open spaces are strategically located to allow for visual connection with surrounding spaces, reinforcing passive surveillance while maintaining privacy for occupants.

Principle 8
Housing Diversity and Social interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.

The proposal provides a diverse apartment mix that supports varying household needs, from singles to families and downsizers. Flexibility in apartment layouts ensures adaptability over time. Communal terraces and landscaped podiums are designed to foster social interaction, while ground floor retail activates the street and contributes to local vibrancy.

Provision is also made for affordable housing, consistent with the Catlecrag's objectives for inclusive and mixed tenure.

The proposed residential development responds to Castlecrag's evolving social context by offering a flexible housing model that supports a diverse range of living needs, lifestyles and household budgets. A mix of apartment types and shared amenity spaces provide choices for a broad demographics.

Principle 9
Aesthetic

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

The proposed built form is composed with clarity and balance, with its external expression derived from the internal planning and structural of the development. The facade is articulated to reflect the arrangement of uses within, creating a legible and proportionate form that integrates comfortably with the evolving urban context.

Openings are carefully positioned to optimise outlook and daylight while maintaining privacy and residential comfort. Recesses, setbacks, and a defined relationship between the podium and upper levels contribute to a well-scaled and visually coherent composition that strengthens the streetscape along Edinburgh Road.

A refined material palette of sandstone-inspired tones, muted finishes, and glazed elements enhances the visual quality and sense of place. The facade's rhythm and modulation are consistent with the surrounding context, reinforcing the emerging identity of Castlecrag as a green, connected, and vibrant local centre.

Project Background

Executive Summary

This SSDA seeks consent for the construction of a shop top housing development comprising of a 4-storey podium with ground floor specialty retail tenancies, two 11-storeys residential envelopes from the existing ground level with communal open space on the rooftop, and 5 levels of basement car parking. A total of 150 dwellings with 10 units of affordable housing is included in the proposal. The proposal also includes site amalgamation of two lots and strata subdivision at 100 Edinburgh Road, Castlecrag.

The proposal for 100 Edinburgh Road, Castlecrag builds upon an existing Development Approval (DA) for a mixed-use development on the site, introducing additional residential levels above the previously approved Development Application (2024) to deliver a more efficient and future-focused design outcome.

The site occupies a strategically significant position within the Castlecrag Local Centre, situated along Edinburgh Road and surrounded by established low-density residential areas and natural bushland. The proposal responds to this context through a carefully considered design that integrates built form, landscape, and public domain improvements while respecting the suburb's strong landscape and heritage identity.

The amended design maintains the intent and integrity of the existing DA, retaining the approved retail podium and active ground floor uses while optimising the vertical extension to accommodate a diverse mix of two-, three-bedroom and penthouse units. The increased height and density are consistent with the NSW Housing SEPP objectives, supporting greater housing diversity and affordability while achieving high standards of architectural and environmental performance.

Through sensitive massing, a refined material palette, and generous landscaped terraces, the proposal ensures that the new residential components sit comfortably within the surrounding topography and minimise visual impact from key viewpoints. Enhanced sustainability measures, including passive design strategies, improved energy performance, and expanded communal open space, further strengthen the project's social, environmental, and economic outcomes.



/ 3D View of Built form

Project Overview

Introduction

The existing 2024 DA approval for 100 Edinburgh Road Castlecrag establishes a comprehensive base that addresses considerations of access, address, public domain and landscape.

The design initiatives of the approved scheme are retained and the design can be naturally extended to support additional affordable and market housing.

The additional building height equates to a two 11-storeys residential envelopes above the existing ground level along Edinburgh Road. The number ofapartments can increase from 38 in the approved DA to over 100 apartments.

Site Description

The site is located at 100 Edinburgh Road, Castlecrag. The site is bound by Edinburgh Road to the North, Eastern Valley Way to the West and low density residential to the South and East

The site falls within the study area for Castlecrag and is in an ideal location for higher density to meet the anticipated urban strategy targets of the state and Willoughby City Council.

The site is not listed as a heritage item or located within a Conservation Area identified by the WLEP 2012. The site, however, adjoins the Griffin Heritage Conservation Area as it is defined by The WLEP 2012 and lies within the vicinity of the Community Centre, No. 10 The Postern, Castlecrag, listed by Schedule 5 Part 1 of this plan. (refer to Heritage Impact Statement prepared by Weir Phillips Heritage and Planning)

The traditional lands of the Cammeraygal people are now contained within much of the North Sydney, Willoughby, Mosman, Manly and Warringah local government areas. The Cammeraygal people are recorded as being in the northern parts of the Sydney region for approximately 5,800 years. Cammeraygal Country includes the waters of Middle Harbour, Mugga, to the reaches of Lane Cove River, Turrumburra.

Topography and Orientation

The site is located on a prominent ridge line, the ridgeline elevations provide views across Castlecrag to the South.

Overview of Proposed Development

The proposed mixed-use residential building includes a range of one-, two-, three- bedroom apartments, including penthouse apartments and affordable housing.

The Ground Level provides retail tenancies and super market at Lower Ground level along Eastern Valley Way and Edinburgh Road. A new through site link bounded by retail, provides a connection to the pedestrian network to the Postern and Castlecrag pathway network beyond. Access to the basement car parking and loading is from the North East corner of the site off of Edinburgh Road.

Development Overview

Site Area	5,099m^2
Building Levels	11 Residential levels above existing Ground Floor
Basement Levels	5
Total Gross Floor Area	Residential GFA : 17,497m^2 Retail GFA: 3,454m^2 Total GFA: 20,951m^2
Building Maximum RL to AHD	RL 126.737m
Total Apartments	150
Adaptable Apartments	24
Car Parking	376
Motor Bike Parking	21
Loading Dock Truck Bays	2

PART A: URBAN DESIGN RESPONSE

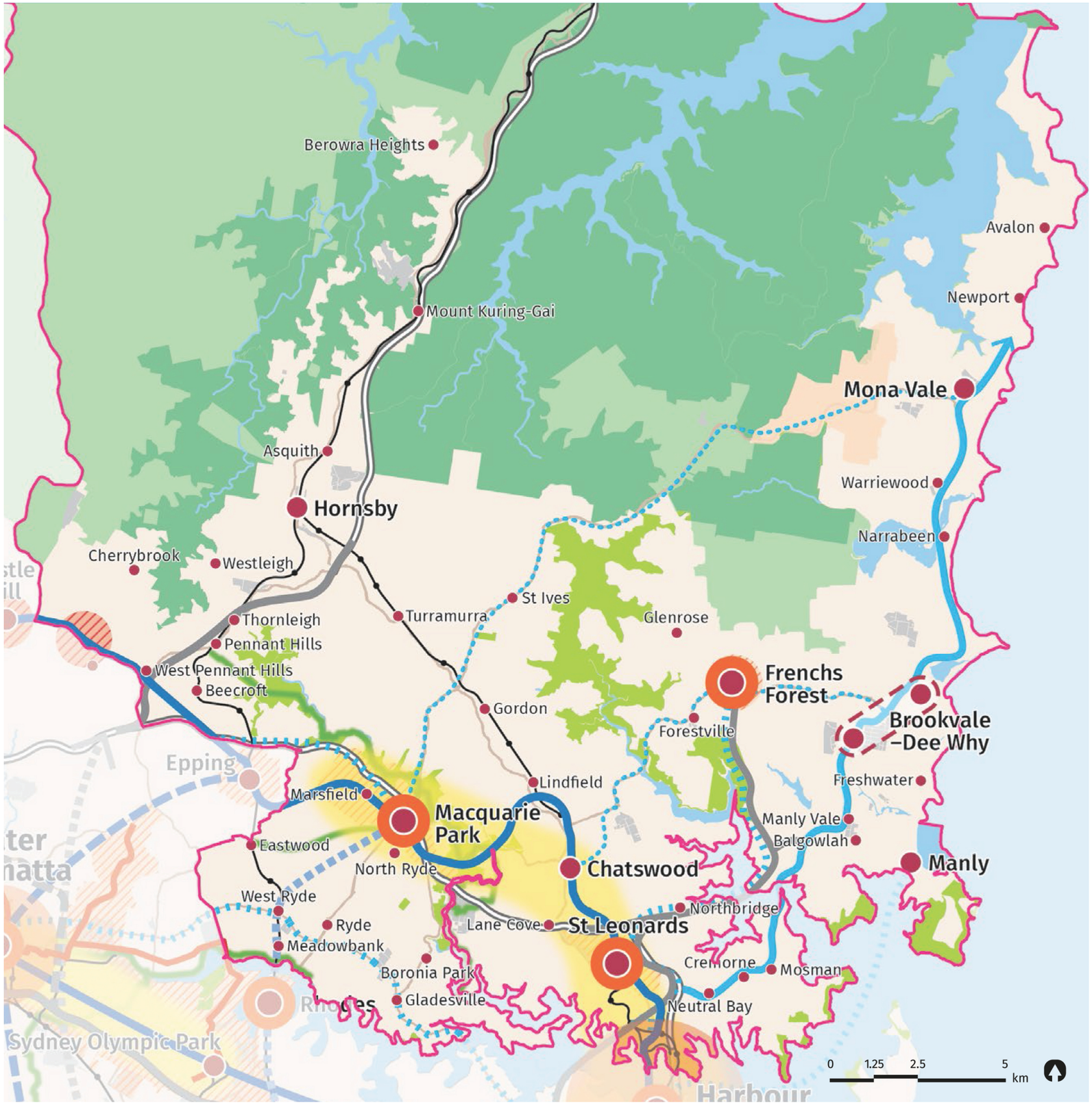
Place and Context

Place

Macro-level Context

The Greater Sydney Region Plan envisioned a connected Metropolis of three cities where most residents live within 30 minutes of their jobs, education and health facilities, services and great places. The Plan outlined the expected demands for housing and employment in relation to population growth. And, in turn, identified over arching development strategies to support the above projections.

According to the plan, by 2056 there will be an additional 1.5 million people across Sydney metropolitan area, with a requirement for "*725,00 new homes and 817,00 new jobs.*"



/ North District Plan 2018

Place

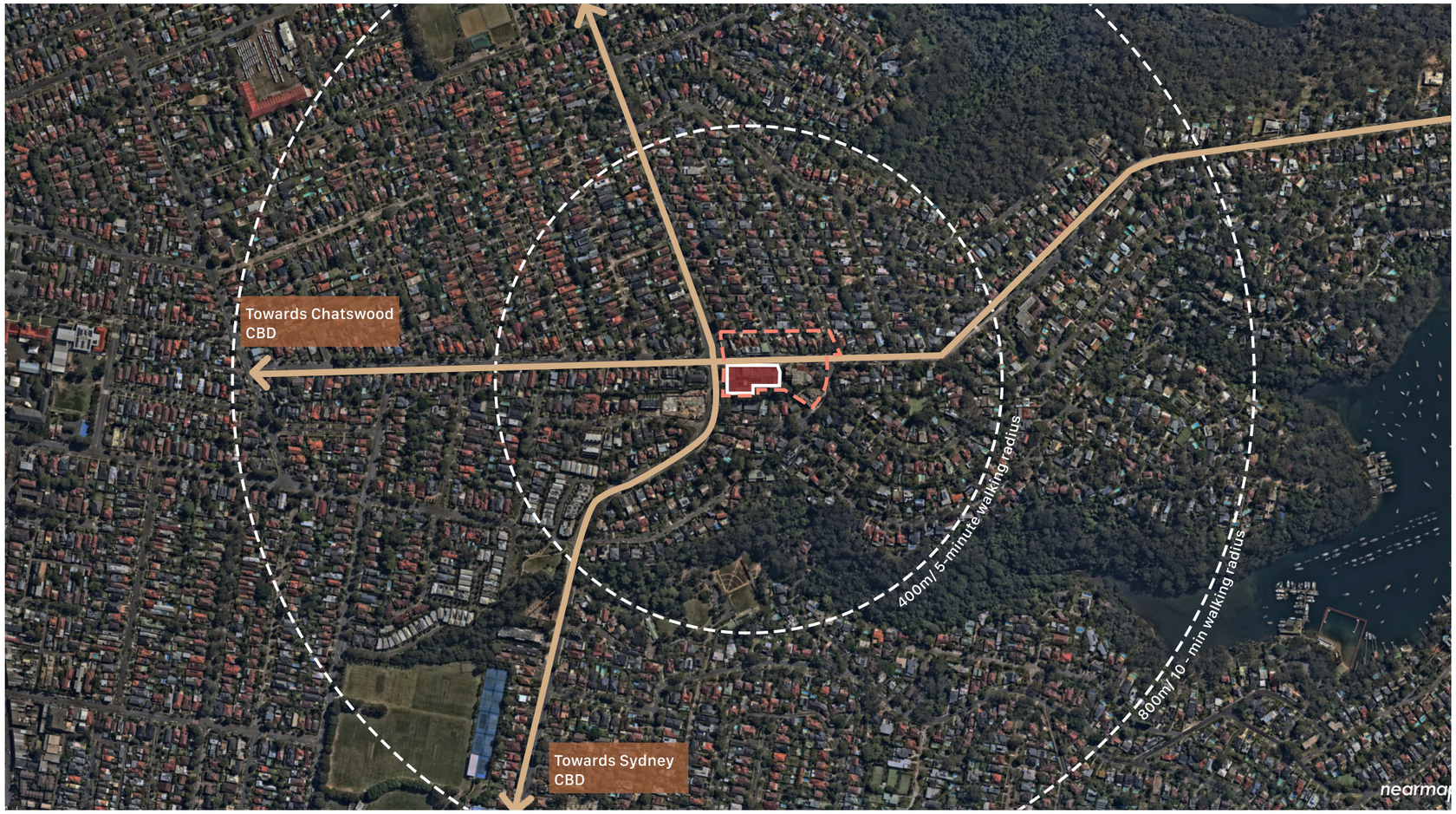
Macro-level Context

The proposed development is located within Willoughby, approximately 6.5km North of the Sydney CBD and 3km from Chatswood CBD. Castlecrag falls under the governance of the Willoughby City Council and majority of the municipality is residential with the subject site within close proximity to the busy centres of St Leonards, Chatswood and North Sydney CBD.

The draft Willoughby Local Centres Strategy 2036 aims to promote a network of thriving, attractive and distinctive village centres throughout the Council area.

The current trend shows that Castlecrag's population is set to drastically increase over the next few years. The site falls within the study area for Castlecrag and is in an ideal location for higher density to meet the anticipated urban strategy targets of the state and Willoughby City Council.

Aligning with Metropolitan Strategies in place, this proposed development will cater to the development of a walkable local centre contributing positively to housing demand of additional 1,500 dwellings in Willoughby's local centres by 2036.



/ Macro-level context of the Quadrangle



/ Place



/ The Village



/ Landscape

Place

Site and Surroundings

The site is located at 100 Edinburgh Road and is comprised of two lots, Lot 11 DP 611594 and Lot 1 DP 43691, totalling to 5,166m^2. Lot 11 defines the major part of the site and Lot 1 comprises of a small strip of land, approx. 70m^2 on the eastern end of the southern boundary.

Lot 11 is zoned for Local centre E1 and Lot 1 is zoned Public Recreation RE1. It is imagined that the adjacent land (not forming part of this submission) zoned RE1 could be remediated with agreement from the appropriate stakeholders.

The site is located on a prominent ridge line, along Edinburgh road. The Site slopes towards the south and has a fall of approx. 12-8% from north to south. The site is afforded good solar access to the north where the current site utilises the forecourt with activated retail frontages. The orientation of the site lends itself for both public and private uses where solar access is readily available.

To the south of the site, an existing public site link is formed, currently in a state of disrepair. The site link currently ends at a driveway where access is unsafe and impeded by the flow of traffic. There is an abundance of opportunity to make this a safe and legible site link.

The existing trees on the site were planted when the previous development was built. However, they are not of local old growth forests and are not endemic to the context. The existing street trees along Edinburgh Road and Eastern Valley way add a sense of place and are to be retained.

The existing building had no heritage merit and is not listed under state or local registers as a building of heritage significance. Demolition of all built works on the site has been completed under a separate approval.



/ Site context

Place

Landscape and Nature

The natural contours of the site are closely followed and interpreted in the 1921 Griffin Plan for Castlecrag. These topographic lines are followed by the lot lines, which create a comparable radial division, and the streets and pedestrian walkways. This beautiful, flowing geometry comes to an abrupt stop at their plan's eastern boundary. We envision a potential continuation of the Griffin geometry in our site concept. A soft extension of the radial geometry that reaches to the eastern valley way, the line of "The Parapet" and "The Rampart," and Castlecrag's natural boundary.

The inspiration for our architectural form has come from the landscape forms of Castlecrag. The emblematic landscape elements of Castlecrag have been re-interpreted in the architecture:

- **Gully Ravine**: The central profiling of the podium stepping down to the gully
- **Terracing Topography**: The profiled landscape podium terraces
- **Sandstone Outcrop and Promontory**: The cantilevered sandstone block-like forms on the ridge



/ Existing landforms



One of the predominant communities associated with the unique Castlecrag natural setting is the Ridge top Woodland which is set on the top of the Sydney Sandstone found along plateaus, ridges and exposed slopes. with species such as the narrow-leafed Apple, Scribbly Gum, Sydney Peppermint, Stringybark and banksias.



The ***upper escarpments*** are reminiscent of the exposed sandstone ridges, with eroded rock outcrops and with gnarled vegetation reaching out for the sun with close ground hugging plants & sparse planting. The pockets of richer soil and diversity means that a large variety of stunning native plants, with vibrant colours and textures There are fragrant boronias, soft furry petalled flannel flowers abundant in spring, sculptural ancient macrozamias, grass trees.



Sydney ***Sandstone gully*** thrives on the geology of Hawkesbury Sandstone. With many secret glades and gullies, with deep clear pools, and mossy caverns, and soft overhanging ferns are part of this typology. The bedrock with spectacular sandstone monoliths pitted and wind eroded form honeycomb sculptures that detached from the Escarpment.

Place

Landscape and Nature

A contextual landscape response



/ Willoughby soil map

Objectives

The landscape design draws upon the geology that was formed by distant rivers eroding inland mountains that began to deliver huge amounts of sand, silt, and clay that filled the Sydney Basin. The sediments were fused together and cemented into sandstone and the finer silts to shale these unique layers are the Narabeen group, Hawkesbury (Sydney) Sandstone and uppermost Wianamatta shale the correlation between the geology and the vegetation that is celebrated and abstracted within the design. This unique bushland of Castlecrag displays a vibrant, invigorating, diverse and yet calming natural bushland. It is that essence of the natural bushland that is integrated into the project, respecting and reflecting the unique quality of the natural landscape.

The Landscape design approach can be defined as incorporating the following key objectives:

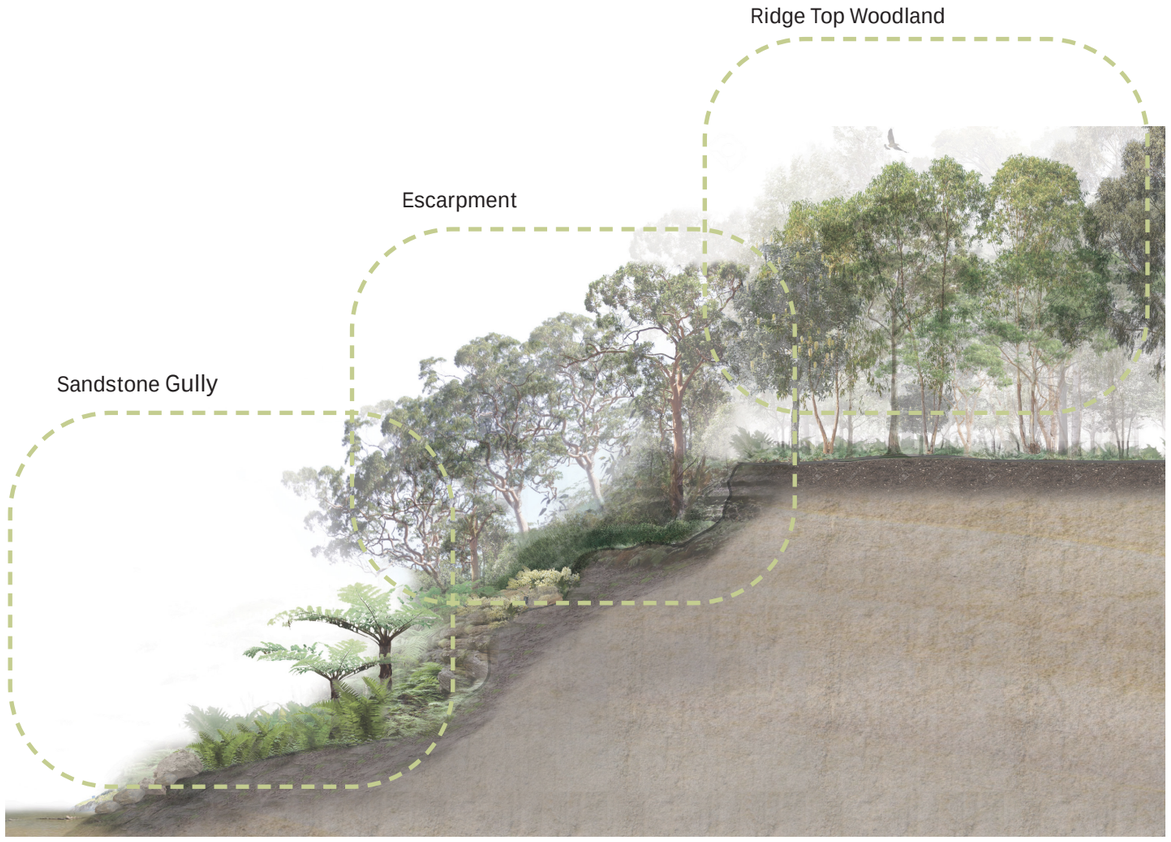
- Create a unique development through the integration of architecture and landscape
- Pay homage to the vision of Marion and Walter Burley Griffin who perceived the Castlecrag's bushland flora as " the cleanest most delicate and varied native indigenous perpetually blooming flora extent".
- Create a landscape that is an integral part of the built form
- Reconnect with the surrounding natural landscape qualities.
- Extend natural heritage landscape of Castlecrag into the precinct.
- Strengthen the distinctive Castlecrag community identity
- Provide a strong sense of place and community pride.
- Develop a contemporary landscape, with references and respect to the historical sentiments and character of the historical Castlecrag landscape
- Provide a sophisticated bushland environment through considered simplicity of design, while responding to the integrity of the architecture.
- Provide spatial opportunity for a variety of recreational activities that cater to both residents and visitors of different age groups.
- Replace removed trees with endemic species in similar numbers.

The Quadrangle is a cohesive piece of architecture and landscape, with a design that aims to bring people closer to the natural world in a bushland setting. Our work and concept for this site are based on the idea that the lines separating building and nature is artificial. The first step in our strategy and design process is to comprehend and interpret the Castlecrag's existing terrain.

Landscape Zones

This landscape section of the planning proposal supports the building envelope is broadly defined by the following areas:

- Integrated Landscape through site link that connects the existing pedestrian path to The Postern
- Public Domain and community space with Intergrated retail areas to Edinburgh Road
- Landscaped private communal Garden including; seating, garden areas, outdoor dinning.



/ Castlecrag's form

Site

Planning Context

North District Plan 2018

The North District Plan is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision for Greater Sydney. It is a guide for implementing the Greater Sydney Region Plan, A Metropolis of Three Cities, at a district level and is a bridge between regional and local planning. The proposal will positively add to both the private and affordable housing stock in line with targets outlines above.

Local Strategic Planning Statement (LSPS), 2020

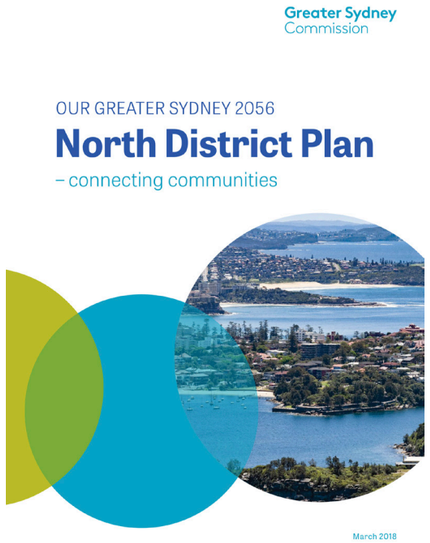
Aligned with the Great Sydney Region Plan and the North District Plan, the NSW Government's strategic land-use plans for Great Sydney and the North District, the Willoughby Local Strategic Planning Statement provides the vision for 2036 and 10 key directions and priorities.
The LSPS guides a range of land-use planning strategies and instruments including LEP and DCP.

Willoughby Local Centres Strategy 2036

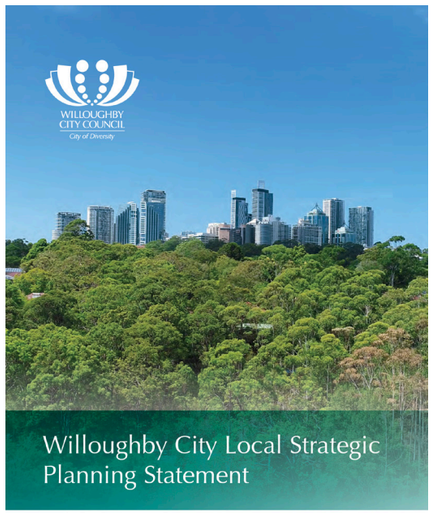
Aligned with the Willoughby LSPS and Willoughby Housing Strategy, this strategy aims to identify 8 local centres that provide opportunities for growth in employment and housing. This aims to:
- help reinforce the importance of local centres, as meeting places, a focus for local shopping, and social cohesion;
-To enhance the distinctive character of local centres and improve the public domain
- respect its existing character and heritage while promoting growth

Our Green City Plan 2028

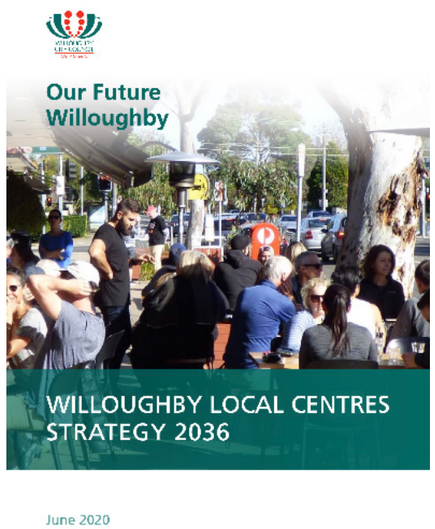
To achieve the green city outcomes, and protect, conserve and improve local diverse landscapes, this local plan focuses on the priorities including:
- Reduce carbon and greenhouse gas emissions;
- Promote sustainable lifestyles and practices;
- Enhance, protect and respect waterways, bushland, nature, wildlife and ecological systems; and
- Reduce energy, water, and resource waste and encourage reuse and recycling.



/ North District Plan



/ Local Strategic Planning Statement



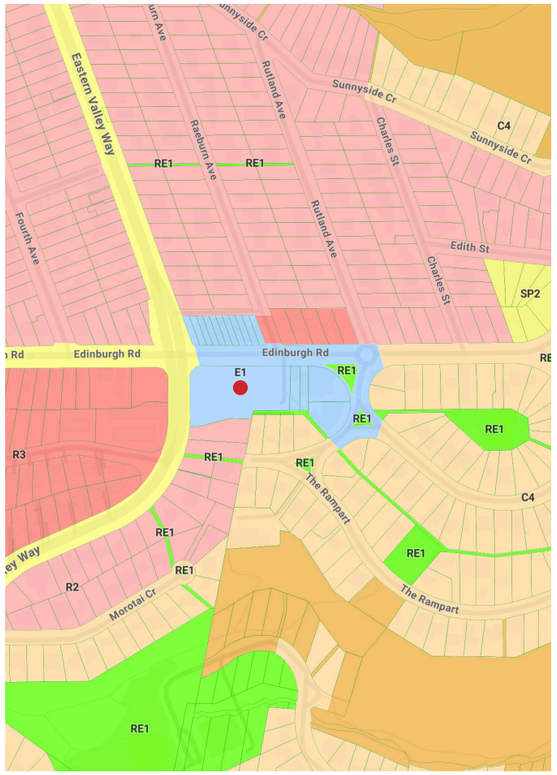
/ Local Centres Strategy 2036



/ Our Green City Plan

Planning Controls

Land Use



E1 Local Centre

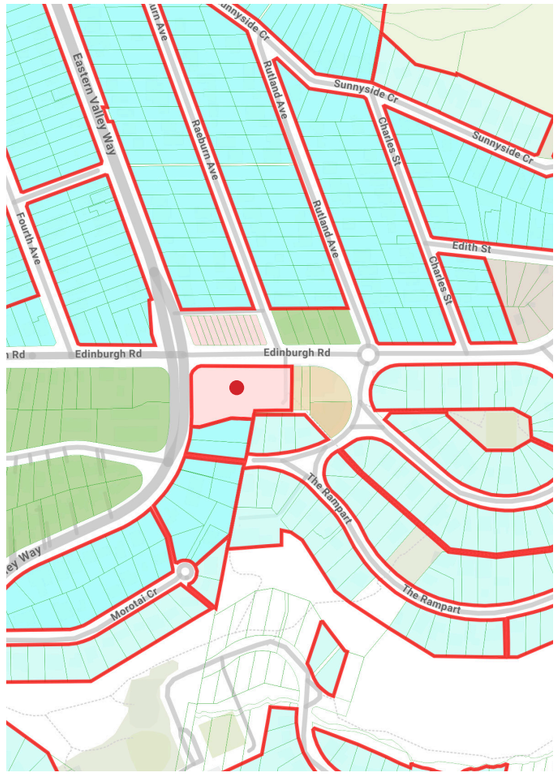
MU1 Mixed Use

R1 General Residential

RE1 Public Recreational

The precinct is defined by a combination of E1 *Local Centre* and R2 *Low Density Residential* zones along one side of Edinburgh Road, with C4 *Environmental Living* zoning on the opposite side. The SSDA is lodged under the Housing Delivery Authority with a target to deliver 150 dwellings, including affordable housing in a mixed use development

Floor Space Ratio



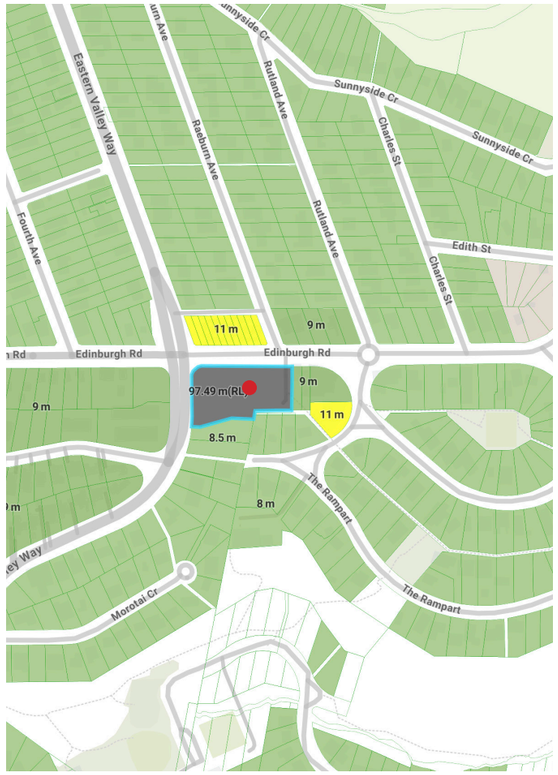
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0.7:1

0.4:1

The locality supports low to moderate floor space ratios of 0.4 to 1.6:1. This largely reflect Castlecrag's established low-density and landscape-integrated character.

Building Heights



97.49m RL

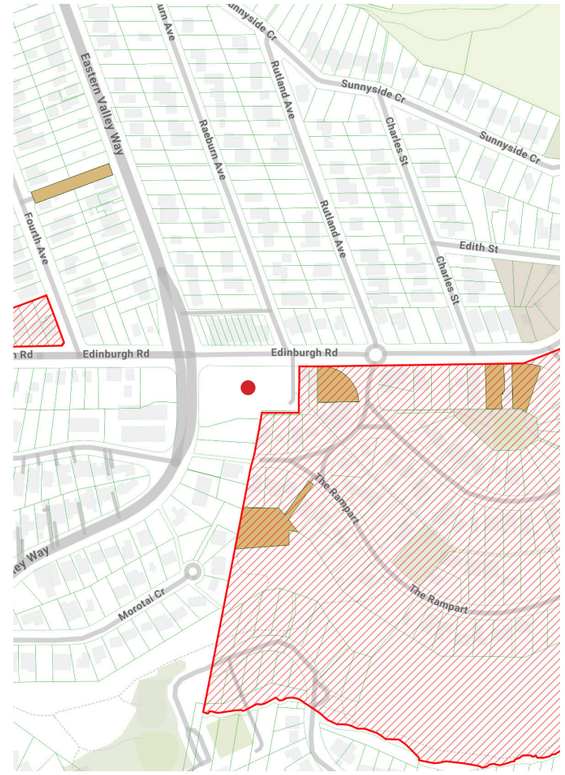
11m

9m

Site

Heights are generally limited to one and two storeys, with modest increases encouraged along Edinburgh Road to support mixed-use activity. Under the Housing SEPP, developments providing affordable housing will qualify for increased height and floor space bonus, enabling increased housing diversity while maintaining the area's established character and amenity.

Heritage



Heritage Conservation Area

The precinct is characterised by a strong heritage and landscape identity, with much of Castlecrag included within the Heritage Conservation Area. While the subject site itself is not heritage-listed, the proposal has been designed to respond sensitively to its heritage setting.

Site location

The Site

The site is located at the junction of Eastern Valley Way, which is a busy arterial road and Edinburgh Road, local road servicing the local centre. The suburb displays much evidence of Griffin's plan with winding roads, and integrated with the natural landscape.

The Site is located within the Quadrangle shopping village which is zoned as E1 (Local Centre) as per WLEP 2012. The adjacent development around the site is predominantly residential (R2 and R3). Edinburgh Road serves as the main axis for the local centre.

The site is surrounded by 1 and 2 storey dwellings The buildings within the local centre are in the form of a traditional shop top housing with 1-2 storey mixed use. The local centre comprises of a fine grain built form along Edinburgh Road with an active retail edge comprising of shops, cafes and restaurants. The proposed redevelopment of the Quadrangle must retain a similar character with a community focus.



/ Site viewed from junction of Edinburgh Road and Eastern Valley way



/ Existing character

The Site

Views

With the existing building on the site now demolished, the visual catchment remains limited due to the site's position approximately 11 metres below Edinburgh Road. Despite its relatively prominent location, the proposed development is partially obscured from many potential viewing points, as it sits within the canopy height of mature street trees in the surrounding area. Furthermore, the local topography, curvilinear road network, and heavily vegetated streetscape all contribute to restricting sightlines both to and from the site.

An assessment of the surrounding local streets provides an understanding of available sight distances and assists in evaluating the visual impact of the proposal. In most instances, the established street trees prevent clear views into the site. These street-level perspectives are instrumental in determining the appropriate form and massing of the development in relation to its context.



/ Location Plan



/ From Rutland Avenue looking west



/ Outside 97 Eastern Valley Way looking north



/ From outside Griffin centre in Edinburgh Road looking west of site



/ View of Quadrangle shopping village from north



/ From Eastern Valley Way looking south of site



/ North facade of existing shopping village

The Site

Castlecrag as a local centre

A Draft Local Centres Strategy 2036 was released by Willoughby council in 2019. The strategy documents characterise Castlecrag as a shopping village with a unique character, having a strong reference to the original subdivision penned by Walter Burley Griffin and Marion Mahony Griffin.

The WLCS 2036 summarises the character and place of the Castlecrag Study are as follows:

"The subdivision and layout of Castlecrag was designed by Walter Burley Griffin and the south eastern side-of the center is within the Griffin Conservation Area. The centre sits on a ridge-line with views to the south. Castlecrag has a predominantly one to two storey built form character with a fine grain street frontage. The built form has a strong heritage character, referencing the original vision for Castlecrag and the existing Griffin Conservation area. The centre offers north-facing cafes and associated outdoor dining, complemented by retractable awnings on the southern side of the street and consistent fixed awnings to the north."

The proposed vision is to transform the ageing Quadrangle Shopping Village into a mixed-use and walkable neighbourhood centre that can better serve the community of Castlecrag:

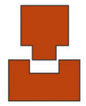
- Strengths of Existing Character
- Distinct heritage character
- Range of dining venues
- Undercover protection through street awnings
- Amenity provided by the small supermarket located
- Streetscape is attractive with a landscape character
- Retail amenity
- Fine grain built form of existing shop on Edinburgh Rd
- Mature trees contribute to the visual aesthetics of the centre
- Parking both on street and off street supports

The proposal evolving from concepts developed in an earlier design excellence competition for the site, will offer a large village space with amenity that is inclusive of the wider community. It is a project aimed at rejuvenating an old shopping village that has come to the end of its commercially viable life, and providing the community with a higher level of amenity.



/ Castlecrag as a local centre

NSW *Better Placed* Objectives



Better Fit

Contextual , local and of its place

Good design in the built environment is informed by and derived from its location, context and social setting. It is place-based and relevant to and resonant with local character, heritage and communal aspirations. It also contributes to evolving and future character and setting.

+ Building design to use natural materials to blend into bushland setting
+ Built form to follow natural contours and be visually recessive while respecting context yet responding to evolving character of Castlecrag.

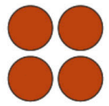


Better Performance

Sustainable, adaptable and durable

Environmental sustainability and responsiveness is essential to meet the highest performance standards for living and working. Sustainability is no longer an optional extra, but a fundamental aspect of functional, whole of life design.

+ Building orientation and form maximise access to views, natural light and cross-ventilation.
+ Native planting, green roofs and passive cooling for better ecological performance.
+ Provision for EV charging for long-term adaptability.

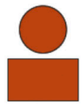


Better For Community

Inclusive, connected and diverse

The design of the built environment must seek to address growing economic and social disparity and inequity, by creating inclusive, welcoming and equitable environments. Incorporating diverse uses, housing types and economic frameworks will support engaging places and resilient communities.

+ Affordable housing is provided as part of a balanced residential mix.
+ Public domain improvements with high quality retail activation along Edinburgh Road enhance local amenity.
+ Mixed-use program supports the local economy and creates activity throughout the day.



Better For People

Safe, comfortable and liveable

The built environment must be designed for people with a focus on safety, comfort and the basic requirement of using public space. The many aspects of human comfort which affect the usability of a place must be addressed to support good places for people.

+ Apartments are designed with well considered solar access, outlook and amenity.
+ Communal open spaces provide opportunities for recreation and social connection.
+ Universal design principles ensure accessibility and inclusivity.



Better Working

Functional, efficient and fit for purpose

Having a considered, tailored response to the program or requirements of a building or place, allows for efficiency and usability with the potential to adapt to change. Buildings and spaces which work well for their proposed use will remain valuable and well-utilised.

+ Housing mix tailored to diverse household needs, including market and affordable dwellings.
+ Efficient planning delivers highly usable spaces with minimal circulation.
+ Building layouts are designed to adapt to future change.

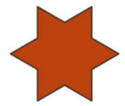


Better Value

Creating and adding value

Good design generates ongoing value for people and communities and minimise costs over time. Creating shared value of place in the built environment raises standards and quality of life for users, as well as adding return on investment for industry

+ Three key tenures: market housing; affordable housing, and retail — create long-term value.
+ Enhanced street character contributes to the appeal of Castlecrag.
+ Investment in durable materials will minimise lifecycle costs.



Better Look and Feel

Engaging, inviting and attractive

The built environment should be welcoming and aesthetically pleasing, encouraging communities to use and enjoy local places. The feel of a place, and how we use and relate to our environments is dependent upon the aesthetic quality of our places, spaces and buildings. The visual environment should contribute to its surroundings and promote positive engagement.

+ Active frontages create a welcoming public realm.
+ Green terraces and communal open spaces establish a gathering space for residents and visitors.
+ Retail hub and an identity for Castlecrag

Key Design Principles

Designing With Country

Country

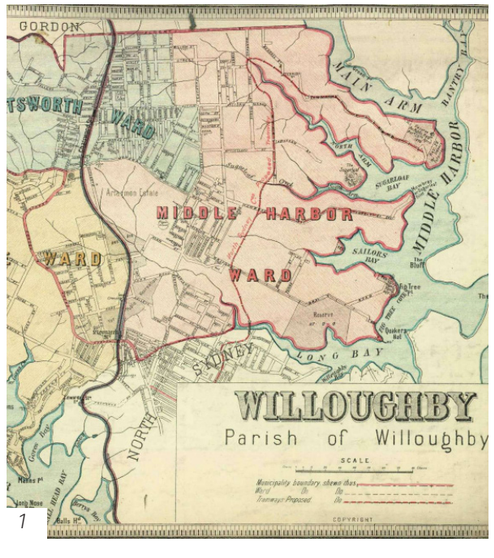
The site lies on the lands of the *Gai-mariagal people*, also known as the *Cammeraygal people of the Eora Nation*, the Traditional Custodians of this Country. The Cammeraygal have maintained a continuous and enduring connection to the land, waters, and skies of the region for thousands of years. The Cammeraygal are part of the Gai-mariagal group of the Eora Nation, whose Country extends across Sydney's Lower North Shore, encompassing the harbour foreshores, sandstone ridges, and bushland valleys that define the character of Castlecrag and its surrounds.

The process of colonisation profoundly disrupted these connections, with European settlement from the late 18th century leading to dispossession, displacement, and significant cultural and social impacts for the Cammeraygal people and the wider Eora Nation. This proposal acknowledges that history and responds to the NSW Government's Connecting with Country Framework by embedding respect for Aboriginal cultural values into the planning and design process.

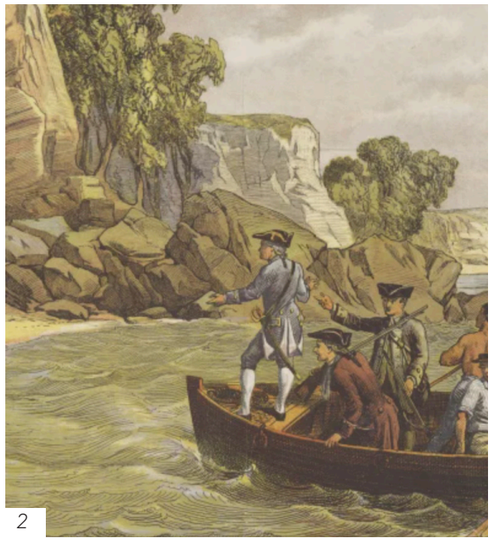
The project integrates multiple opportunities to strengthen connections with Country, recognising the enduring cultural, spiritual, and environmental relationship of the Cammeraygal people, the Traditional Custodians of this land.

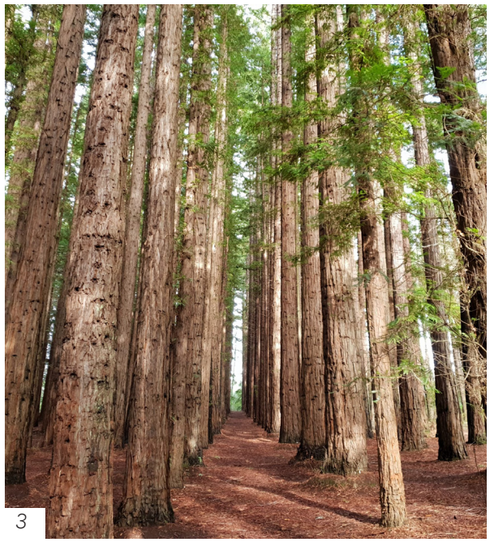
For thousands of years, the Cammeraygal people have maintained a deep and reciprocal connection with these lands, waters, and skies — guided by knowledge systems that emphasise balance, care for Country, and respect for the interdependence between people and the environment. Evidence of their long occupation and cultural continuity remains embedded in the landscape, through rock engravings, shelters, middens, and pathways that trace their relationship with place.

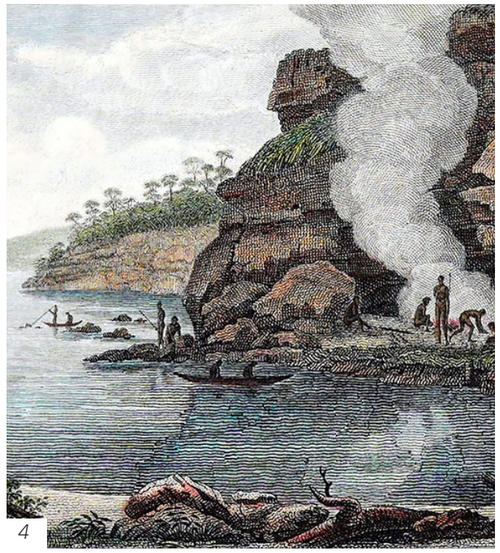
This proposal seeks to acknowledge and honour those enduring connections by responding to the principles of the NSW Government's Connecting with Country Framework. The design process has been informed by values of respect, reciprocity, and listening to Country, expressed through material selection, landscape design, and architectural form. Opportunities to reflect Cammeraygal cultural narratives are embedded in the public domain and built form — fostering a deeper sense of place, identity, and cultural continuity within the evolving urban fabric of Castlecrag.



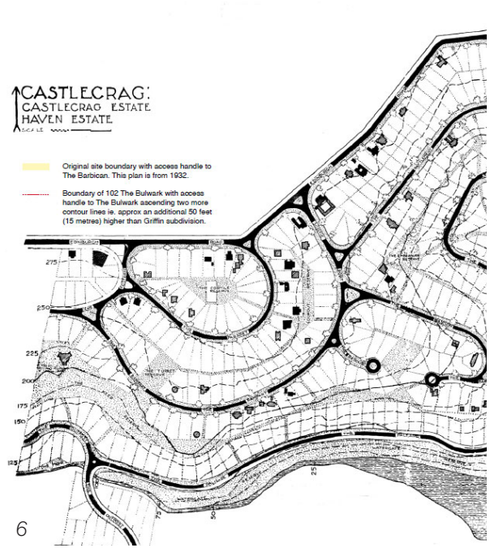
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2


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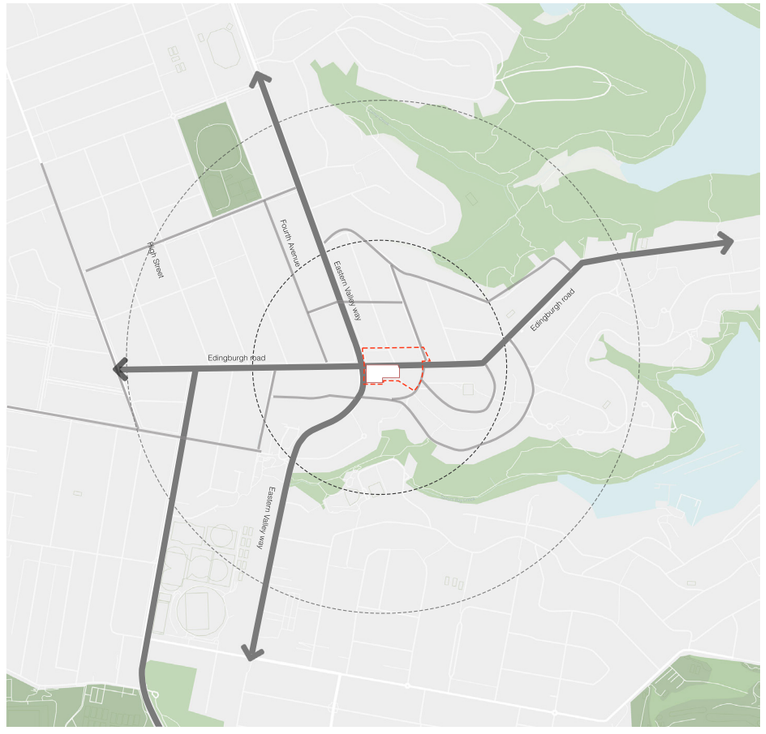
6

First Nations Significance

1. Willoughby Map
2. Painting, Joseph Lycett, 1817
3. Sydney red gums growing in Lane Cove National Park
4. Berry Bay foreshore
5. Patterns on tree barks
6. Castlecrag Estate Map

Public Domain and Existing Site Character

Traffic Movement



Arterial Roads Secondary roads

- The site is located on the south eastern corner of the intersection of Eastern Valley Way and Edinburgh Road.
- Within the Castlecrag local centre, the road network supports numerous modes of transportation, including pedestrians, bicycles, public transportation, freight, private vehicle movements, and parking.
- Edinburgh Road functions as the east-west link between low density residential community and commercial district within the local centre
- High traffic volumes along Edinburgh Road and Eastern Valley Way junction

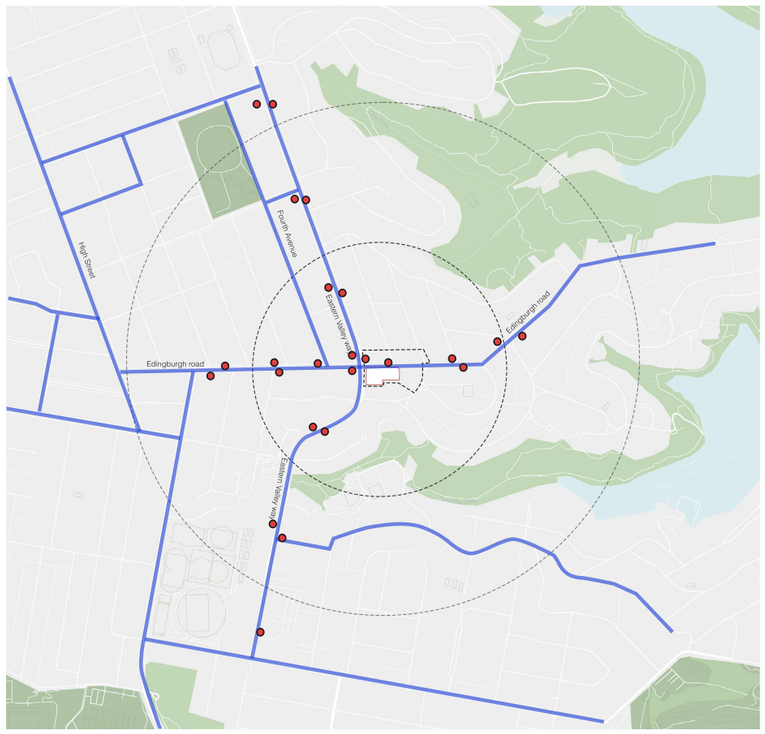
Active Transport links and Walkability



Bike lane Pedestrian movement Proposed bike network

- Edinburgh Road serves as the key walking corridor within the local centre with active retail edge and highest pedestrian movement along it.
- Although the existing shopping village is easily accessible, the existing topography and winding roads provide steep footpath grades, making it difficult to navigate by foot.
- Connect the Edinburgh Road to the Postern by activating the existing through site links across the study area
- Castlecrag local centre contains an existing on-road cycle route on Edinburgh Road in the form of mixed traffic

Access



Bus routes Bus stops

- Access by public transport serves the Castlecrag local centre with bus stops located on Eastern Valley Way at the intersection with Edinburgh Road
- Existing bus routes serve the site well, making public transportation as convenient as possible. The study area is well connected by bus to surrounding areas, like Chatswood, Lindfield, North Sydney and Crows Nest.
- The proximity of essential convenience stores and social hub facilities such as cafes and restaurants to the site adds to the incentive to reduce reliance on cars.

Public Domain and Existing Site Character

Open Space Network

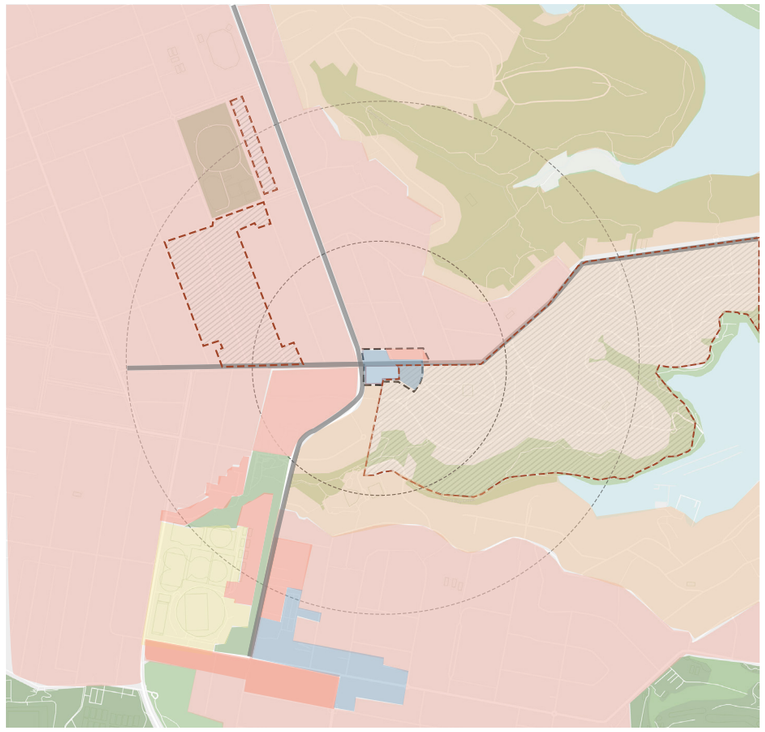


Green spaces

Public accessbile space (proposed)

- Activated open spaces and waterfront within 800m radius
- Proximity to many smaller parks and reserves
- Local centre is the only activated public space within Castlecrag with retail amenities

Land Use Zoning



R2 - Low density residential

R3 - Med density residential

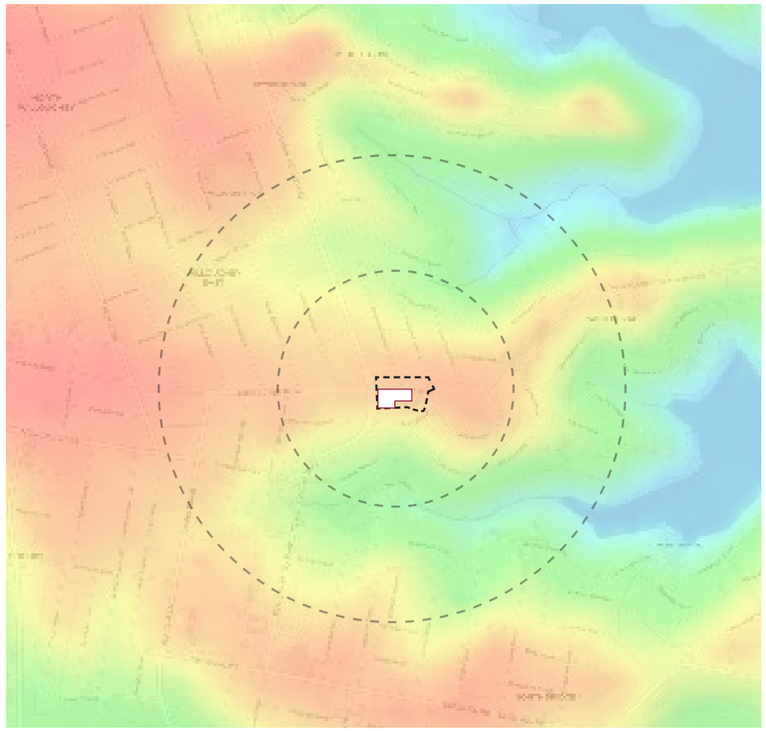
E1 -Local centre

Heritage

The site is located in E1 zone as per WLEP 2012 that allows for a mix of residential and retail. E1 local centre must ensure provision of an active retail street edge at the ground level.

- The site is not heritage listed but is located adjacent to the Griffin conservation area.
- Maintain the existing RE1 strip (Lot 1) at the rear of the site as part of the pedestrian access way linking to The Postern.

Topography



- The roads of Castlecrag were planned to suit the topography of the area; following the natural contours of the land.
- Reflects on Griffins' belief that the built environment should respect the natural environment.
- Furthermore, the layout of the streets also provided residents with views of the landscape. The site sits on a ridge line providing views to the waterfront and its immediate surroundings.

Site Analysis

The site is characterised by the following:

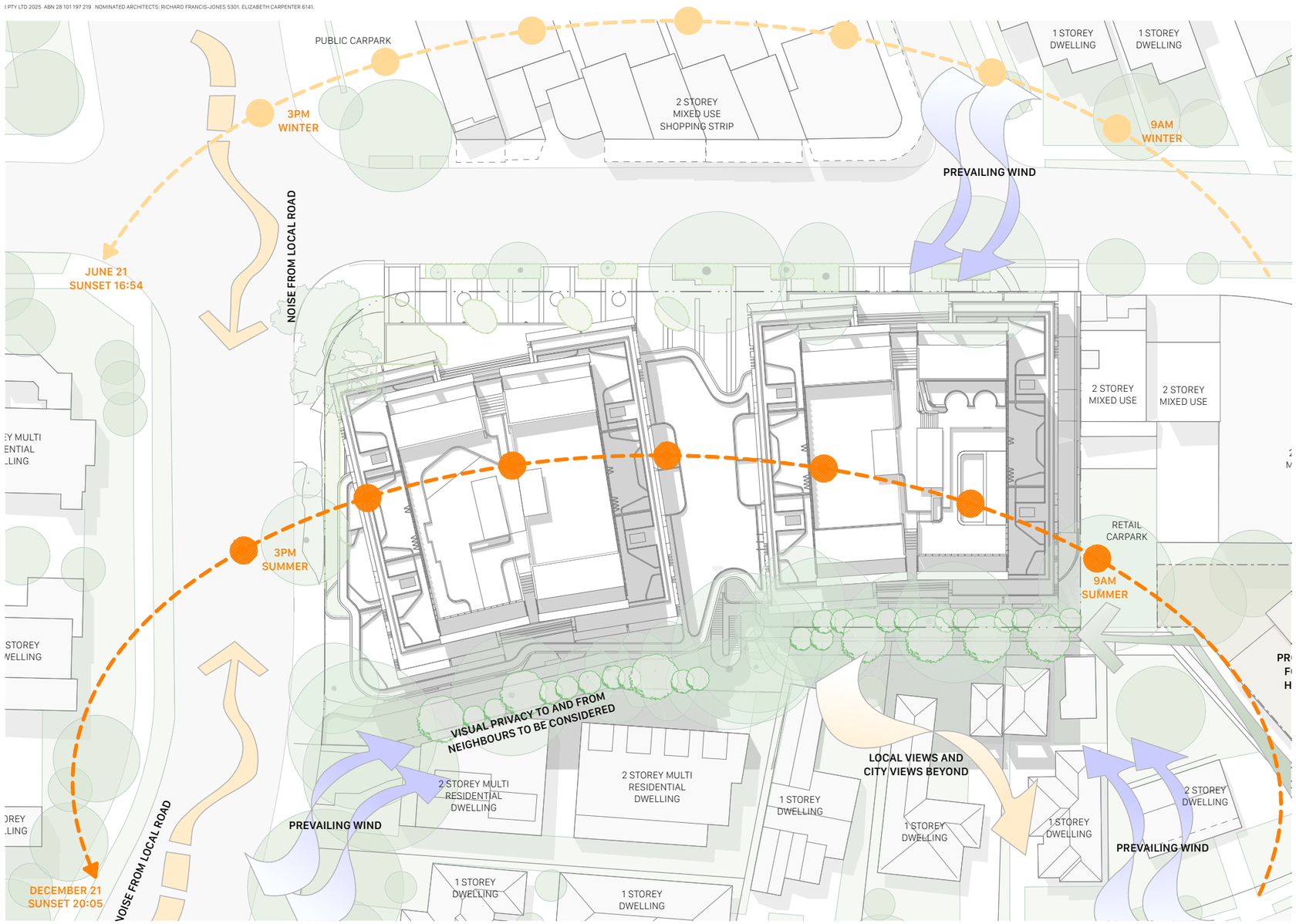
Topography and Views:
The site is situated on a prominent ridge line along Edinburgh road. The site slopes southward and has a fall of approximately 12-8% from north to south. The site's orientation makes it suitable for both public and private uses with the built form design following the natural contours of the site.

Solar Access:
The current site, has a frontage with activated retail edge, with good solar access to the north. The design should consider separation between built form to reduce visual impacts and effects of overshadowing on the low to medium residential development to the south of site.

Through site links:
To the south of the site, an existing public site link is formed. The site link currently ends at a driveway where access is unsafe and impeded by the flow of traffic. There is an opportunity to make this a safe and legible site link.

Existing Vegetation:
The existing trees on the site were planted when the previous development was built. They are not of local old growth forests and are not endemic to the context. These trees are candidates for removal / replacement. The existing street trees along Edinburgh Road and Eastern Valley way add a sense of place and are to be retained.

Heritage:
The existing building has no heritage merit and is not listed under state or local registers as a building of heritage significance. Demolition of all built works on the site has been completed.



/ Site Analysis

Site Analysis

Site Constraints



The existing shopping village was at the end of its commercial viability making it an ideal site for redevelopment. Its location at the junction of a major transport corridor, Eastern Valley Way and Edinburgh Road makes it prone to higher traffic movement.

Site Opportunities



Willoughby LGA is expected to witness a rapid increase in population over the next 20 years; anticipating a marginal growth in Castlecrag. The strategic location of site serves as a gateway to Castlecrag and is an important symbolic introduction to the Griffin designed suburb. The subject site is home to the dilapidating ‘Quadrangle’ and provides an opportunity for renewal and redevelopment. The site is suitable for a medium density mixed use local centre providing the residents with a fine-grain centre while it retains its distinct heritage character.

As the only local centre with retail amenity in Castlecrag, it aims to reduce travel time for future residents by providing local services within 400m radius. The proposal aims to maximise social interactions by introducing large open and communal spaces in the site forming new connections both at ground level and at the roof level. The design of a landscaped plaza at the ground level with retail facilities helps activate the ground plane mimicking the existing character of shopping village. Retail businesses such as cafes, restaurants, shops, supermarkets and similar uses benefit he local community and residents while also improving the night-time economy of the suburb. By greening the facade, introducing ample landscaping elements and maintaining the existing trees on site will help minimise the urban heat effect on site.

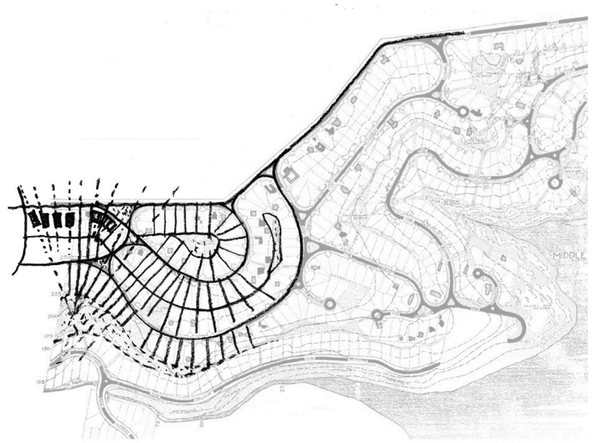
Vision for Castlecrag



Landscape and Architecture

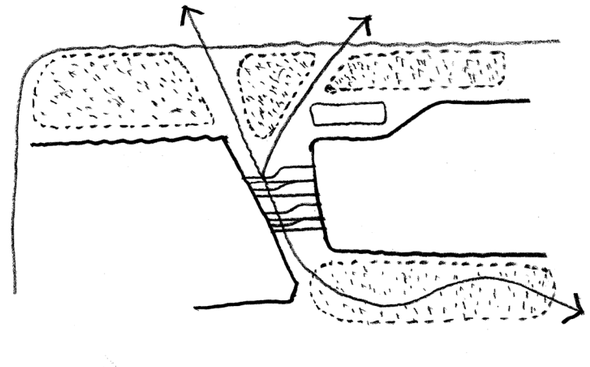
The Quadrangle is an integrated work of landscape and architecture, where the design is inspired by a vision of how to live our lives closer to nature in a bushland setting. Underpinning our work and concept for this site is a belief that the boundaries between landscape and architecture is artificial. Our approach and design methodology begins with a understanding and interpretation of the landscape of the Castlecrag.

The unique life of Castlecrag is a life close to nature, an appreciation and sensitivity to the beautiful Indigenous bush escarpment landscape. At the gateway to Castlecrag this natural bushland and rock escarpment should be announced and experienced.



Topography and Alignment

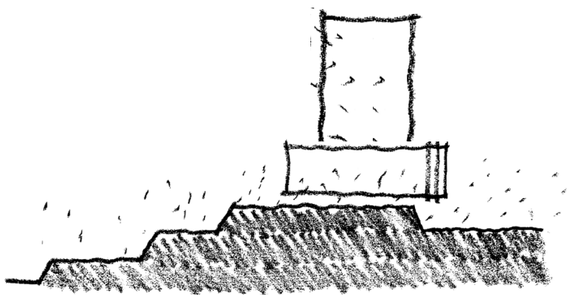
The 1921 Griffin plan for Castlecrag closely follows and interprets the natural contours of the site. The streets and pedestrian pathways follow these lines of topography with the lot lines a corresponding radial division. The eastern boundary of site is an abrupt stop to this beautiful fluid geometry. Our site plan imagines a possible continuity of the Griffin geometry. A gentle continuation of a radial geometry extending to the line of ‘The Parapet’ and ‘The Rampart’ to Eastern Valley way and the natural threshold of Castlecrag.



Public Space, Community and Pathways

The creation of a north facing public/ communal space is at the centre of the concept. This is to be a bushland-ridge gathering space, sheltered from the street through dense landscape planting, edged with deep sandstone colonnades and connecting with the bushland pathways and contoured geometry of Castlecrag. It is to be a meeting and gathering place for the community and visitors to Castlecrag, with a subtle sense of theatre for performance, recalling Marion Mahony’s passion for theatre. ‘No boundaries, no fences’, we are proposing a series of generous landscaped terraces with gentle privacy transitions and a shared communal landscape.

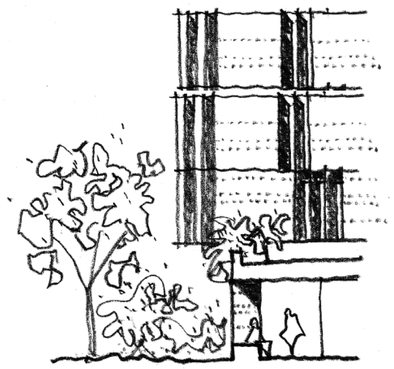
These landscaped garden areas are zoned into those managed by the residence to ‘common’ zones maintained by the body corporate. In this way a unified bushland-inspired landscape characterises the project and is maintained. We would like to promote this living close to nature as a character and value of this project, in line with the vision of the Griffins.



Pavilion and Platform, Activated Frontage

The concept is a composition of two primary and essential architectural and landscape forms:

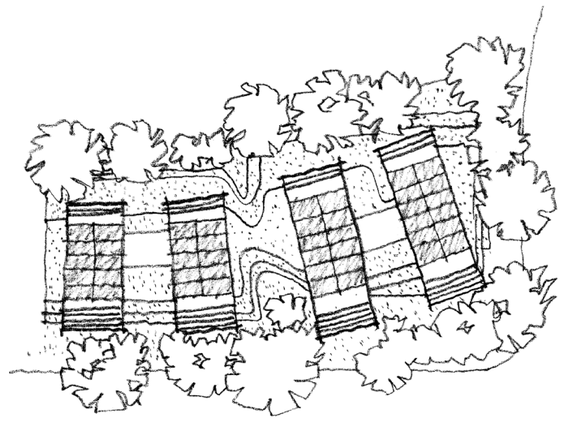
- A platform of landscaped terraces stepping down in relation to the natural contours of the site
- A series of sandstone pavilions carefully positioned on this platform in a gentle radial pattern



Stone and Depth

Natural materials and the bush landscape will characterise the material experience of the new buildings.

True to the Griffin's vision for Castlecrag, Sandstone and concrete are used to give depth, weight and connection to the ground of the site. Deep colonnades, openings and reveals will give depth and shade. Timber and concrete pergolas and awning shades integrate with landscape to give further shade and depth.

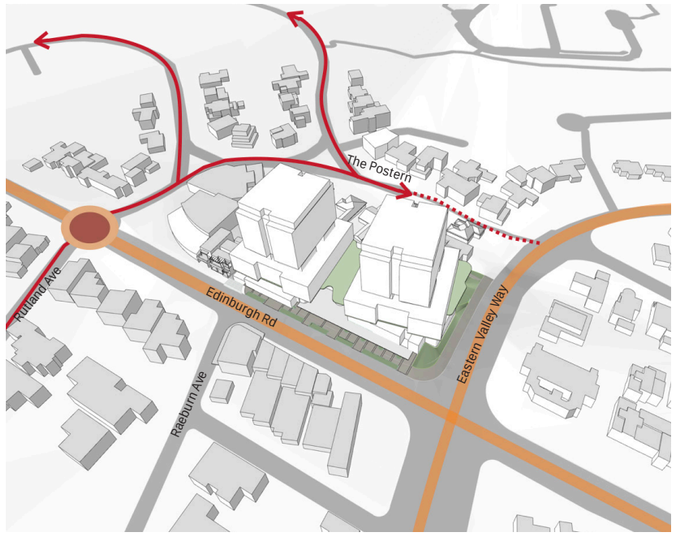


Nature and Sustainability

Walter Burley Griffin and Marion Mahony Griffin were environmentalists at heart. Their vision for castlecrag was to live and love amongst the natural setting of the untamed bushland.
In keeping with their ethos of reducing the human input, the proposed redevelopment will reduce embodied energy, and promote the use of renewable and sustainable energy consumption.

The project proponent is deeply passionate about delivering a sustainable offering, and will continue to develop these ideas as the project moves forward.

Urban Design Principles



Road network and Access

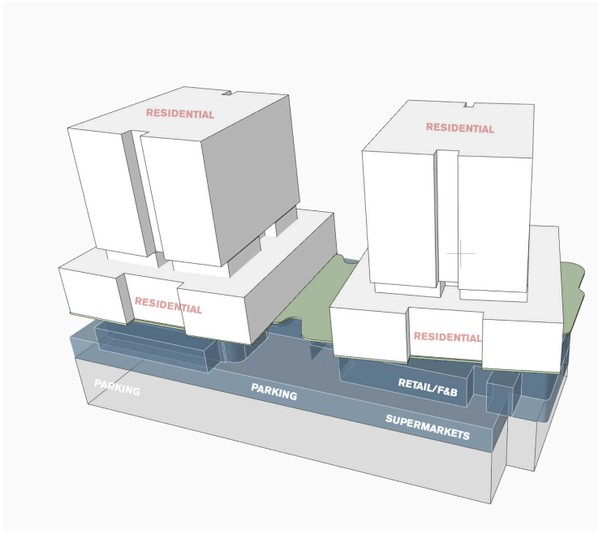
The site is located at the intersection of Edinburgh Road and Eastern Valley Way. Its strategic location along a major transport corridor, supports amendment of the existing planning controls to achieve higher density housing and with retail amenities, in line with Council and NSW Government's strategic vision for the area.



Setbacks

Based on the planning controls on the site, a setback of 6m is provided from the southern edge of site while a minimum of 4m is left along other edges.

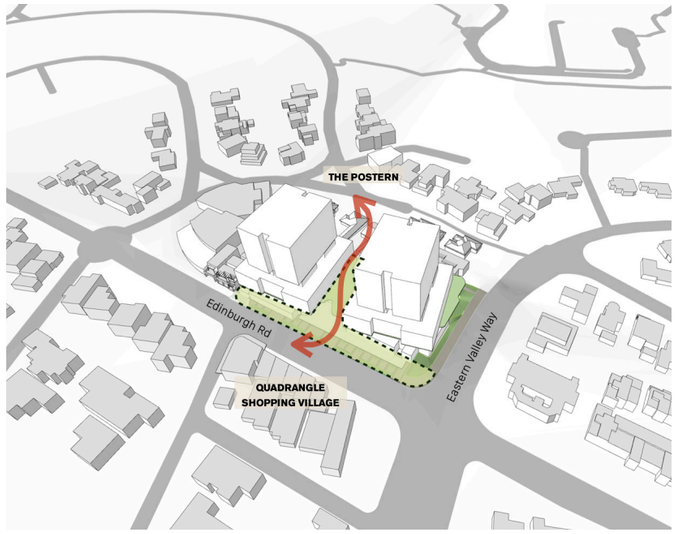
In order to achieve a public accessbile space within Quadrangle and maintain good solar access; a setback of 4m is provided along the frontage of the site and the built form is separated by 8.5m at the ground level.



Massing

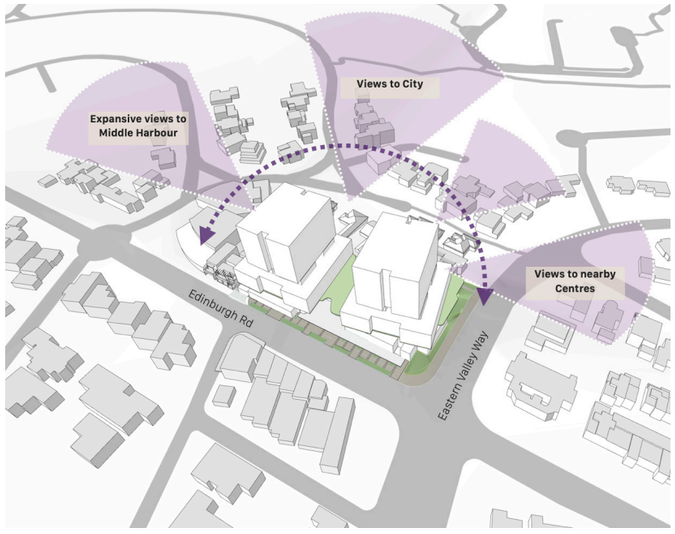
In line with the surrounding development, this proposal is in the form of a shoptop housing typology. With retail amenities and supermarket located at the ground and lower ground level, the residential units are provided across 11 levels. There are four levels of basement provided to support parking requirements for residents and visitors.

Urban Design Principles



Public Space

An existing public site link is formed to the south of the site, currently in a state of disrepair. The site link is unsafe and impeded by the flow of traffic. A safe and legible site link connecting the Quadrangle Shopping Village to the Postern can be created.



Views

The streetscape in Castlecrag are characterised by tree lined streets and gardens with often substantial foliage. The street pattern, topography and street trees limit distant views of the proposed development. The use of natural materials will serve to reduce the visual impact of the proposal, setting it into its landscape. The use of terraces and rooftop gardens captilize on the natural topography of the site

Key View Corridors

The site's elevated ridge line location provides opportunities for apartments and communal areas to enjoy panoramic views towards the Sydney CBD and Middle Harbour, reinforcing the project's high level of residential amenity. The built form is arranged to capitalise on these outlooks, with tower orientations and setbacks designed to open up view corridors to the city skyline while avoiding unnecessary visual obstruction from neighbouring sites.

At the same time, the proposal ensures that the development integrates seamlessly into the broader metropolitan skyline, contributing positively to the Willoughby LGA and maintaining balanced relationships with nearby centres such as Chatswood, St Leonards and North Sydney.

- **Towards South**: Panoramic views across Middle Harbour, toward Sailors Bay and the vegetated escarpments of Northbridge and Seaforth, highlighting the natural bushland setting that defines Castlecrag's identity. Distant views towards North Sydney and CBD.
- **East:** Distant outlooks toward Middle Harbour and the harbour foreshores, with filtered views through the established tree canopy along Edinburgh Road.
- **Towards North-West:** Views across to Lane Cove National Park
- **West:** Distant urban views toward Willoughby and Chatswood, contributing to the sense of orientation and connection to the broader metropolitan context.
- **Immediate Surrounds:** Local views over the landscaped rooftops and public domain of the Quadrangle Village, reinforcing visual connection between the new residential levels and the surrounding neighbourhood.



PART B: ARCHITECTURAL DESIGN STATEMENT

Built Form Response

Community Engagement & Design Excellence

The initial proposal for redevelopment of the site was made in 2020 by Greencliff Castlecrag Pty Ltd. The proposal sought to rejuvenate a local shopping village that had came to the end of it's commercially viable life and replace with a mixed use development that would better service the local community whilst relating to the immediate context, acknowledging the important history of the Griffin plan for Castlecrag. The current proposal has under gone a number of submissions:

01 Indicative Massing as per Draft WLCS 2020

Under the *Willoughby Local Centres Strategy 2036*, the Castlecrag local centre is identified for increased residential and commercial capacity along with public domain upgrades. The draft strategy proposes building heights of up to five storeys and an FSR of up to 1.6:1 on the Quadrangle site, and up to three storeys with an FSR of 1.8:1 on the Griffin Centre site. It also recommends a minimum 3-metre upper-level setback for shop-top housing, the creation of a new plaza and improved pedestrian links within and around the Quadrangle Shopping Village, and a new park or green space at the corner of Edinburgh Road and The Postern.

02 Indicative Massing as per Exhibited WLCS 2020

The *Willoughby Local Centres Strategy 2036* proposes increased building heights on the Quadrangle site to four storeys along Eastern Valley Way and three storeys above Edinburgh Road, with an FSR of up to 1.6:1, or 1.8:1 where an additional lower level utilises site topography. Key provisions include a 3m upper-level setback for shop-top housing, retention of existing controls for the Griffin Centre (heritage item), and maintained pedestrian links to The Postern. The proposal provides approximately 10,248 sqm residential GFA (185% uplift) and 6,287 sqm non-residential GFA (32% uplift).

03 Design Excellence

In November 2019, the proponent held a design excellence competition involving three leading Australian architectural firms, with FJMT selected as the winning team by an independent jury. The jury praised FJMT's concept for its strong integration of architecture and landscape, reflecting Castlecrag's unique bushland character and gateway location. The design features stepped podiums and pavilion forms that follow the site's natural contours, maintaining visual permeability, minimising overshadowing, and enhancing the public realm through extended pathways and landscaped connections. The scheme was recognised for its contextual sensitivity and potential to achieve design excellence.

04 Planning Proposal

In June 2020, Greencliff Castlecrag Pty Ltd lodged a planning proposal for 100 Edinburgh Road, Castlecrag, seeking amendments to the WLEP 2012. The site, zoned B1 Neighbourhood Centre. The proposal sought approval for a part 3/part 4 storey mixed-use development with an FSR of 2.0:1. The application was referred to the Sydney North Planning Panel for Gateway determination and found that the proposed height, bulk, and scale should be consistent with the Local Centres Strategy. The revised proposal was informed by the principles of the original competition-winning scheme and aligned with the Willoughby Local Centres Strategy 2036.

05 Approved Development Application (2024)

The proposal comprises a mixed-use development of up to three storeys above Edinburgh Road with an overall FSR of 1.8:1. It includes residential apartments, retail tenancies, and a supermarket serving the wider community. The scheme provides retail and private parking along with eight public parking spaces delivered through a VPA. It features a north-facing, publicly accessible open space of approximately 1,150m² fronting Edinburgh Road, improved pedestrian crossings and footpaths for enhanced safety and amenity, and retention of mature trees at the front and rear of the site.

06 Housing Delivery Authority - SSDA

The revised proposal for 100 Edinburgh Road builds on the existing 2024 approval by introducing additional residential levels, resulting in up to additional storeys above the approved retail and commercial podium. This increase in height upto RL 126.737 m and increased density delivers a more efficient design outcome. The amended scheme retains the approved retail podium and active street frontage, while optimising the upper levels for a mix of one-,two-, three-bedroom, and penthouse apartments. The increased height and density align with NSW Housing SEPP objectives, promoting housing diversity, design quality, and environmental performance.

Public Domain & Ground Plane

Street Front Activation & Arrival

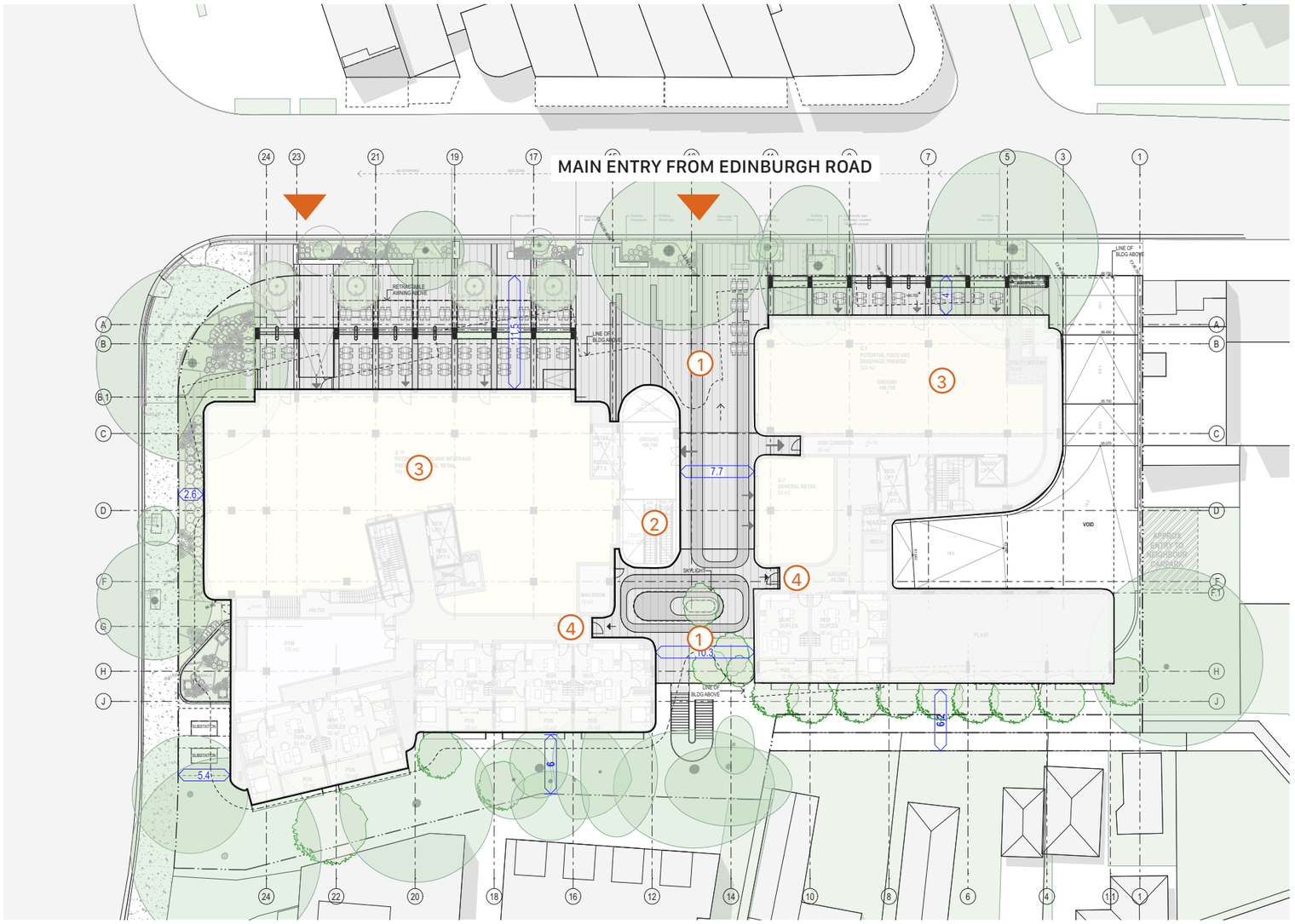
Positioned at the intersection of Edinburgh Road and Eastern Valley Way, the site sits at the gateway to Castlecrag. The activation at the ground level provides an opportunity for bespoke retail amenities with cafes and restaurants along Edinburgh Road that can create an anchor and destination for the neighbourhood.

The activation of the street frontage on the corner of Eastern Valley Way and Edinburgh Road also provides an open and inviting environment for residents and the local community.

The integration of new landscape at street level and podium level further helps generate a new and familiar natural environment within the suburban context of Castlecrag.

Residential Entrance

The residential lobby for the 2 podium apartment blocks are located on either side of the through site link. Its street significance is emphasised by the use of stone cladding and concrete, in contrast with the glazed retail frontage and sandstone base.

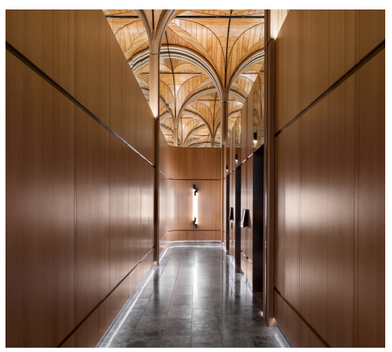


Ground Floor Plan

KEY

1	Through site link/ Retail frontage
2	Retail Lift and escalators/ travelators to supermarket and parking
3	Retail Space
4	Residential Lobby Entry







Retail

Ground Level Retail Tenancies

The retail tenancies will contribute to the street activation on Edinburgh Road. They will provide a destination for the local neighbourhood, and serve as meeting places for the residents and visitors.

A central atrium contains vertical circulation, connecting the ground and lower ground levels.



Ground Floor Plan

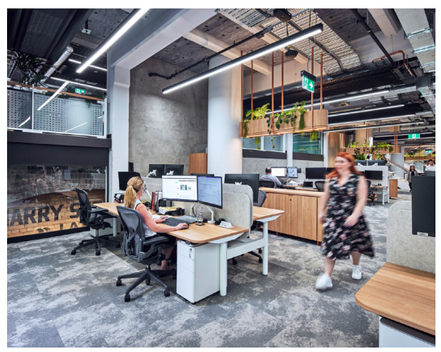
1 **Retail lobby/lift**

2 **Resdiential Lobby**

3 **Retail Space**



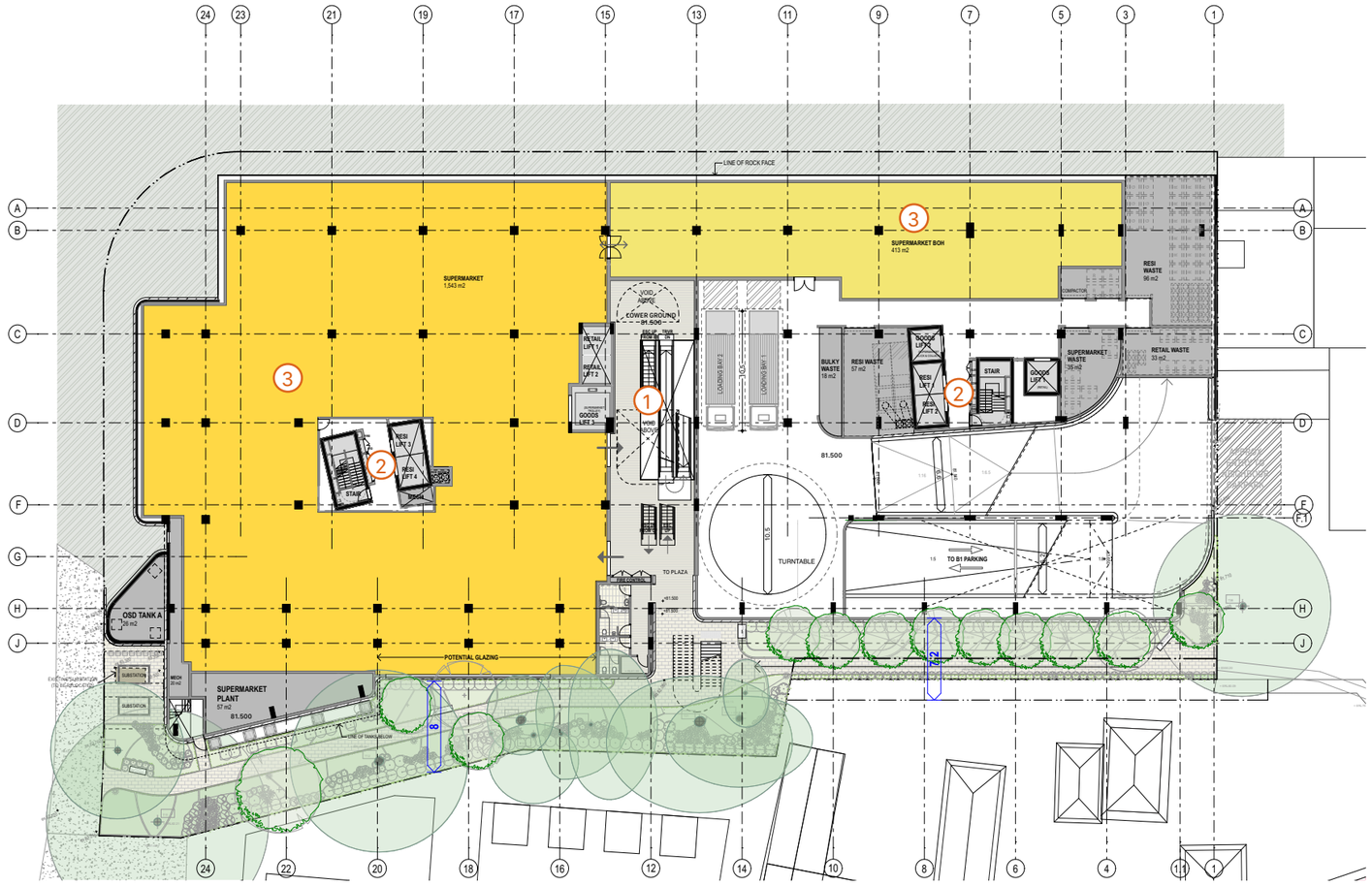




Retail

Lower Ground Supermarket tenancy

A local supermarket is located on lower ground, providing the essentials for the Castlecrag community, and maximising the opportunity for specialty retail and local services at ground level.



Ground Floor Plan

1 Retail lobby/lift
2 Resdiential Lobby
3 Retail Space









Communal

Rooftop communal open space

The landscaped podium roof will be open to the residents as part of the communal open space. This space is divided onto multiple areas with BBQ area and recreational areas positioned to take advantage of the North facing aspect of the terrace and disrict views to south, east and west. A pool is to be provided in the east building for use by all residents

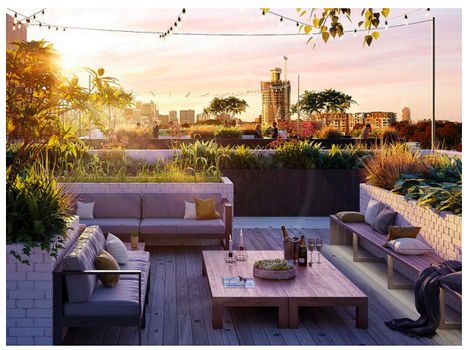


Roof Floor Plan

1 **Communal Space**

2 **Swimming Pool**







Residential

Apartment Mix

The residential towers offer a mix a range of apartment types with a focus on 2 and 3 bedroom apartments that will meet the needs of those in the Castlecrag community looking to move from the family home into an apartment whilst remaining in the area they know and love.

The apartments have been carefully orientated to access the views available from the site. At least 60% of the apartments are considered naturally ventilated

Typical Layouts

Of the 150 apartments and dwellings there are 4 main types, which are divided into sub categories dependant upon area and amenity.
This provides a compliant diversity across the site maximising views.

- 52% or 78 two bedroom apartments
- 36% or 54 three bedroom apartments
- 5% or 8 Penthouses
- 7% or 10 Affordable Apartments



/ Typical Floor Plan







Residential

Apartment Levels

There are 11 residential levels from Ground to Level 11 accessible via lifts.

Private Open Space

Apartments have access to compliant private open space. All apartments have access to balconies or roof terraces of over 10m^2 which open off the main living space and bedrooms. Uppermost apartment have access to a secondary balcony accessible from the bedrooms. All balconies are recessed in from the facade alignment.

Ceiling Heights

The residential floors have ceiling heights at a minimum of 2.7m for habitable rooms and 2.4m for non-habitable rooms.

Access

A lift is provided at each tower to access the residential levels, from Basement 3 and 4 to Level 11. A dedicated retail lift services Basement 2 parking to Ground. The loading bay is located on the Basement 1 and can be accessed by lifts by the supermarket.

Communal Open Space

The roof of each building offers a versatile and inviting area to the resident. With carefully curated landscaping, comfortable seating, and recreational amenities, the communal open space provides a retreat where residents can socialise, and enjoy the surrounding views.

Adaptable Apartments

The proposal offers a diversity of adaptable housing unit, varying in size and location. 24 of the total apartments provided are adaptable (16%). There is also the potential for a wide range of apartments to comply with the Liveable Housing Guidelines including:

- Compliant path of travel from the allotment boundary to an entrance that is step free (already covered by the Premises Standards)
- Entrance door achieves 820mm clear opening (AS4299 and AS1428.1 require 850mm for the Adaptable Housing)
- Doors within the apartment to achieve 820mm opening and corridors should achieve a minimum 1000mm (AS4299 and AS1428.1 require 850mm for the Adaptable Housing)
- Toilet to achieve 900mm x 1200mm clear circulation space forward of the toilet pan, exclusive of the swing of the door, and located in the corner of the room to enable the installation of grab rails
- One bathroom to achieve a slip resistant hob-less shower and located in the corner of the room (also required of AS4299)
- Reinforcement in walls around shower, bath if provided and toilet (if walls are not masonry)
- Handrail to one side of stairs if there are stairs



APARTMENT MIX	LEGEND	NUMBER OF APARTMENTS	% OF MIX
2 Bed		78	52%
3 Bed		54	36%
Penthouse		8	5%
Affordable Apartment		10	7%
TOTAL		**150**	**100%**

Parking

Vehicular Entry and Car-parking

The site is situated approximately 100m south of the bus station at corner of the Eastern Valley Way and Edinburgh Road. Vehicular access to the basement parking and loading facilities are to be provided via a new entry/exit driveway located at the north-east end of the Edinburgh Road site frontage. A dedicated service area is proposed to be located on the ground floor level, adjacent to the bin holding rooms and will be secured by lockable/foldable bollards.

The loading dock is located on the lower ground level, with retail parking provided on Basement Levels 1 and 2. Residential car parking is accommodated on Basement Levels 3 and 4.

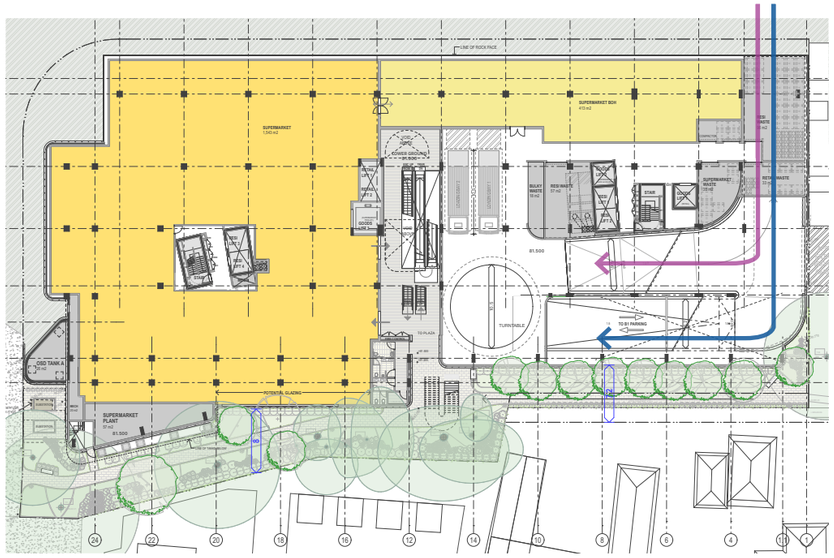
CARPARK YIELD

	Quantity	
RESI	180	204
RESI - ACCESSIBLE	24	
RETAIL	168	172
RETAIL - ACCESSIBLE	4	
TOTAL CARS:	**376**	

	Quantity
MOTORBIKE	21
TOTAL MOTORBIKES:	**21**

	Quantity
BIC-RESI	12
BIC-RESI VISITOR	4
BIC-RETAIL	6
BIC-RETAIL VISITOR	4
TOTAL BICYCLES:	**26**

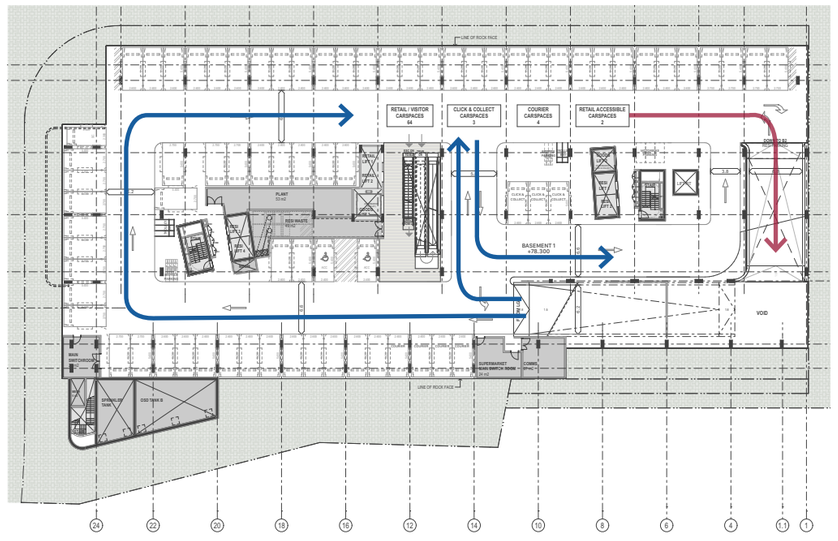
Entry from Ground level



Lower Ground Floor Plan

Retail Parking

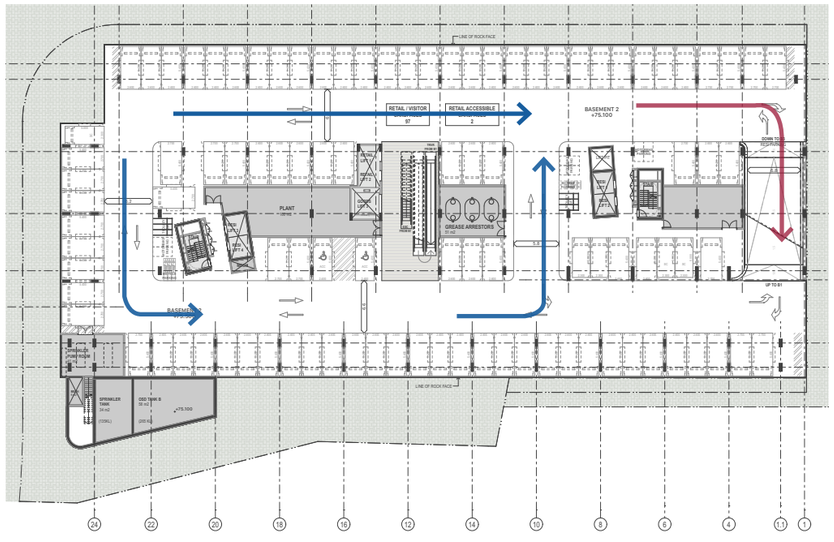
Loading



Basement Level 1 Plan

Retail Parking

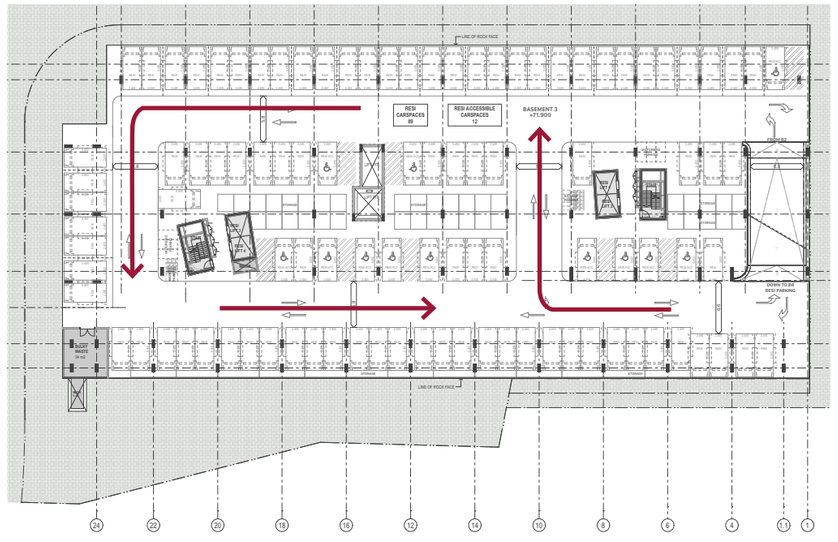
Resdential Parking



Basement Level 2 Plan

Retail Parking

Residential Planning



Basement 3/4 Level Plan

Resdential Parking

Facade Systems and Materiality

Facade Materiality

The design incorporates appropriate proportions and material compositions by prioritising landscape elements over the built component and integrating natural materials and naturally landscaped pathways to relate to the character of the area.

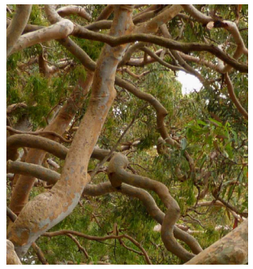
The design utilises locally inspired materials such as sandstone and louvers on the façade of the built form and other complimentary materials with a earthy and light feel to maintain the relationship between the building and its context. The use of sandstone reflects on Griffins legacy and combining with elements like glass, terracotta panels louvers and sunshade provides depth, weight and connection to the ground.

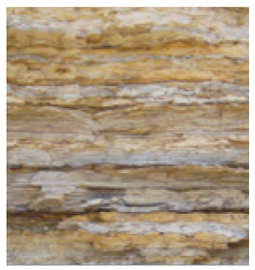
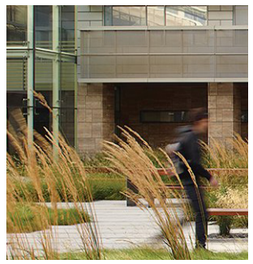
The tower is clad with terracotta panels and concrete frame with punched windows/balconies arranged to generate a facade that appears to connect with the surroundings and align with the internal planning of each apartment. For the residential unit levels, the facade system is differentiated between the north-south and east-west orientation.

The ground floor incorporates fully glazed facades framed with sandstone cladding and articulated by a series of terraced planters. This approach breaks the development into smaller visual components, maintaining an appropriate scale and proportion in relation to the surrounding context. The western façade features a complementary curvilinear form that reinforces key view lines and is finished with external louvres to provide effective solar shading. A series of terraced planters positioned between the tower elements establishes a landscaped "*green spine*" that softens the built form and enhances visual amenity.

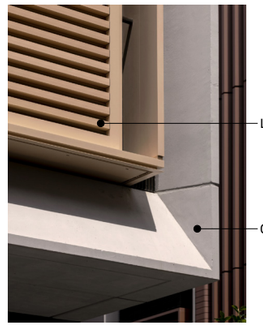
Contextual Inspiration

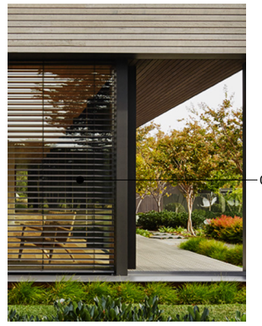





CL01

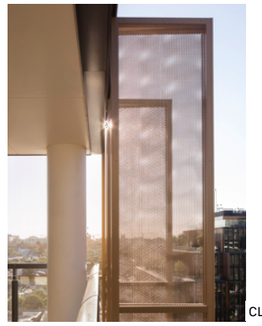


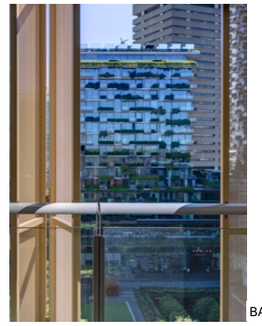


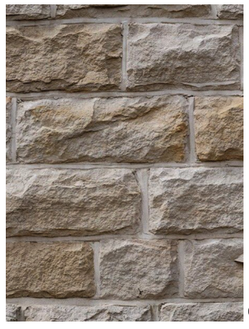


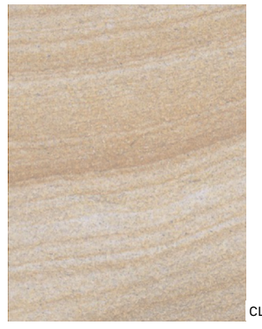

CL03


CL05

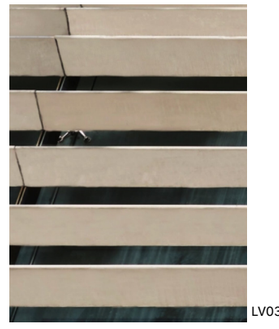

CL05


BAL02


CL07


CL08




LV03

Legend:

BAL01: Balustrade Type 01 - Integrated Planter Box
BAL02: Balustrade Type 02 - Glazed
CL01: Terracotta Cladding
CL02: GRC Cladding
CL03: Metal Cladding - Dark Bronze
CL04: Sandstone Cladding
CL05: Sandstone Cladding Banding
GL01: Glazing Type 01
GL02: Glazing Type 02 (Shopfront)
LV01: Louver type 01 - Metal
LV02: Louver type 02 - GRC
LV03: Louver Type 03 - GRC

Facade Systems and Materiality

Facade Type 01: Cladding

The facade language references the local architectural vernacular, with the use of sandstone and terracotta clad walls for energy efficiency and windows framing views towards Chatswood, Sydney CBD, Lane Cove National park, and Middle Harbour. The use of sandstone and terracotta adds an earthy feel to the built form, integrating it well with its landscape setting. Sandstone is utilised in two forms: block clad which forms a part of the base and banding in the form of soft curves.

Facade Type 02: Window

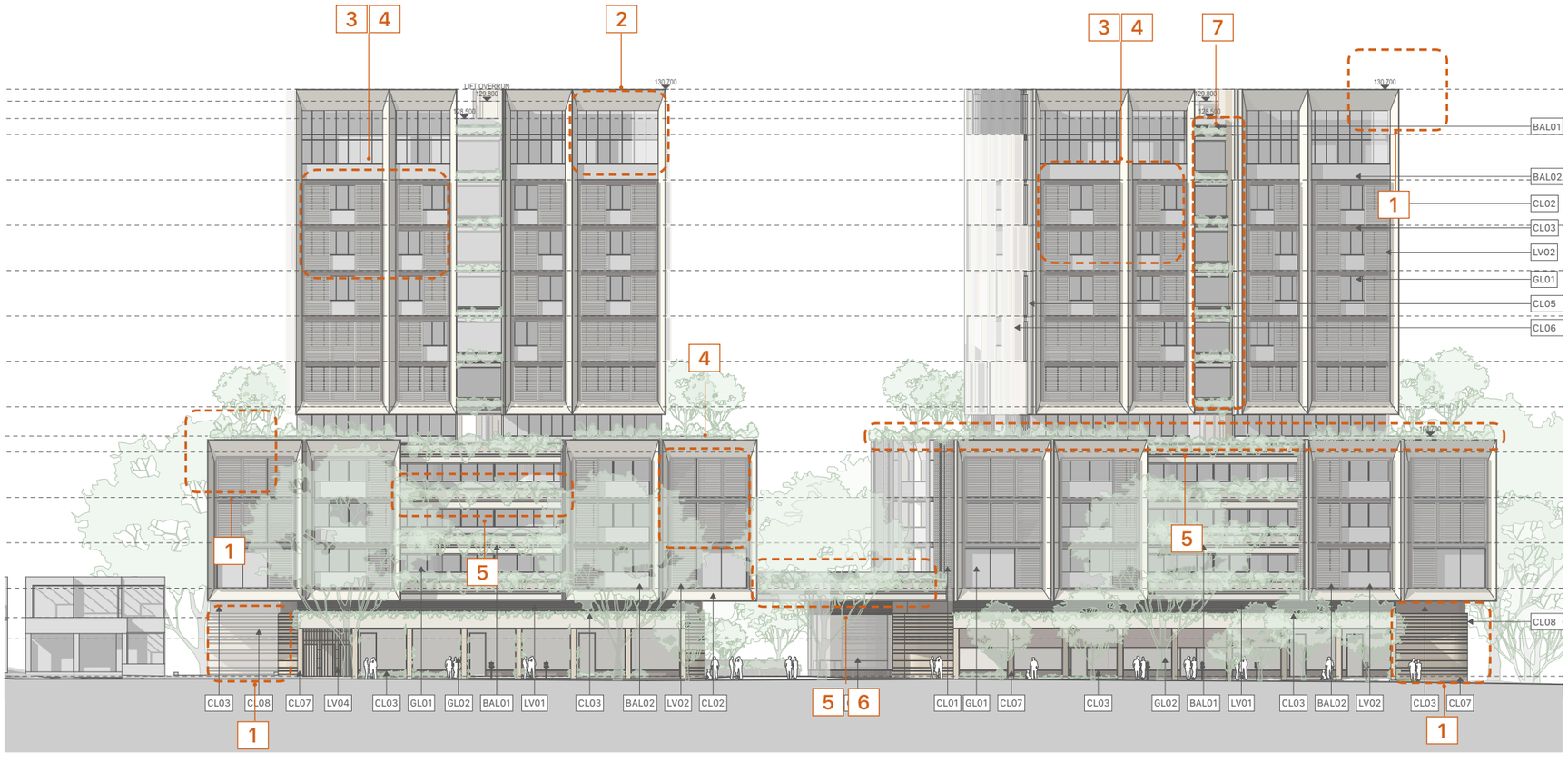
A flushed window within a concrete frame offers a seamless and elegant integration of glass and concrete and cladding . Set within the plane of the frame, the window appears flush with the surrounding surface, maintaining a clean and cohesive aesthetic.
This allows abundant natural light to flood the interior, while framing views of the outside. Use of louvers reduces amount of glazed facade minimises the overall solar heat gain .

Facade Type 03: Balcony

The balconies act as a shading device to the apartments, mitigating the impact of direct sunlight and reducing heat gain within the living spaces. The balcony orientation allows for the creation of shadowed areas and protects the interior from intense sunlight during peak hours. It also presents an opportunity for residents to enjoy the benefits of natural light and fresh air without compromising their comfort. There are two types of balconies: with planters and with frames.

Facade Type 04: Sun-shading devices

The combination of glazed facade, expansive views, and sun-shading devices creates a harmonious balance between transparency and solar control. It allows occupants to enjoy breathtaking views while maintaining a comfortable and well-lit space. Additionally, the facade's sleek design and the sun-shading devices contribute to the overall architectural aesthetic, enhancing the building's visual appeal.
*Operable perforated screens on West and East facade with glazing



Facade Systems and Materiality

Green Planters

The podium and the residential tower are articulated with planters ascending the facade. They create a dynamic and ever-changing living facade that enhances the building's aesthetic appeal and promotes a harmonious connection between nature and architecture.

1.1 Facade Type 05: Terraces

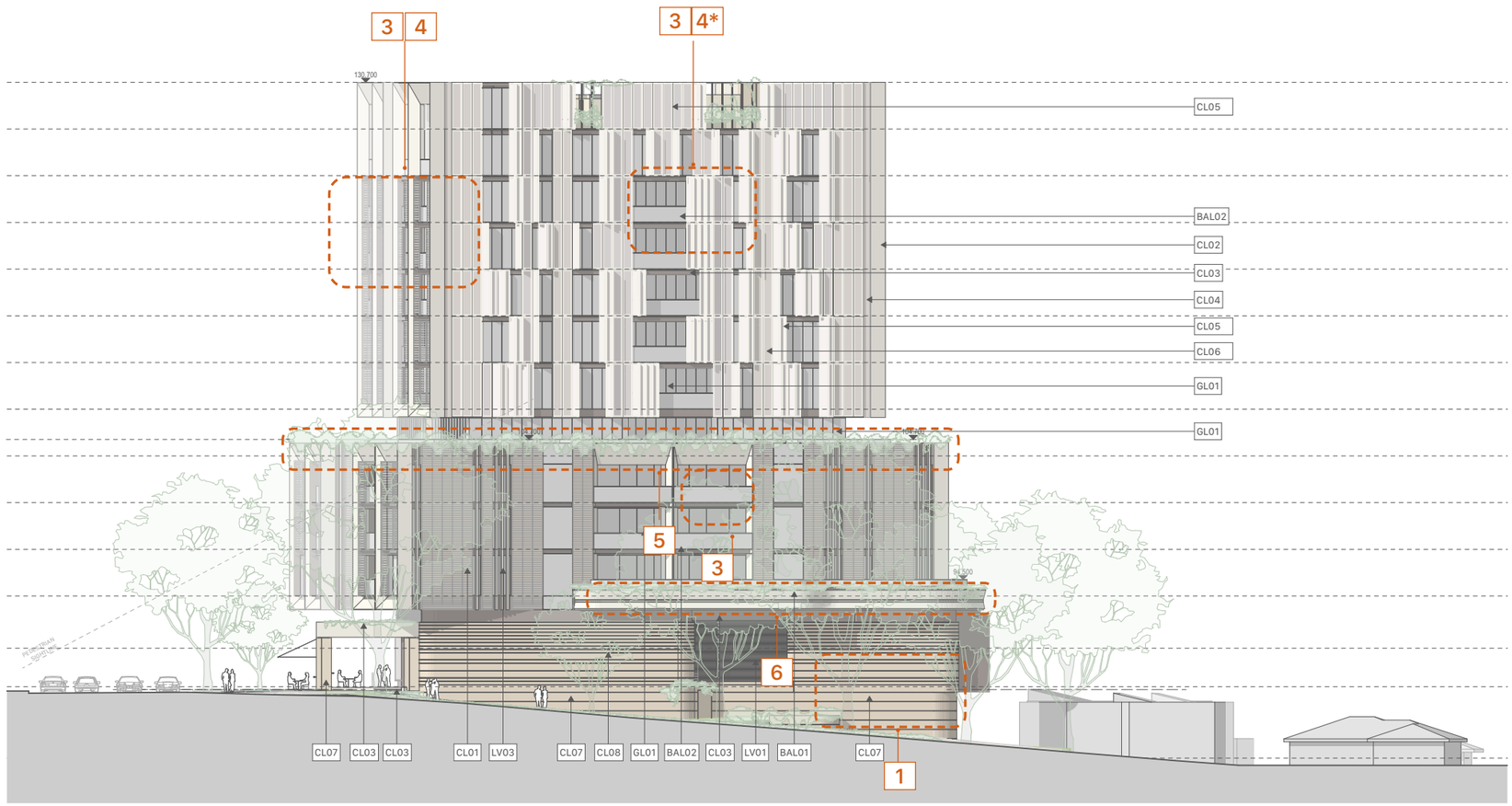
Positioned directly in front and directly above the commercial glazed facade, the planter serves as a buffer with the outdoor. It softens the podium facade, adds privacy and shade, and can improve indoor air quality.

1.2 Facade Type 06: Cantilevered Planter

Cantilevered planters extend outward from the facade walls, creating a visually striking design element, articulating the transition between the podium and the residential tower. It creates a seamless connection between indoor and outdoor spaces, enhancing the residents' experience and connection with nature.

1.3 Facade Type 07: Prefabricated planter

Prefabricated planters on balcony contributes to the articulation of the tower facade. The planter adds visual interest by introducing varying heights, textures, and colours through the selection of plants and flowers. It serves as a focal point, creating a harmonious blend between the building's architectural lines and the organic forms of nature.



Compliance Schedule

Apartment Design Guide Compliance Schedule

APARTMENT DESIGN GUIDE

The proposed development is defined as a shop top housing under Chapter 4 of the Housing SEPP and therefore is required to consider the Apartment Design Guidelines. The table below provides an assessment of the proposed development against the relevant sections of the ADG.

No.	SEPP 65 Apartment Design Guide	Compliance	fjcstudio Commentary
Part 3 - Siting the Development			
3A	**Site Analysis**		
3A-1	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.	**Yes**	• Refer to Section of the report - Site Location and Analysis
3B	**Orientation**		
3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development.	**Yes**	• Refer to the Streetscape section of the report. • Within the constraints of the Willoughby City Council DCP, the Apartments are located to optimise solar access and minimise overshadowing within the site and to the significant public domain elements.
3B-2	Overshadowing of neighbouring properties is minimised during mid-winter.	**Yes**	• Within the constraints of the Willoughby City Council DCP, the Apartments, the building forms and orientation have been composed to minimise overshadowing - refer to the report • Refer to the shadow diagrams showing plan shadows to the adjacent buildings and significant public domain elements
3C	**Public Domain Interface**		

APARTMENT DESIGN GUIDE

No.	SEPP 65 Apartment Design Guide	Compliance	fjcstudio Commentary
3C-1	Transition between private and public domain is achieved without compromising safety and security.	**Yes**	The apartment lobby opens to the public domain through glazed facades providing good visual amenity toward the public domain. An access control system will be provided to control entry and exit from the apartment lobby. The lobby entry is also within view of primary pedestrian paths along the northern boundary (Edinburgh Road) which in turn will provide good passive surveillance of the area. • All public spaces to the edge of the building are overlooked by the ground level retail tenancies which provides passive surveillance and a visual link. • Opportunities for concealment are minimised with the ground floor mainly glazed.
3C-2	Amenity of the public domain is retained and enhanced.	**Yes**	• Existing public domain at the northern street frontage has been retained and enlarged towards the western street front (at the intersection to Eastern Valley Way) and a new public pedestrian link has been created through the site connecting the public path to the south of the site to Edinburgh Road.
3D	**Communal and Public Open Space**		
3D-1	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.		

Apartment Design Guide Compliance Schedule

No.	SEPP 65 Apartment Design Guide		Compliance	fjcstudio Commentary
	Design Criteria	Communal open space has a minimum area equal to 25% of the site.	**No**	• The total area devoted to communal open space equals 21% of the site area. It is located at: • Ground floor (Resident Communal Open space and and Publicly accessible public open space) • Level 11 - top roof (Resident Communal Open space)
		Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter).	**Yes**	• The Level 11 top roof communal open space is south/north facing and achieve a minimum of two hours of sunlight on 21 June to over 50% of the space
3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.		**Yes**	• Communal open spaces are constituted by an outdoor communal terrace, including play areas, seating and outdoor dining / BBQ spaces
3D-3	Communal open space is designed to maximise safety.		**Yes**	• Passive surveillance of space and CPTED principles have been considered throughout the development and is enhanced with CCTV coverage of the public domain and lobby areas.
3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.		**Yes**	• Public domain at the northern street frontage has been retained to maintain pedestrian activity along Edinburgh Road which is a main through-fare and provide foot traffic to the retail shops along that street. • The north-south link has an active retail presence which is now enhance with the connection through to the existing public foot path on the souther side of the site.

No.	SEPP 65 Apartment Design Guide		Compliance	fjcstudio Commentary
3E	**Deep Soil Zones**			
3E-1	Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality.			
	Design Criteria	Deep soil zones are to meet the following minimum requirements: Site area: less than 650m² — Minimum dimensions: - — Deep soil zone (% of site area): 7% 650m² - 1,500m² — 3m greater than 1,500m² — 6m greater than 1,500m² with significant existing tree cover — 6m	**Yes**	The proposed development provides 10% of the site area as Deep Soil zone. The deep soil zone is located on the Southern and Western sides of the site, providing a great solar access to support plant and tree growth. Southern zone is directly adjoining the existing neighbouring deep soil area.
3F	**Visual Privacy**			
3F-1	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.			
	Design Criteria	Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: up to 12m (4 storeys): Habitable rooms and balconies 6m — Non-habitable rooms 3m up to 25m (5-8 storeys): 9m — 4.5m over 25m (9+ storeys): 12m — 6m	**Yes**	The proposed development is surrounded by low rise building. Building setback are compliant with the planning controls

Apartment Design Guide Compliance Schedule

No.	SEPP 65 Apartment Design Guide	Compliance	fjcstudio Commentary
	Separation distances between buildings on the same site must be as follows: *Up to 4 storeys/12 metres* • Habitable Rooms/Balconies to Habitable Rooms/Balconies 12 • Habitable Rooms to Non-Habitable Rooms 9 metres • Non-Habitable Rooms to Non-Habitable Rooms 6 metres *5 to 8 storeys/up to 25 metres* • Habitable Rooms/Balconies to Habitable Rooms/Balconies 18 metres • Habitable Rooms to Non-Habitable Rooms 12 metres • Non-Habitable Rooms to Non-Habitable Rooms 9 metres *9 storeys and above/over 25 metres* • Habitable Rooms/Balconies to Habitable Rooms/Balconies 24 metres • Habitable Rooms to Non-Habitable Rooms 18 metres • Non-Habitable Rooms to Non-Habitable Rooms 12 metres		
3F-2	*Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.*	**Yes**	• *Balconies and windows have been design to avoid overlooking between units.* • *Balcony planters are utilised on the facade to provide privacy where appropriate without impacting natural ventilation and light.*
3G	***Pedestrian Access and Entries***		
3G-1	*Building entries and pedestrian access connects to and addresses the public domain.*	**Yes**	• *All entries and pedestrian ways address the greater public domain.*
3G-2	*Access, entries and pathways are accessible and easy to identify.*	**Yes**	• *Access requirements have been identified including requirements for access to lobbies, apartments and retail. All have on grade accessible access and contrasting colours for vision impairment. Signage to entrances are provided in addition to site wide way-finding strategies.*
3G-3	*Large sites provide pedestrian links for access to streets and connection to destinations.*	**Yes**	• *Site abounds street on two sides (Edinburgh Road & Eastern Valley Way)* • *New public pedestrian link has been created through the site connecting the public path to the south of the site to Edinburgh Road.*
3H	***Vehicle Access***		
3H-1	*Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.*	**Yes**	• *The loading dock and the basement carpark share the entry on Edinburgh Rd. It is of adequate width to provide ease of entrance and exit.*
3J	***Bicycle and Car Parking***		
3J-1	*Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.*		
	Design Criteria *For development in the following locations:* • *on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or* • *on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre* *the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less.*	**Yes**	• *The proposed development provides 204 residential and 172 commercial car bays (376 total), located across 4 levels of basement. Refer to Traffic Report for details of car parking numbers.*
	The car parking needs for a development must be provided off street.	**Yes**	

Apartment Design Guide Compliance Schedule

No.	SEPP 65 Apartment Design Guide		Compliance	fjcstudio Commentary
3J-2	*Parking and facilities are provided for other modes of transport.*		**Yes**	• *26 bicycle parking spaces are provided. (Refer Traffic Report)* • *21 motorbike parking spaces are provided. (Refer Traffic Report)*
3J-3	*Car park design and access is safe and secure.*		**Yes**	• *The car park is secure with access directly to the residential lobby. Residential lift serve for access to bicycle parking on basement floors in addition to management of waste and loading*
3J-4	*Visual and environmental impacts of underground car parking are minimised.*		**Yes**	• *Parking is below the residential building and is not visible from ground level.*
3J-5	*Visual and environmental impacts of on-grade car parking are minimised.*		**Yes**	• *The impact of entry and loading on ground level is minimised by maintaining a single entry point.* • *Existing loading entry location maintained*
3J-6	*Visual and environmental impacts of above ground enclosed car parking are minimised.*		**Yes**	• *There is no above ground parking*
Part 4 - Designing the Building				
4A	***Solar and Daylight Access***			
4A-1	*To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.*			
	Design Criteria	*Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.*	**Yes**	• *70% of the apartment achieve more than 2 hours of direct sunlight between 9 am and 3 pm at mid winter.* • *30% receiving less than 2 hours of Sun at winter solstice.* • *30% receive no direct sunlight between 9 am and 3 pm at mid winter*
		A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.	**No**	*30% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter.*

No.	SEPP 65 Apartment Design Guide		Compliance	fjcstudio Commentary
4A-2	*Daylight access is maximised where sunlight is limited.*		**Yes**	• *All apartments have been designed to maximise their window openings to capture views and as a consequence optimise their access to sunlight be it direct, reflected or ambient.*
4A-3	*Design incorporates shading and glare control, particularly for warmer months.*		**Yes**	• *To all apartments on all levels across the whole development, balconies and sun shading extend to shade summer sun, but allow winter sun to penetrate living areas* • *Shading devices such as fixed louvres and balconies are used across the development for specific facade responses. Refer to elevations and 3D imagery.*
4B	***Natural Ventilation***			
4B-1	*All habitable rooms are naturally ventilated.*		**Yes**	• *All apartments have operable windows with compliant open areas.* • *All balconies have sliding doors opening into the living spaces to maximise ventilation*
4B-2	*The layout and design of single aspect apartments maximises natural ventilation.*		**Yes**	• *Apartments are well orientated where possible to maximise the natural ventilation performance of apartments.*
4B-3	*The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.*			
	Design Criteria	*At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.*	**Yes**	• *60% of the apartments are cross ventilated. 55% are dual aspect.*
		Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	**Yes**	• *All apartments are less than 18m deep*

Apartment Design Guide Compliance Schedule

<table>
<tr><th>No.</th><th colspan="2">SEPP 65 Apartment Design Guide</th><th>Compliance</th><th>fjcstudio Commentary</th></tr>
<tr><td>4C</td><td colspan="2">Ceiling Heights</td><td></td><td></td></tr>
<tr><td>4C-1</td><td colspan="2">Ceiling height achieves sufficient natural ventilation and daylight access.</td><td></td><td></td></tr>
<tr><td></td><td>Design Criteria</td><td>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:
<table><tr><th colspan="2">Minimum ceiling height
for apartment and mixed use buildings</th></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>For 2 storey apartments</td><td>2.7m for main living area floor
2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr><tr><td>If located in mixed used areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr></table>These minimums do not preclude higher ceilings if desired.</td><td>Yes</td><td>• All habitable rooms have a minimum ceiling height of 2.7m.
• All non-habitable rooms have a minimum ceiling height of 2.4m</td></tr>
<tr><td>4C-2</td><td colspan="2">Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms.</td><td>Yes</td><td>• All habitable rooms have a minimum ceiling height of 2.7m
• All non-habitable rooms have a minimum ceiling height of 2.4m
• All ceiling mounted services are located in 2400 ceilings over non habitable areas. Bulkheads do not protrude into habitable spaces</td></tr>
<tr><td>4C-3</td><td colspan="2">Ceiling heights contribute to the flexibility of building use over the life of the building.</td><td>Yes</td><td>• The proposed development is for a residential development with Ground Floor retail and Commercial
• The apartment ceiling heights comply with Objectives 4C1 and 2</td></tr>
<tr><td>4D</td><td colspan="2">Apartment Size and Layout</td><td></td><td></td></tr>
<tr><td>4D-1</td><td colspan="2">The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.</td><td></td><td></td></tr>
</table>

<table>
<tr><th>No.</th><th colspan="2">SEPP 65 Apartment Design Guide</th><th>Compliance</th><th>fjcstudio Commentary</th></tr>
<tr><td rowspan="5"></td><td>Design Criteria</td><td>Apartments are required to have the following minimum internal areas:
<table><tr><th>Apartment type</th><th>Minimum internal area</th></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each.</td><td>Yes</td><td>• All apartments conform to the required minimum internal areas.
• Apartment sizes have been developed in accordance with the client brief and approvals on the development site whilst providing efficient apartment planning.
• The scheme results in the following range of apartment sizes:
• I. 1 Bed Internal- 57 to 62 m2
• II. 2 Bed Internal - 80 to 106 m2
• III. Duplex 2 Bed Internal - 93 m2
• IV. 3+ Bed Internal - 90 to 145 m2</td></tr>
<tr><td></td><td>Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.</td><td>Yes</td><td>• All habitable rooms have windows which represent more than 10% of the floor area of the room.</td></tr>
<tr><td>4D-2</td><td colspan="2">Environmental performance of the apartment is maximised.</td><td></td></tr>
<tr><td>Design Criteria</td><td>Habitable room depths are limited to a maximum of 2.5 x the ceiling height.</td><td>Yes</td><td>• All apartments are open plan layouts, with living rooms and bedrooms located against the external envelope of the building to maximise natural light and ventilation
• All apartments have habitable room widths greater then the ADG recommendation allowing for greater daylight penetration</td></tr>
<tr><td></td><td>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.</td><td>Yes</td><td>• All apartments comply with the 8m to the back of the kitchen rule of thumb.</td></tr>
<tr><td>4D-3</td><td colspan="2">Apartment layouts are designed to accommodate a variety of household activities and needs.</td><td></td><td></td></tr>
</table>

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No.	SEPP 65 Apartment Design Guide		Compliance	fjcstudio Commentary
	Design Criteria	*Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space).*	**Yes**	• *All apartments comply with the minimum ADG bedroom sizes.* • *All apartments comply with the minimum ADG living room widths.* • *Penthouses have wider living rooms.*
		Bedrooms have a minimum dimension of 3m (excluding wardrobe space).	**Yes**	
		Living rooms or combined living/dining rooms have a minimum width of: • *3.6m for studio and 1 bedroom apartments* • *4m for 2 and 3 bedroom apartments.*	**Yes**	
		The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.	**Yes**	
4E	***Private Open Space and Balconies***			
4E-1	*Apartments provide appropriately sized private open space and balconies to enhance residential amenity.*			
	Design Criteria	*All apartments are required to have primary balconies as follows:* *The minimum balcony depth to be counted as contributing to the balcony area is 1m.*	**Yes**	• *Majority of the proposed apartment balcony areas satisfy the ADG objectives.* • *The scheme results in the following range of balcony sizes:* • *I. 1 Bed External Area- 8 to 10m2* • *II. 2 Bed External Area - 14 to 36m2* • *III. Duplex 2 Bed External Area - 10m2* • *IV. 3 Bed External Area - 15 to 27m2* • *V. Penthouse External area - 28 m2*
		For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.	**Yes**	• *For apartments on a podium Level 1 and Level 4, a private open space is provided instead of a balcony.*

Dwelling type	Minimum area	Minimum depth
Studio apartments	4m²	-
1 bedroom apartments	8m²	2m
2 bedroom apartments	10m²	2m
3+ bedroom apartments	12m²	2.4m

No.	SEPP 65 Apartment Design Guide		Compliance	fjcstudio Commentary
4E-2	*Primary private open space and balconies are appropriately located to enhance liveability for residents.*		**Yes**	• *Balconies are located off the living areas to maximise sunlight and views.*
4E-3	*Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.*		**Yes**	• *Balconies are located within the building envelope to become an integral part of the form.* • *Balcony planters are used to control sunlight and winds*
4E-4	*Private open space and balcony design maximises safety.*		**Yes**	• *The proposed development satisfies the requirements of the objective.* • *The handrail design is contiguous across the width of all balconies and the heights are compliant with the Australian Standards and NCC*
4F	***Common Circulation and Spaces***			
4F-1	*Common circulation spaces achieve good amenity and properly service the number of apartments.*			
	Design Criteria	*The maximum number of apartments off a circulation core on a single level is eight.*	**Yes**	*Not applicable, the building is of 11 storeys.*
		For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.	**Yes**	• *Four (4) resident lifts are proposed.* • *There is also two (2) additional commercial lift accessing Ground Floor, Lower Ground Floor, Basement 1 and Basement and, a three (3) additional goods lifts for the Supermarket on Ground Floor, Lower Ground Floor and Basement 1*
4F-2	*Common circulation spaces promote safety and provide for social interaction between residents.*		**Yes**	• *Areas in front of lifts and corridor widths allow for sufficient circulation space and interaction of residents*
4G	***Storage***			
4G-1	*Adequate, well-designed storage is provided in each apartment.*			

Apartment Design Guide Compliance Schedule

No.	SEPP 65 Apartment Design Guide		Compliance	fjcstudio Commentary
	Design Criteria	*In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:* Dwelling type / Storage size volume Studio apartments — 4m³ 1 bedroom apartments — 6m³ 2 bedroom apartments — 8m³ 3+ bedroom apartments — 10m³ *At least 50% of the required storage is to be located within the apartment.*	**Yes**	• *Storage is provided in all the apartments*
4G-2	*Additional storage is conveniently located, accessible and nominated for individual apartments.*		**Yes**	• *Storage cages being provided in Basement 3 and Basement 4* • *On grade accessible access is provided to storage facilities*
4H	***Acoustic Privacy***			
4H-1	*Noise transfer is minimised through the siting of buildings and building layout.*		**Yes**	*Generally apartments are arranged side by side to assist in the resolution of acoustic separation and zoning. Noise sources such as lift shafts and common corridors have also been taken into account.*
4H-2	*Noise impacts are mitigated within apartments through layout and acoustic treatments.*		**Yes**	*Where possible, rooms with similar noise requirements are grouped together. Wardrobes are also used as sound buffers.*
4J	***Noise and Pollution***			
4J-1	*In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.*		**Yes**	• *Generally apartments are arranged side by side to assist in the resolution of acoustic separation and zoning.* • *Noise sources such as lift shafts and common corridors have also been taken into account.* • *Operable screens and louvres are proposed to balconies to provide a sense of enclosure and privacy when desired.*
4J-2	*Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.*		**Yes**	• *Insulation will be provided to the facade walls to minimise noise. Elements of solid walls are provided to the balcony areas to further minimise noise transfer.* • *The use of solid wall construction and appropriately insulated window will mitigate the proximity of the Edinburgh Road rail corridor.*
4K	***Apartment Mix***			
4K-1	*A range of apartment types and sizes is provided to cater for different household types now and into the future.*		**Yes**	• *A range of apartment types are provided across the entire development, including, large 1 beds, 2 beds, 3 beds and 4 beds apartments, with the addition of affordable housing units, 3 beds penthouses and 2 bed multi-level units.*
4K-2	*The apartment mix is distributed to suitable locations within the building.*		**Yes**	• *The mix is distributed evenly across the floors with the premium/larger apartments taking up the upper levels and prime location.*
4L	***Ground Floor Apartments***			
4L-1	*Street frontage activity is maximised where ground floor apartments are located.*		**Yes**	• *No Ground floor apartments are located directly off of street on Edinburgh Road or along Eastern Valley Way so will not impact street front activity.*
4L-2	*Design of ground floor apartments delivers amenity and safety for residents.*		**Yes**	• *Ground floor apartments are accessed off of a secure building lobby*
4M	***Façades***			

Apartment Design Guide Compliance Schedule

No.	SEPP 65 Apartment Design Guide	Compliance	fjcstudio Commentary
4M-1	Building facades provide visual interest along the street while respecting the character of the local area.	Yes	• The facades have been studied in detail in terms of local materiality, environmental response, enhancement of the public domain and modulation of scale and residential rhythm.
4M-2	Building functions are expressed by the façade.	Yes	• Refer Facade Information in Design Statement
4N	**Roof Design**		
4N-1	Roof treatments are integrated into the building design and positively respond to the street.	Yes	• The east and west facing parts of the roof areas are used as terraces for apartments.
4N-2	Opportunities to use roof space for residential accommodation and open space are maximised.	Yes	• The roof areas are used as terraces for the apartments. The roof areas on the podium (level 1 & level 4) are used as private open space for the residents.
4N-3	Roof design incorporates sustainability features.	Yes	• Rooftop landscaping is proposed as part of the rainwater harvesting system.
4O	**Landscape Design**		
4O-1	Landscape design is viable and sustainable.	Yes	• Selected plants provide visual interest through form, texture and variations in seasonal colour. Raised perimeter mass planting beds are provided on the terrace gardens to define outdoor entertainment areas and to enhance privacy screens between neighbouring terraces. Stormwater is to be harvested and retained on site for re-use in the planter bed irrigation system.
4O-2	Landscape design contributes to the streetscape and amenity.	Yes	• The proposed urban and landscape design creates a unique sense of place fully integrated with the nature of the architectural proposition
4P	**Planting on Structures**		
4P-1	Appropriate soil profiles are provided.	Yes	• Raised planters across the entire proposed development provides sufficient soil depth for planting appropriately scaled plants
4P-2	Plant growth is optimised with appropriate selection and maintenance.	Yes	• Plant selection will be a combination of groundcovers, climbing plants and selection of plants suitable for external terraces. The soil formation will be framed in planters to provide a variety of soil depths to ensure a diverse selection of species types.
4P-3	Planting on structures contributes to the quality and amenity of communal and public open spaces.	Yes	Refer to landscape report.
4Q	**Universal Design**		
4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members.	Yes	• Refer to access consultant report. Yes
4Q-2	A variety of apartments with adaptable designs are provided.	Yes	• An adaptable apartment type is provided with a total of 24 apartments located on Levels 1 - 3. • Equitable access is provided to all adaptable apartment doors in accordance with AS 1428.2
4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs.	Yes	• Apartment layouts are flexible and can accomodate different furniture layout to suit range of lifestyle. Light weight internal partitions are proposed to permit layouts to be changed at later date to suit requirements.

Apartment Design Guide Compliance Schedule

No.	SEPP 65 Apartment Design Guide	Compliance	fjcstudio Commentary
4R	**Adaptive Reuse**		
4R-1	New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.	**Yes**	Not applicable
4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse.	**Yes**	Not applicable
4S	**Mixed Use**		
4S-1	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.	**Yes**	• The project is a compliant mixed use development within the approved boundaries and given the retail locations and expected pedestrian activation of the precinct, the proposed development will achieve the objective.
4S-2	Residential levels of the building are integrated within the development, and safety and amenity are maximised for residents.	**Yes**	• The proposed development satisfies the requirements of the objective. Please refer to the drawing documentation which illustrates compliance with this.
4T	**Awnings and Signage**		
4T-1	Awnings are well located and complement and integrate with the building design.	**Yes**	•The proposed development satisfies the requirements of the objective. Please refer to the drawing documentation which illustrates compliance with this objective
4T-2	Signage responds to the context and desired streetscape character.	**Yes**	• Signage to be developed under separate application
4U	**Energy Efficiency**		
4U-1	Development incorporates passive environmental design.	**Yes**	• See 'Solar and Daylight Access' for natural daylighting. • All apartments have internal drying facilities and where indicated, screened balconies.
4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.	**Yes**	• The proposed development satisfies the requirements of the objective. Please refer to the drawing documentation which illustrates compliance with this objective
4U-3	Adequate natural ventilation minimises the need for mechanical ventilation.	**Yes**	• Natural ventilation is provided
4V	**Water Management and Conservation**		
4V-1	Potable water use is minimised.	**Yes**	• The proposed development satisfies the requirements of the objective
4V-2	Urban stormwater is treated on site before being discharged to receiving waters.	**Yes**	• The proposed development satisfies the requirements of the objective. Refer to Water Management Plan.
4V-3	Flood management systems are integrated into site design.	**Yes**	• All Ground Floor levels have been designed to suit flood levels and freeboard requirements
4W	**Waste Management**		
4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.	**Yes**	• All waste storage and management facilities are located on basement and are not accessible nor visible to the general public.
4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling.	**Yes**	• A dual garbage & recycling chute is provided to all the apartments
4X	**Building Maintenance**		
4X-1	Building design detail provides protection from weathering.	**Yes**	• The materiality and detailing of the proposed development are in keeping with the client brief, building typology and expected building life.
4X-2	Systems and access enable ease of maintenance.	**Yes**	• All facades are accessible for cleaning and maintenance via rope access.
4X-3	Material selection reduces ongoing maintenance costs.	**Yes**	• Materials have been carefully selected to require minimum ongoing maintenance.

Apartment Design Guide Compliance Schedule

No.	SEPP 65 Apartment Design Guide	Compliance	fjcstudio Commentary
	Building Configuration - Safety of Children • *Windows have safety screens, window locks or other safety devices to prevent falls. •* • *Room layouts minimise the need to locate furniture immediately adjacent windows or balustrades*	**Yes**	• *Openable windows have safety devices to satisfy the requirements of the objective.*

The assessment table above demonstrates that the proposed development complies with all of the key design criteria of the Apartment Design Guide.

Solar Access Analysis

The site sits within a predominantly low rise neighbourhood and therefore does not receive any shadow from surrounding developments. 50% of apartments offer at least a double aspect.

Objective 4A-1: Design Criteria

Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in Sydney Metropolitan Area.

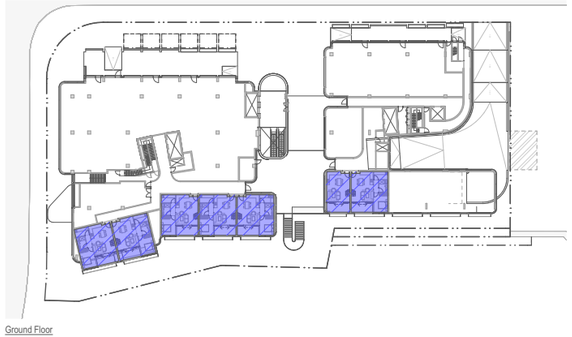
Complies : 70% of the apartments receive more than 2 hours of direct sunlight between 9am and 3pm during the winter solstice.

A maximum of 30% of apartments in a building receive <2hrs sunlight between 9am and 3pm at mid winter.

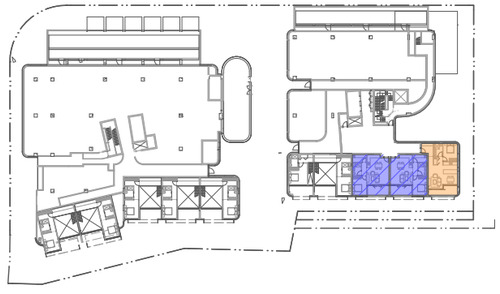
Complies

A maximum of 15% of apartments in a building receives no direct sunlight between 9am and 3pm at mid-winter.

Does not Comply : 30% of apartments receive no direct sun



Ground Floor



Mezzanine



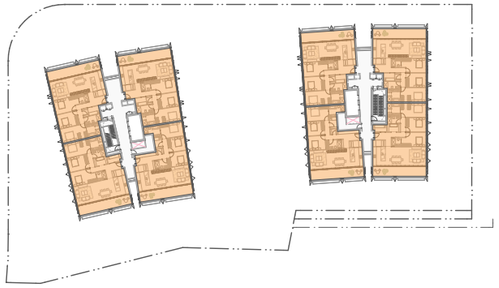
Levels 1-3



Level 4



Levels 5-9



Level 10

ACHIEVING SOLAR ACCESS

Level	Apartments receiving > 2h of Sun at winter solstice	Apartments receiving < 2h of Sun at winter solstice
GF	-	7
Mezzanine	1	2
Level 1	14	6
Level 2	14	6
Level 3	14	6
Level 4	9	3
Level 5	9	3
Level 6	9	3
Level 7	9	3
Level 8	9	3
Level 9	9	3
Level 10	8	-
	105 (70%)	45 (30%)

SOLAR ACCESS BETWEEN 9am and 3pm

GREATER OR EQUAL TO 2 HOURS

LESS THAN 2 HOURS

LESS THEN 15 MIN

SOLAR ACCESS ADG COMPLIANCE

Apartments receiving > 2h of Sun at winter solstice	105 (70%)	**COMPLY**
Apartments receiving < 2h of Sun at winter solstice	45 (30%)	**COMPLY**
Apartments receiving no direct sunlight at winter solstice	45 (30%)	**DOES NOT COMPLY**

Objective 4A-1 | Design Criteria

Living rooms and private open spaces of at least 70% of apartment receiving a minimum of 2 hours direct sunlight between 9am and 3pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas.

A maximum of 15% of apartments in a building receives no direct sunlight between 9am and 3pm at mid winter.

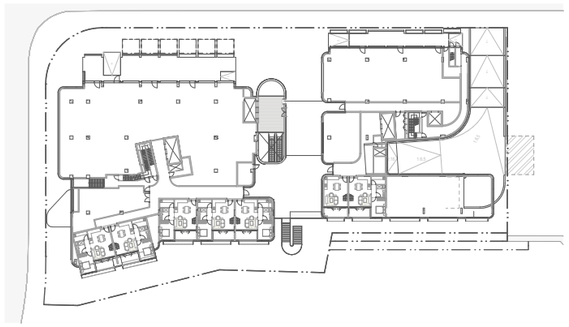
Natural Ventilation Analysis

Objective 4B-3: Design Criteria

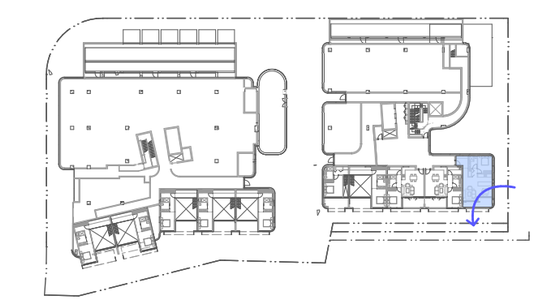
1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows for adequate natural ventilation and can not be fully enclosed.

Number of apartments with natural cross ventilation:
91 (60%)

2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.
Not applicable



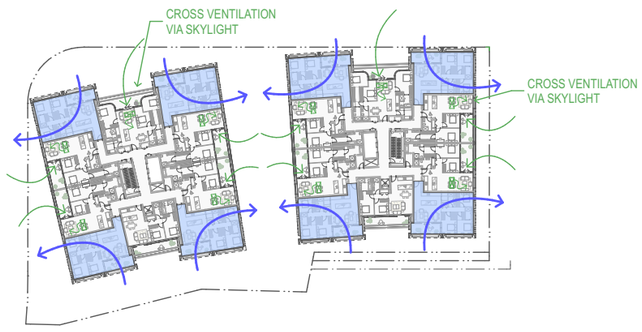
Ground Floor



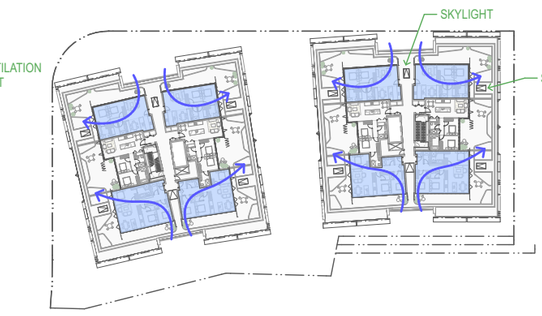
Mezzanine



Levels 1-2



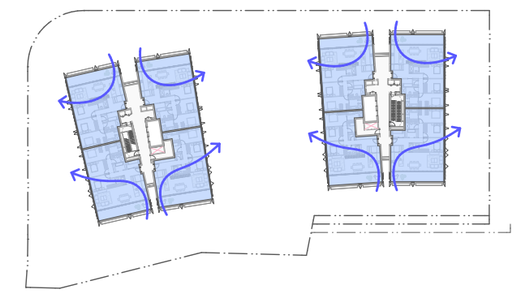
Level 3



Level 4



Levels 5-9



Level 10

ACHIEVING NATURAL VENTILATION

Level	Number apartments with natural ventilation	Number apartments without natural ventilation	
GF	0	7	
Mezzanine	1	2	
Level 1	8	12	
Level 2	8	12	
Level 3	18	2	
Level 4	8	4	
Level 5	8	4	
Level 6	8	4	
Level 7	8	4	
Level 8	8	4	
Level 9	8	4	
Level 10	8	0	
Total	91	59	150

ACHIEVING NATURAL VENTILATION

APARTMENT DESIGN GUIDE, PART 4B-3
The number of apartments with natural ventilation is maximised to create a comfortable indoor environment for residents.

1. *At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.*
2. *Overall depth of a cross-over or cross-through apartment does not exceed 18m measured glass line to glass line.*

Required = 60 %

Provided = 60 %

COMPLIES

Communal Open Space

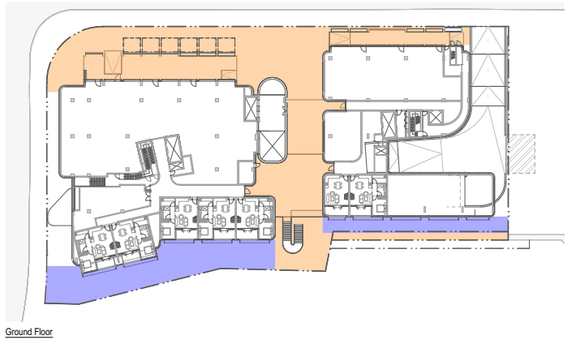
3D- Communal and public open space

1. Communal open space has a minimum area equal to 25% of the sit.

21% of residential communal open space provision

Does Not Comply

2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)



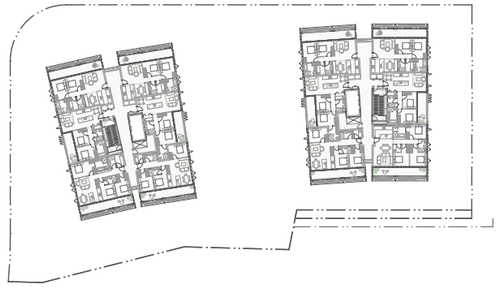
Ground Floor



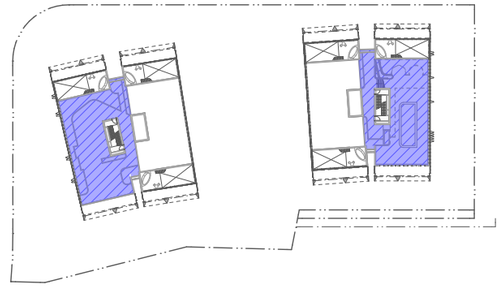
Level 1



Level 4



Levels 5-9



Level 11

RESIDENT COMMUNAL OPEN SPACE = **1,097 m²** = 21%

PUBLICLY ACCESSIBLE PUBLIC OPEN SPACE = **1,310 m²**

APARTMENT DESIGN GUIDE, PART 3D-1
An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping

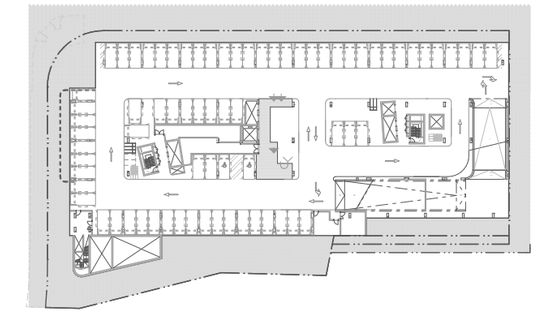
1. *Communal open space has a minimum area equal to 25% of the site*
2. *Developments achieve a minimum 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm 21 June (mid winter)*

Deep Soil

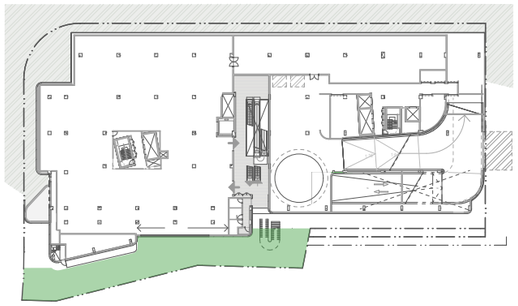
Objective 3E: Design Criteria
Deep soil zones are to meet the following minimum requirements:

Site Area	Min. Dimensions	Deep Soil area
Less than 650m²	-	7%
650m²-1500m²	3m	
Greater than 1500m²	6m	
Greater than 1500m² with significant tree cover	6m	

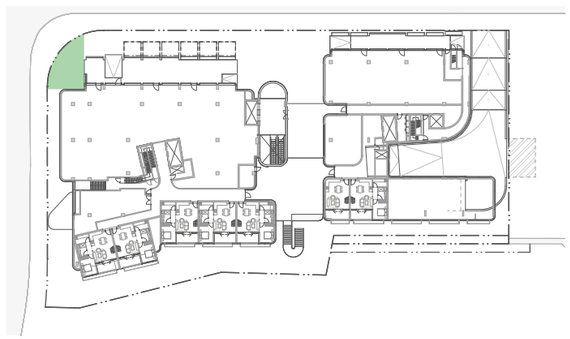
Complies: 10% (513m²)of deep soil provision



Basement 1



Lower Ground



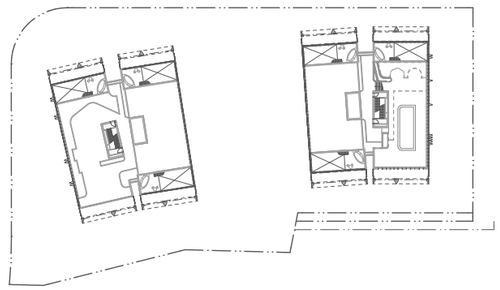
Ground Floor



Level 1



Level 4



Level 11

DEEP SOIL ZONE = **513 m²** 10%

APARTMENT DESIGN GUIDE, PART 3E-1
Deep soil zones provide areas on the site that allow for and support health plant and tree growth. They improve residential amenity and promote management of water and air quality.
Site area > 1150 sqm = 7%
Minimum width = 6m

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