



SSDA DESIGN REPORT

241–245 PENNANT HILLS ROAD, CARLINGFORD

october 2025

purpose of this document

The report has been prepared in support of the State Significant Development Application (SSDA) by the Carlingford Unit Trust for the construction and operation of a mixed-use development, including in-fill affordable housing, on land located at 241–245 Pennant Hills Road, Carlingford.

SSDA No. 84699461

This report has been prepared by Kennedy Associates Architects (KAA), with input from relevant organisations and disciplines. It is to be read in conjunction with the architectural drawings, the EIS prepared by Planning Direction, and the accompanying appendices and reports.

design team

organisation:	role:
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MANCE ARRAJ ENGINEERS	STORMWATER
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PREMIUM CONSULTING ENGINEERS	MECHANICAL SERVICES
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JACK STORCH	CPTED
HERITAGE NOW	ABORIGINAL CULTURAL & ENVIRONMENTAL HERITAGE
ACCESS RIGHT	ACCESS
EMM CONSULTING	SOCIAL IMPACT
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TRAFFIC SOLUTIONS	TRAFFIC
WASTE AUDIT	WASTE MANAGEMENT
PLANNING DIRECTION	VISUAL IMPACT
TREEHAVEN ENVIRONSCAPES	ARBORIST
H RAMSAY	SURVEYOR
GCA	GEOTECHNICAL & CONTAMINATION
MORROW GEOTECHNICS	GEOTECHNICAL

document control

issue:	date:	description:
B	3.12.2025	SSDA ISSUE





balaka falls - hunts creek reserve

Kennedy Associates Architects acknowledge the
Wallumedegal clan of the Darug Nation,
the traditional custodians of the land on which the project is located.

We pay our respects to their Elders past, present, and emerging.

We acknowledge and respect their
cultural heritage, beliefs, and ongoing relationship with the land.

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project vision

"When completed, the development at 241-245 Pennant Hills, Carlingford, will deliver a significant addition to the wider Parramatta region, offering 2,060 sqm of commercial space and 136 dwellings, including 25 affordable housing units, in an environmentally responsible and architecturally sophisticated project that exceeds performance standards while enriching the street environment and local character of Carlingford."

1

introduction

1.1

consultant declaration

Declaration		
Name	Steve Kennedy	
Qualifications	NSW Architects Registration Board Registration No. 5828	
The undersigned declares that this Design Report has been prepared in response to the following SEARs requirements issued for the Project on 17 October 2025 for SSD-84699461:		
SEARs item no.	SEARs Requirement	Relevant Section of this Report
5.	Design Quality	N/A
6.	Built Form and Urban Design	Section 2.3 Section 2.4 Section 2.5 Section 2.6 Section 4.3.2 Section 4.4.1 Section 4.2.8
7.	Environmental Amenity	Section 3.2 Section 3.3 Section 4.2.2 Section 4.2.3 Section 4.2.4
23.	Public Space	Section 2.3.5 Section 2.3.6 Section 2.4.2 Section 2.6 Section 4.2.3 Section 4.2.4 Section 4.2.7
Signed		
Dated	3 December 2025	



1.2

project description

This Design Report has been prepared by Kennedy Associates Architects on behalf of Triple Eight Corporation at the Carlingford Unit for the construction and operation of a mixed-use development including in-fill affordable housing (the **proposal**) on land at 241–245 Pennant Hills Road, Carlingford (the **site**).

This report has been prepared to outline the project’s design approach and strategies as well as an assessment of the project’s performance against relevant legislative design criteria.

This report accompanies a State Significant Development Application that seeks approval for the demolition and construction of a mixed-use residential and commercial development including in-fill affordable housing, which involves the following:

- Site preparation works, including demolition of existing structures, vegetation removal as necessary, and bulk excavation.
- Construction and operation of a mixed-use development comprising commercial premises, gymnasium, child care centre, and shop top housing as follows:
 - One 18-storey building (Building A) in the northeast corner of the site; and two 4-5 storey buildings (Building B & C) along the western edge of the site.
 - A publicly accessible through site link between Pennant Hills Road and Felton Road.
 - 6 commercial tenancies at ground floor.
 - A 3-storey gymnasium within the southern portion of Building C.
 - A 98-place childcare centre located on Level 01 of Building A.
 - 2,680 sqm of communal open space in the following locations:
 - the roof of Building A, B, and C
 - the two-storey podium of Building A
 - the publicly accessible through-site link
 - a total of 136 residential apartments across the three buildings, including 25 in-fill affordable apartments
- Provision of three levels of basement parking with a total of 263 car parking spaces comprising:
 - 151 residential car parking spaces (including 24 accessible spaces);
 - 30 commercial car parking spaces (including 4 accessible spaces);
 - 25 childcare parking spaces (including 4 accessible spaces);
 - 26 gymnasium parking spaces (including 2 accessible spaces);
 - 28 visitor car parking spaces (including 12 accessible spaces); and
 - 3 car share spaces
- Street tree planting and landscaping, extension and augmentation of services and infrastructure as required.

For a detailed project description, refer to the Environmental Impact Statement prepared by Planning Direction.

Site Description and Location

The site is identified as 241–245 Pennant Hills Road, Carlingford within the City of Parramatta Local Government Area (LGA). It is situated in the western portion of the Carlingford Local Centre and is located approximately 18km northwest of the Sydney Central Business District (CBD).

The site is an irregular triangular shape and comprises approximate frontages of 140m to Pennant Hills Road to the southeast, 100m to Felton Road to the north and 135m to the adjoining properties to the west. The site comprises a total area of 6,331 sqm, with the entirety of the site under single ownership.

The site is described in **Table 1** below and illustrated in the Site Aerial Map in **Figure 1** following.

Table 1 Site Description			
Reference	Street address	Legal description	Area
1	241-245 Pennant Hills Road	Lot 1 DP805059	-
2	241-245 Pennant Hills Road	Lot 2 DP805059	-
3	241-245 Pennant Hills Road	Lot 5 DP805059	-
4	241-245 Pennant Hills Road	Lot 6 DP805059	-
total			6331m²



Figure 1 Site Aerial Map
Source: Nearmap, edits by Kennedy Associates Architects



1.3

SEARs compliance

item	SEARs requirement	relevant section of report
5. Design Quality	Demonstrate that the development: in all other instances, has been reviewed by the State Design Review Panel (SDRP) where required under the NSW SDRP: Guidelines for Project Teams.	N/A Applicant submitted a request to meeting with the SDRP but were advised by DPHI to proceed without an SDRP meeting
6. Built Form and Urban Design	Demonstrate how the proposed built form (layout, height, bulk, scale, separation, setbacks, interface and articulation) addresses and responds to the context, site characteristics, streetscape and existing and future character of the locality. Where relevant explain and illustrate the application of any bonuses under an EPI.	Section 2.3 Section 2.4 Section 2.5 Section 2.6
	If relevant, provide an assessment of the development against: - the design principles for seniors housing set out in Schedule 8 of State Environmental Planning Policy (Housing) 2021 (Housing SEPP) and the Seniors Housing Design Guide. - the design principles for residential apartment development set out in Schedule 9 of the Housing SEPP and the Apartment Design Guide (ADG). This should include a table which demonstrates how each dwelling (including affordable dwellings) performs against the ADG design criteria.	Section 4.3.2 Section 4.4.1
	If affordable housing is proposed, provide a floorplan outlining the gross floor area and dwellings that are provided as affordable housing.	Section 4.2.8

item	SEARs requirement	relevant section of report
7. Environmental Amenity	Assess amenity impacts on the surrounding locality, including solar access, visual privacy, view loss and view sharing, as well as wind, lighting and reflectivity impacts. A high level of environmental amenity for any surrounding residential or other sensitive land uses must be demonstrated.	Section 3.2 Section 3.3 Section 4.2.3 Section 4.2.4
	Provide a solar access analysis of the overshadowing impacts of the development within the site, on surrounding properties and public spaces (during winter solstice) at hourly intervals between 9am and 3pm, comparing the proposed development, existing situation and where applicable, a development with no bonuses applied.	Section 4.2.2 Section 4.2.3 Section 4.2.4
23. Public Space	If public space is proposed as part of the development, demonstrate how the development: - maximises the amount, access to and quality of public spaces (including open space, public facilities and streets/plazas within and surrounding the site), reflecting relevant design guidelines and advice from the local council and the Department. - provides accessible public space. - maximises permeability and connectivity. - maximises the amenity of public spaces in line with their intended use, such as through adequate facilities, solar access, shade and wind protection. - maximises street activation. - minimises potential vehicle, bicycle and pedestrian conflicts.	Section 2.3.5 Section 2.3.6 Section 2.4.2 (public space plan) Section 2.6 Section 4.2.3 Section 4.2.4 Section 4.2.7

1.4

development summary

The subject site is legally known as Lots 1, 2, 5, and 6 DP 805059.

Site Area:

Total: 6,331 sqm

Excluding RMS acquisition: 5,765 sqm

Frontages:

140m along Pennant Hills Road.

90m along Felton Road.

Topography:

The site falls approximately:

- 4m along western boundary (falling N to S)
- 3m along Pennant Hills Road boundary (falling NE to SW)
- 1.5m along Felton Road boundary (falling W to E)

Views:

The site offers district and city views to the east and south, including Parramatta CBD, Sydney Olympic Park, and Sydney CBD.

Location:

250m from Carlingford Train Station.

Zoning:

E1 - Local Centre.

Existing Development:

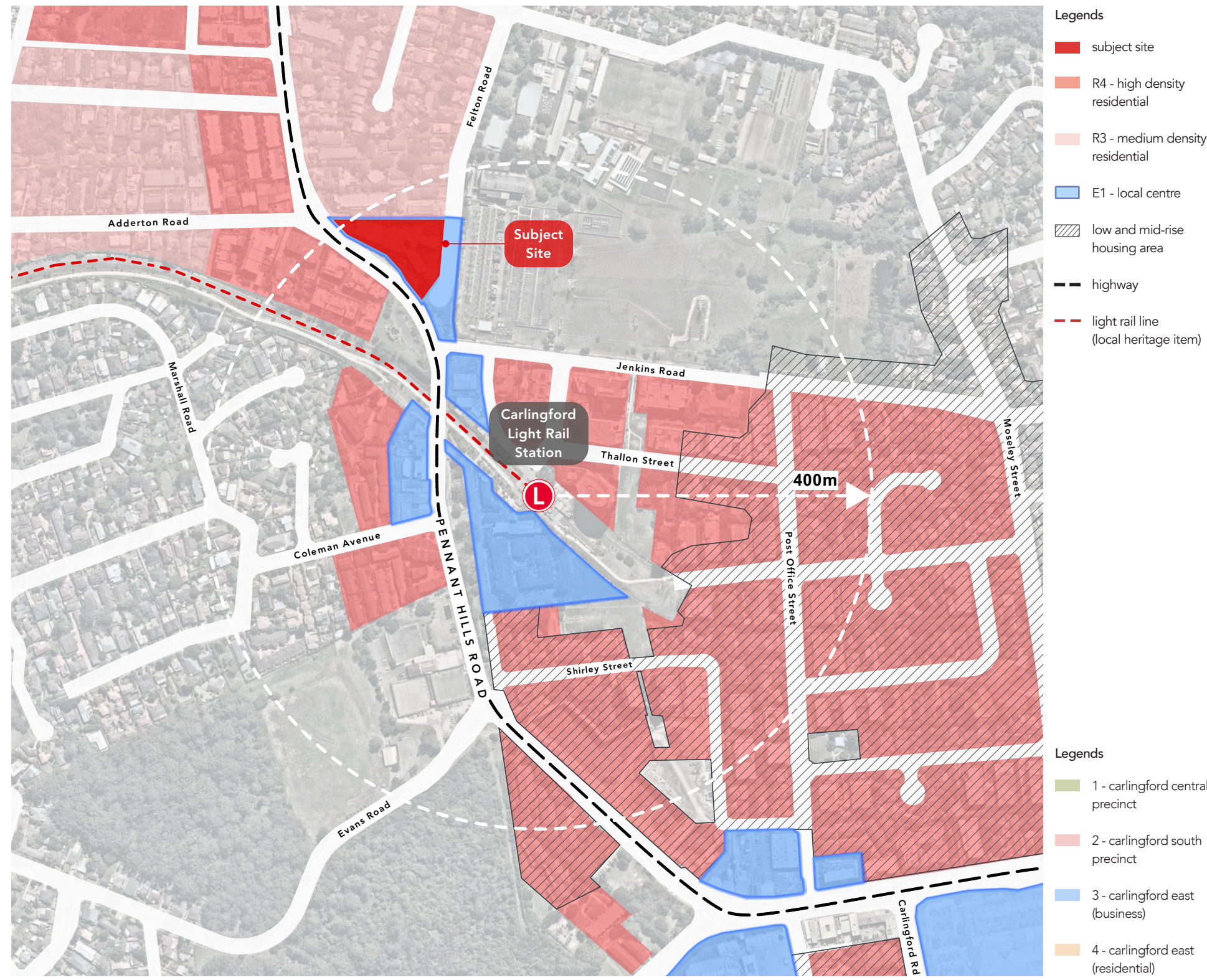
A two-storey brick commercial building with multiple tenancies, including small businesses and a 24-hour gym.

Proposed Development:

- 3 buildings consisting of
 - one 18-storey (62.1m) tower (Bld A)
 - two 4-5 storey buildings — 17.1m (Bld B) and 16m (Bld C)
- 136 residential units (incl. 25 affordable and 24 adaptable)
- 2,060 sqm of commercial / retail space including:
 - a variety of commercial tenancies (6 suites)
 - a gym
 - a 98-place childcare centre
- 2,680 sqm communal open space
- 263 car spaces



1.5 site context



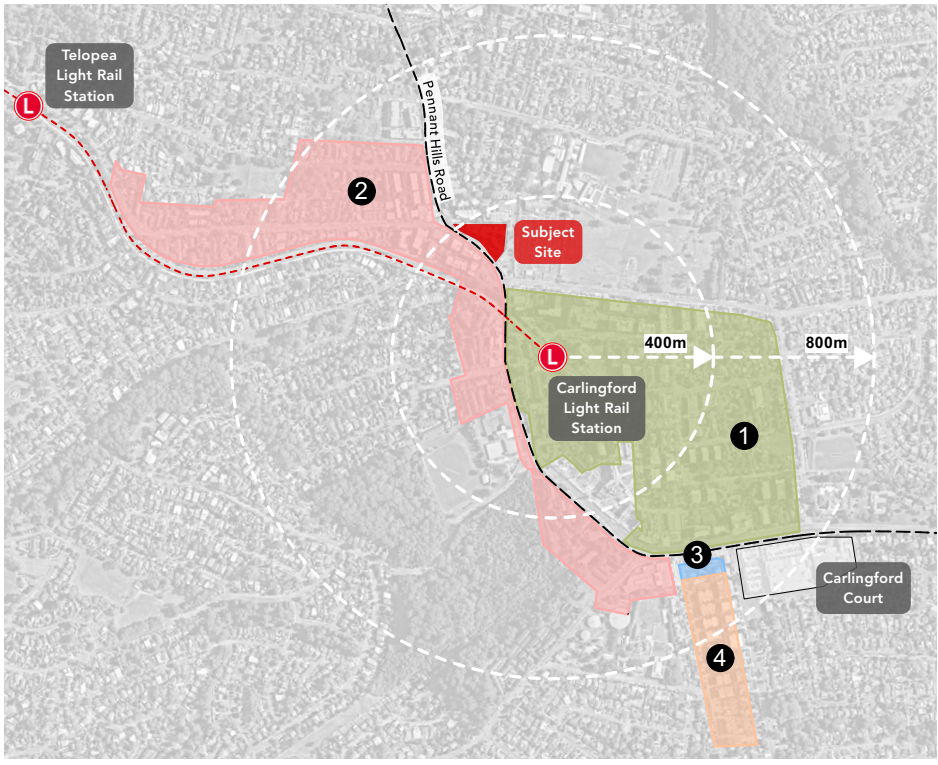
The subject site is less than 400m from the light rail station and is well-located adjacent to the local centre.

- The Carlingford Local Centre precinct is divided into two parts:
- a **transit core** located around the light rail station
 - a **commercial core** located around Carlingford Court Shopping Centre

These two cores are connected by areas zoned for high-density residential development and future growth.

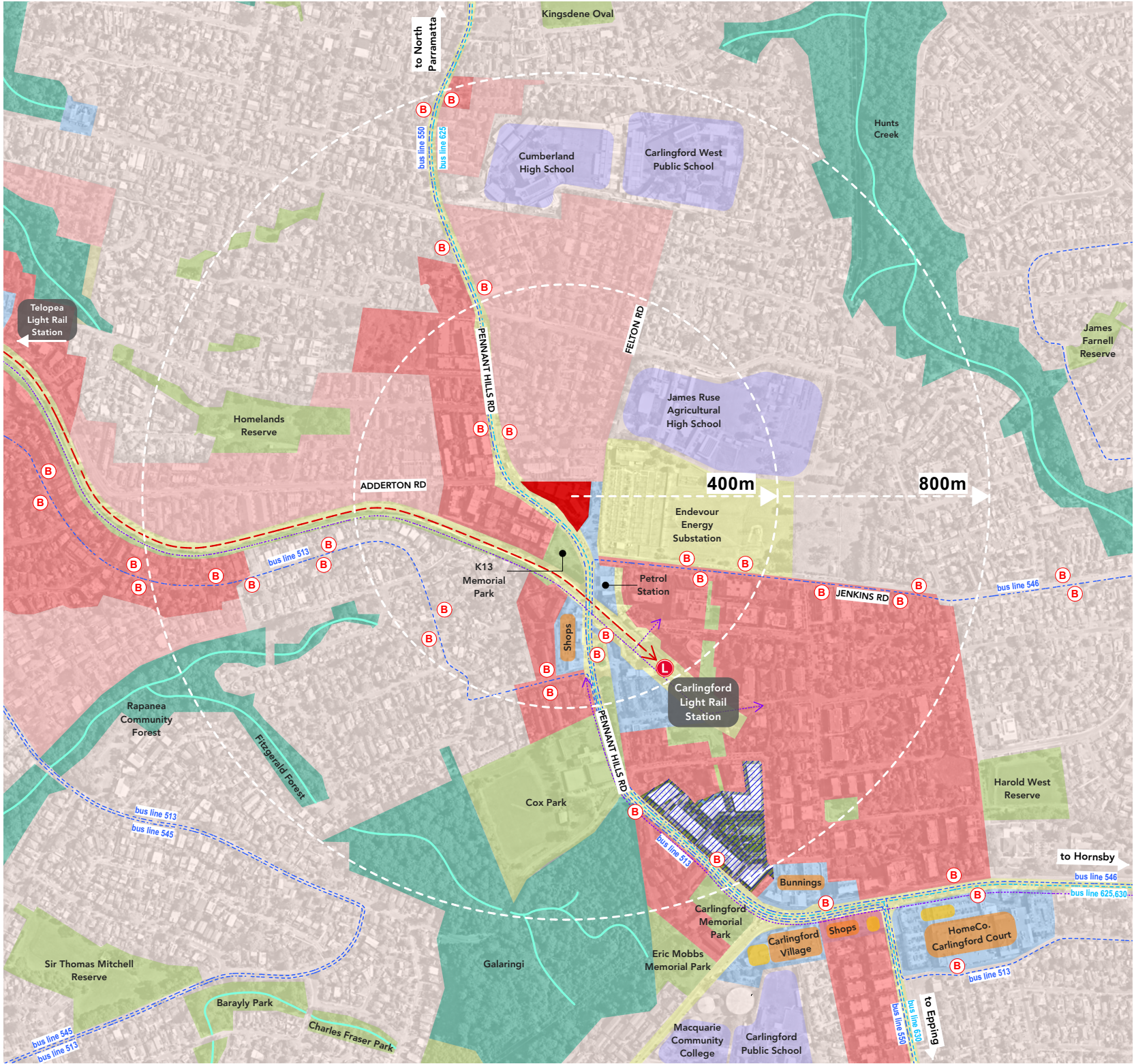
The site is located adjacent / in close proximity to medium- and high-density residential and mixed-use developments. Positioned near major retail hubs such as Carlingford Court and close to the new light rail station, the site benefits from strong connectivity and urban amenity.

Recent State Government-led planning reforms, along with planning proposals for surrounding sites, reflect a clear shift toward increased building heights and residential density—aligning with both State and Local Government visions for more compact, transit-oriented centres across Sydney.



NTS

1.6 wider site context



- Legends**
- subject site
 - R4 - high density residential
 - R3 - medium density residential
 - R2 - low density residential
 - SP2 - infrastructure
 - C2 - environmental conservation
 - RE1 - public recreation
 - E1 - local centre
 - W1 - natural waterways
 - bus stop
 - light rail station
 - bus line
 - light rail line
 - bicycle line
 - commercial buildings
 - educational buildings
 - medical centre
 - residential development 723 units, 29 storeys (under construction)

The site at 241–245 Pennant Hills Road occupies a prominent location on the western edge of the Carlingford Local Centre.

Covering 6,331 sqm, the land is irregular and triangular, with frontages to Pennant Hills Road, Felton Road, and adjoining medium-density residential developments to the west.

Well-served by public transport, the site is also conveniently located near schools, retail amenities, and recreational open spaces.

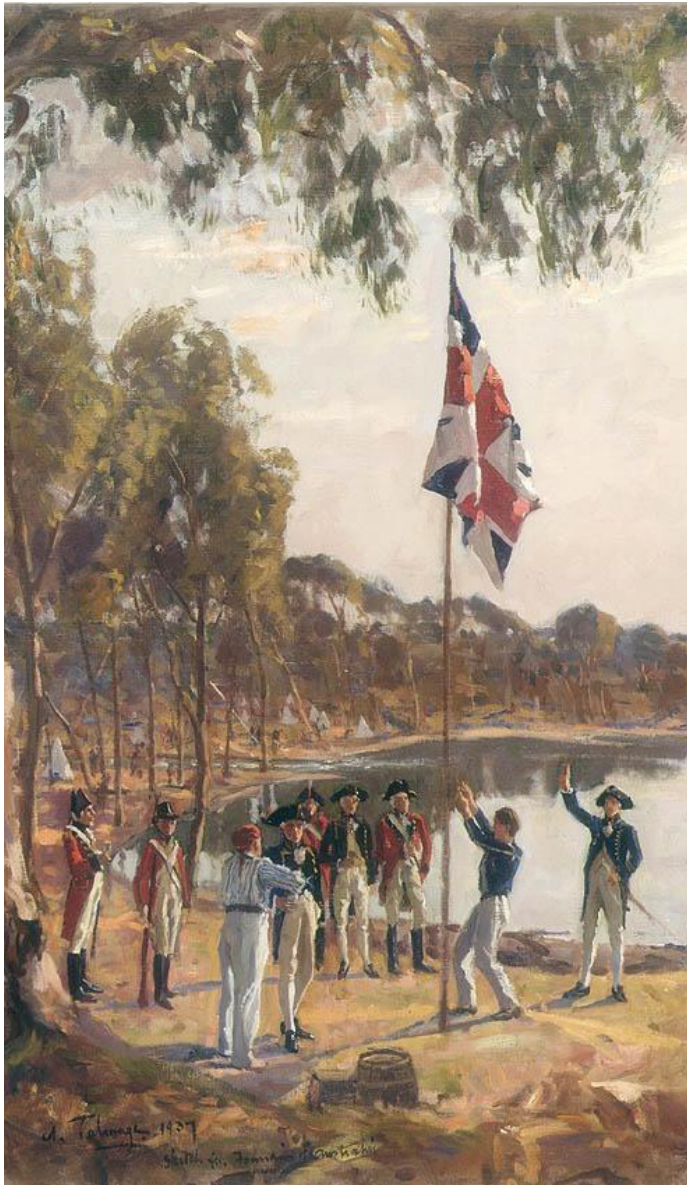
It forms part of the Carlingford Town Centre.



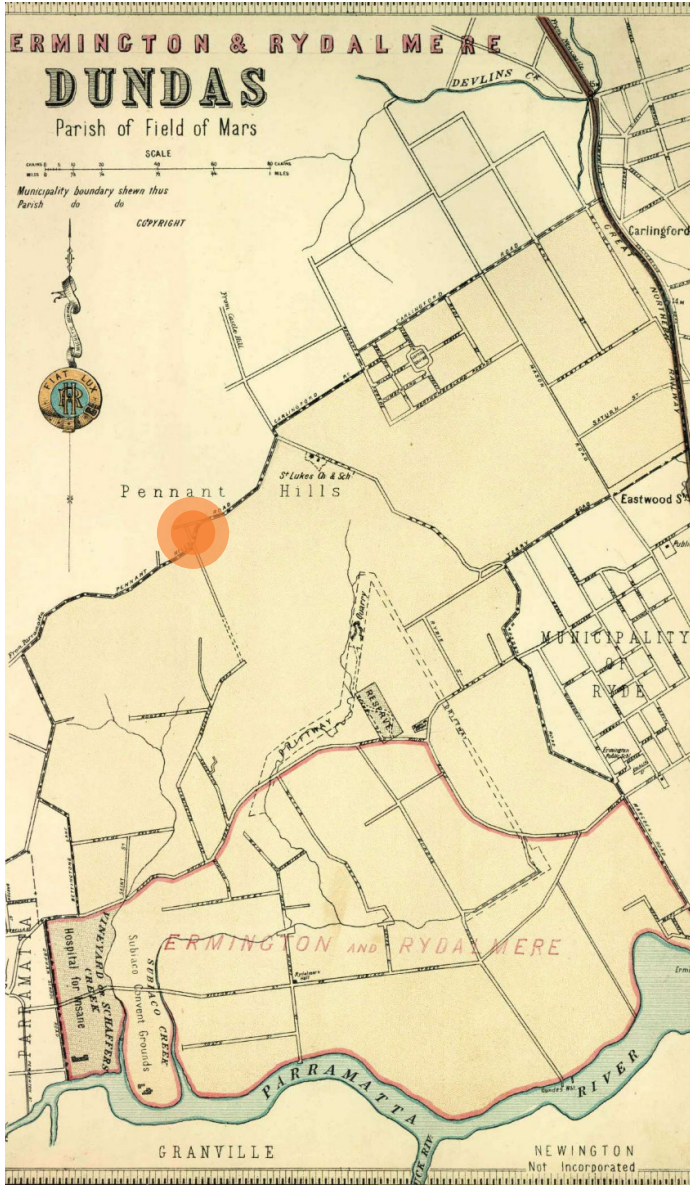
1.7
heritage



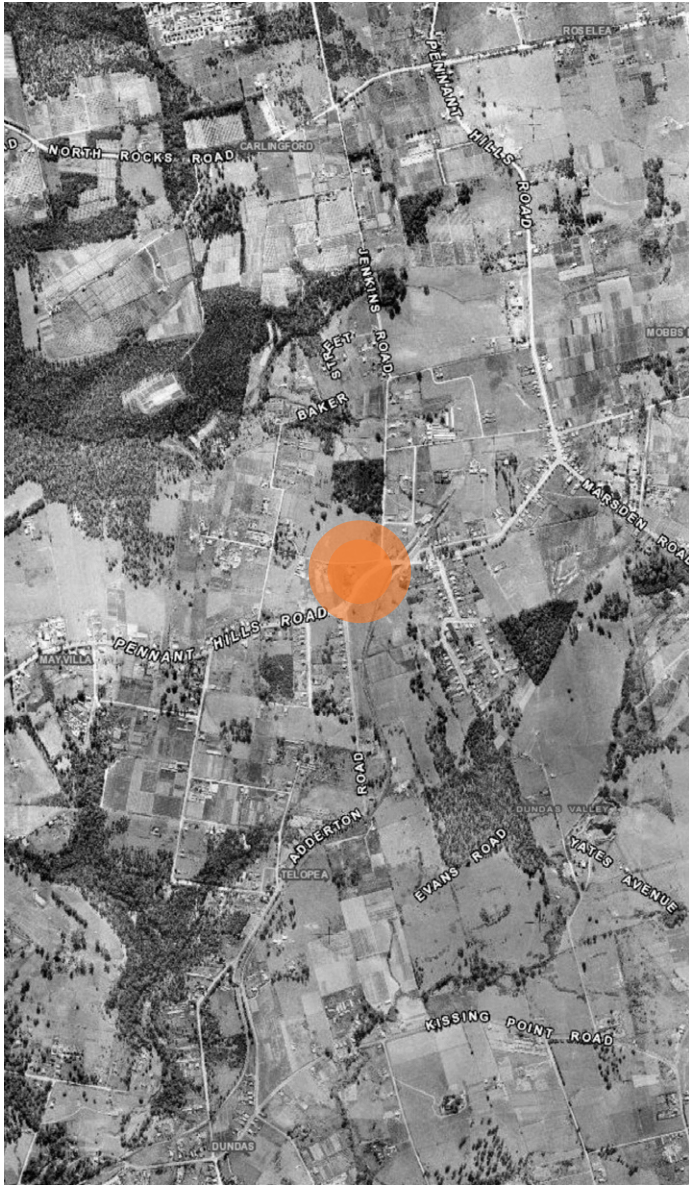
First Nations
pre 1788



Colonisation
1788 onwards

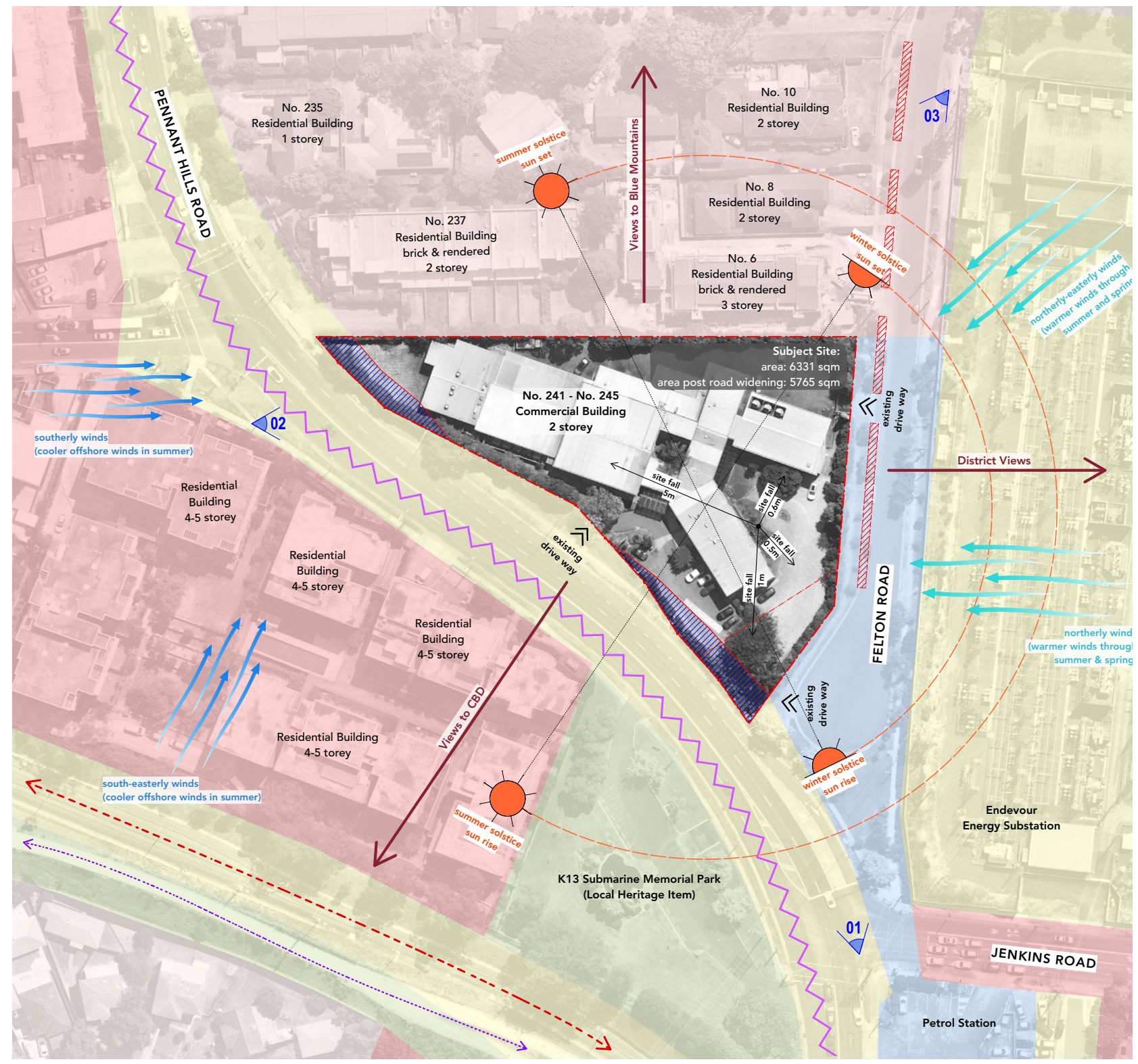


Land Holdings
C1891 - 1894



Development Pattern
1943

1.8 site analysis

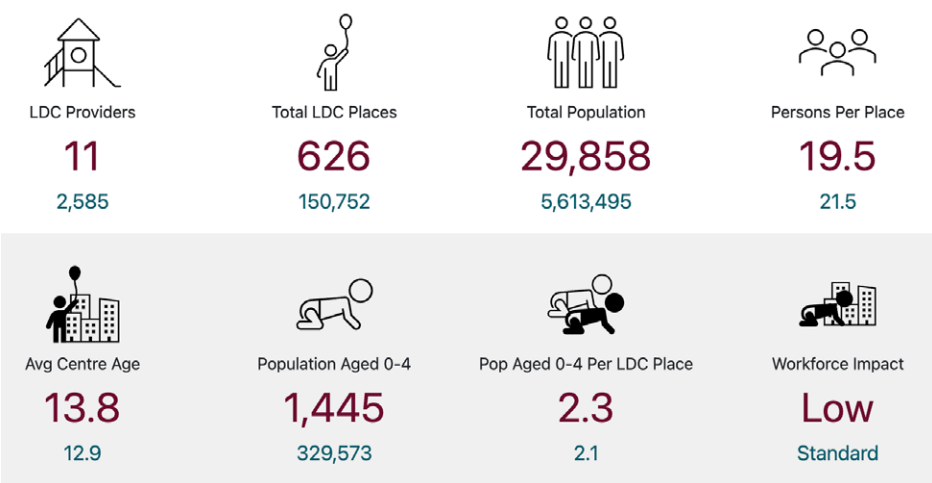


1.9 local child care analysis



Key Metrics

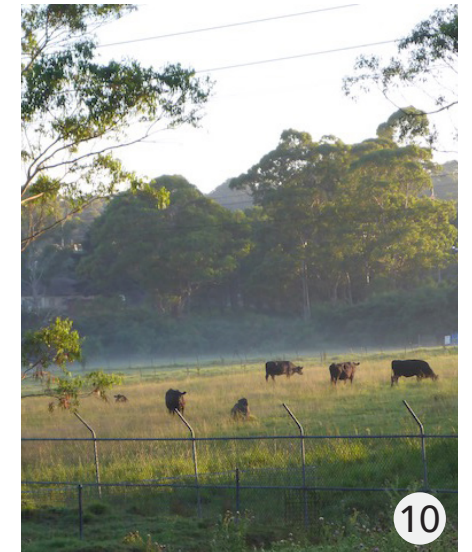
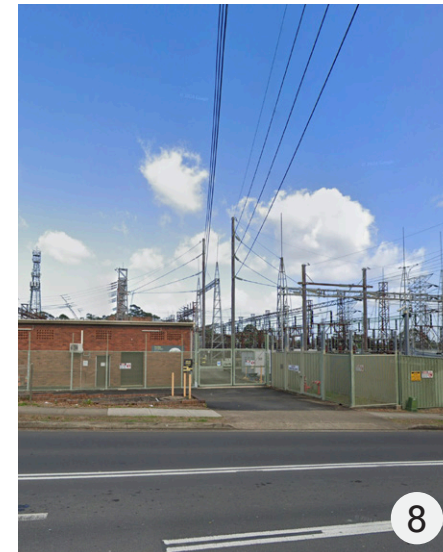
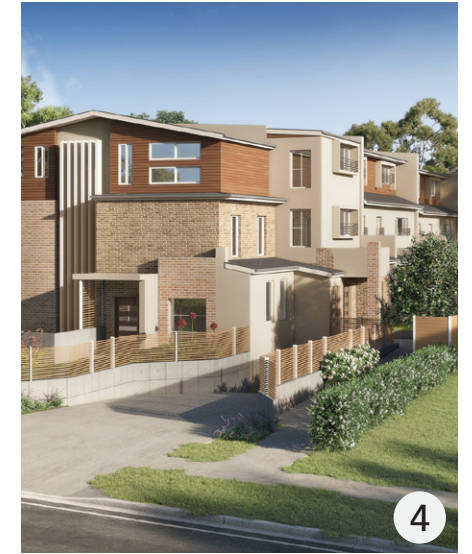
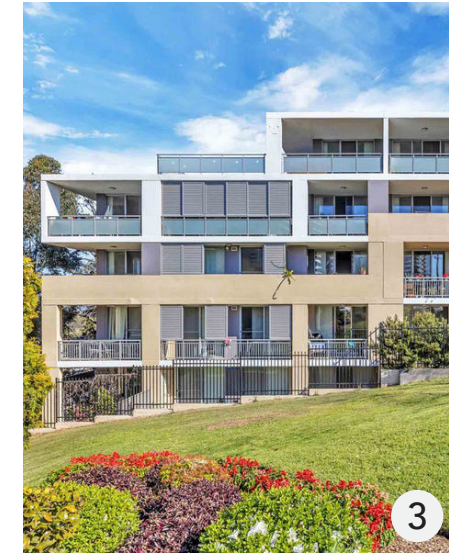
Carlingford / Greater Sydney



No.	Name	No. of Spaces
1	Carlingford Montessori Academy	72
2	Golden Seeds Early Learning Carlingford	102
3	North Rocks Child Care Centre	53
4	Papilio Early Learning Carlingford	78
5	Carlingford Multipurpose Learning Centre	55
6	Families @ Carlingford Education Service	28
7	Munchkin Manor ELC & Preschool	42
8	Carlingford Kindergarten	29
9	Fairytales preschool and Long Day Care Centre	25
10	Shine Preschool Carlingford	103
11	Munchkin Manor Early Lering Centre	39

1.10

character analysis



- 1 - High Rise Development at 263-281 Pennant Hills Road
- 2 - High Density Development along Thallon Street
- 3 - Medium Density Development at 294-296 Pennant Hills Road
- 4 - Medium - Low Scale Developments at 6 Felton Road
- 5 - K13 Memorial Park (Local Heritage Item)
- 6 - Carlingford Court
- 7 - Carlingford Light Rail
- 8 - Endeavour Energy Substation
- 9 - James Ruse Agricultural High School
- 10 - James Ruse Agricultural High School Pastures

The subject site occupies a complex interface of diverse neighbouring characters. To the east, high-rise apartments surround the light rail station, while medium-density dwellings lie to the west. K13 Memorial Park lies to the southeast, with James Ruse High School and a substation located to the north and northeast. Beyond these immediate neighbours, the site is framed by lower-density, suburban-scale developments in the wider surrounds.

This variety of surrounding land uses and built forms has informed the design response—including building height, built form, materials, and landscape treatments—to ensure a sensitive transition between these different contexts.

1.11

planning proposal

The Planning Proposal (Reference Number: PP-2022-376), approved on 2 May 2022, established the guiding framework for the form and scale of development on the subject site.

Adopting a whole-of-site approach, the Planning Proposal defined the key parameters for future development, including the general number, form, location and orientation of buildings.

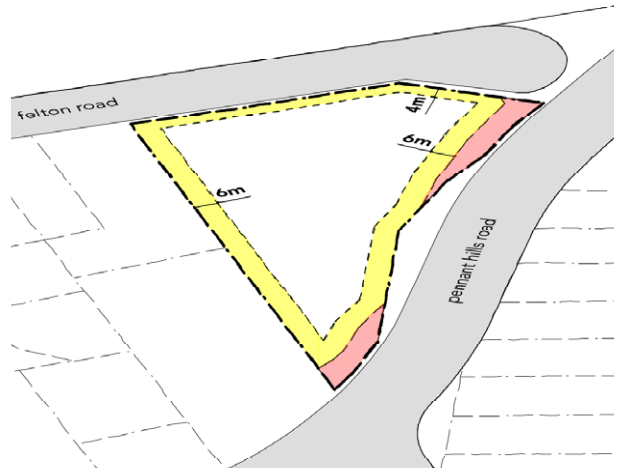
A central feature of the proposal was the provision of a publicly accessible through-site link. This link was conceived in tandem with the proposed height controls to ensure an appropriate transition in scale between the high-density developments within the Carlingford Local Centre to the east and the medium-density residential land to the west.

The Planning Proposal resulted in amendments to the core LEP controls and maps, including:

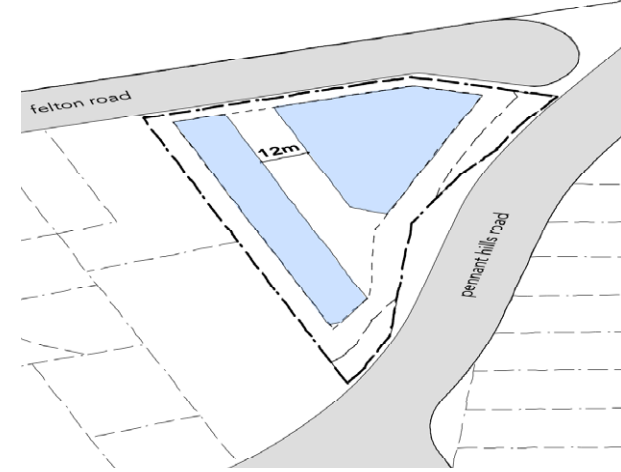
- a maximum floor space ratio (FSR) of 2.1:1
- a maximum building height range of 14 - 49 metres

In addition, two site-specific LEP controls were introduced:

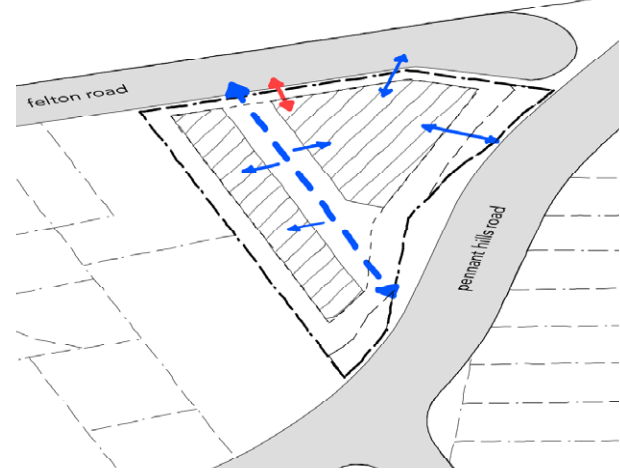
- a requirement to provide a minimum of 1,970 sqm of commercial floor space
- an allowance for up to 456 sqm GFA for winter gardens



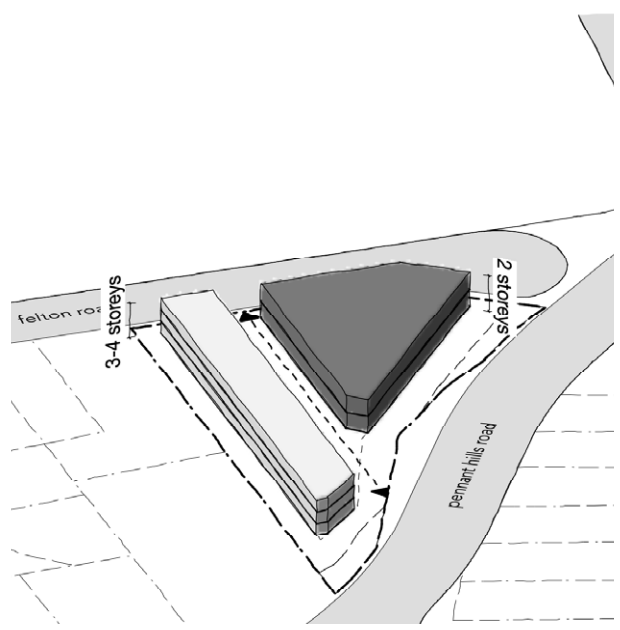
road widening + setbacks



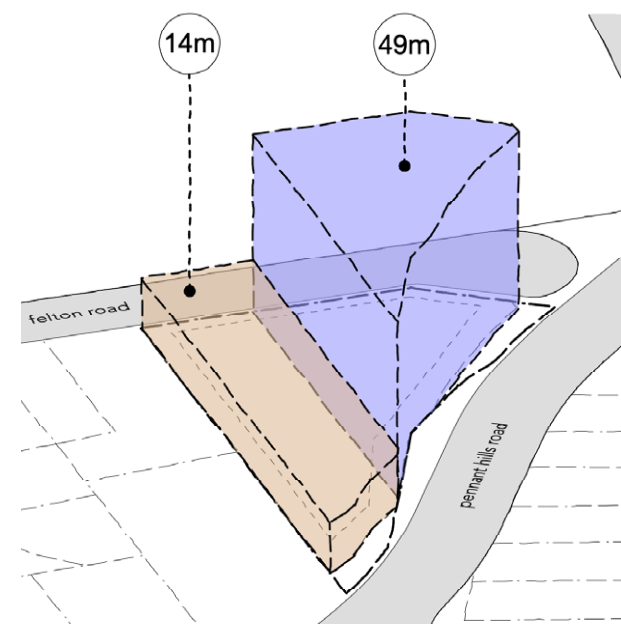
building zones + separation



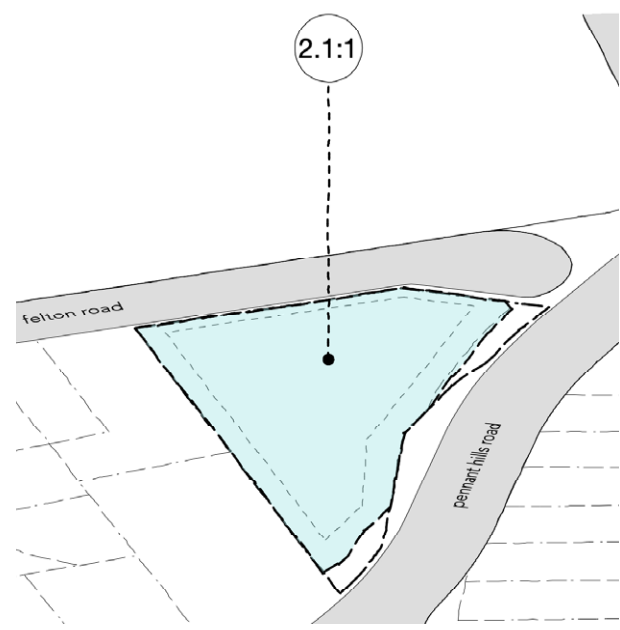
pedestrian + vehicular circulation



commercial podium + low-scale dwellings



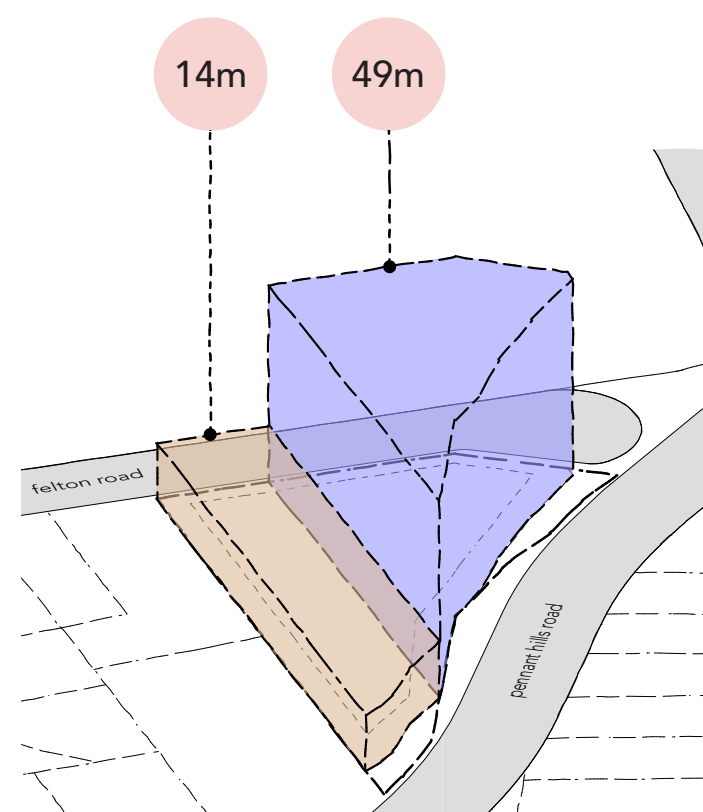
building height



floor space ratio

1.12

in-fill affordable housing incentives



Proposal with LEP Height Plane

Under the current LEP controls, the following building heights apply across the site:

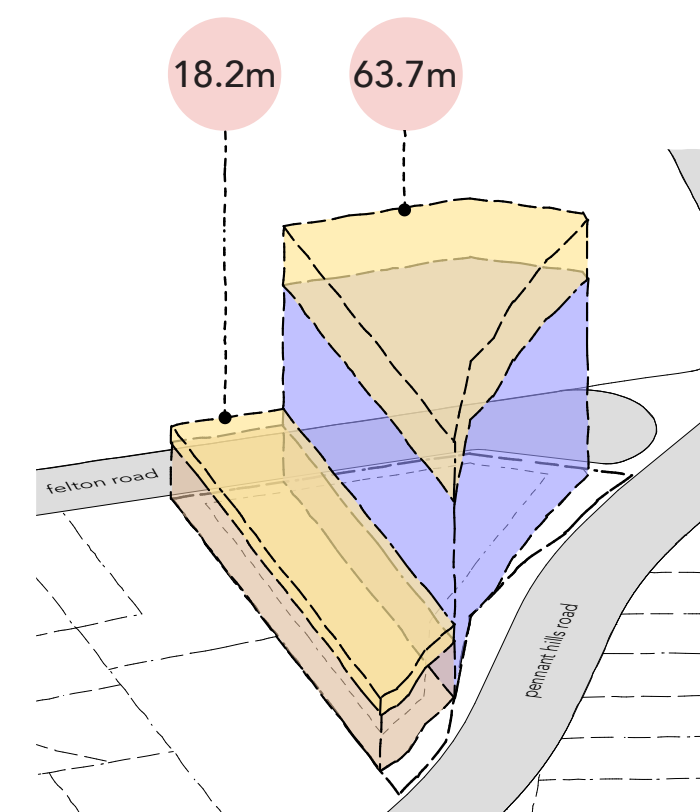
- 14 metres within the western portion of the site (26m wide)
- 49 metres within the eastern portion of the site

+30%

Affordable Housing Incentives

The subject site's proximity to the Carlingford Light Rail Station makes it eligible for additional height and floor space under the In-fill Affordable Rental Housing (ARH) provisions of the NSW Housing SEPP 2021.

Under these provisions, developments that allocate a minimum of 15% of gross floor area to affordable housing may access height and floor space bonuses of up to 30%.



Proposal with +30% Height Plane

Under the ARH provisions of the NSW Housing SEPP 2021, a 30% increase in building height and floor space ratio (FSR) applies, resulting in the following height controls:

- 18.2 metres along the western portion of the site
- 63.7 metres within the eastern portion of the site

In addition, the maximum permissible FSR across the site would increase from 2.1:1 to 2.73:1.

1.13

proposed scheme

The proposed scheme has been carefully developed to respond to the controls established by the Planning Proposal, while also leveraging the additional height and floor space available under the in-fill affordable housing provisions.

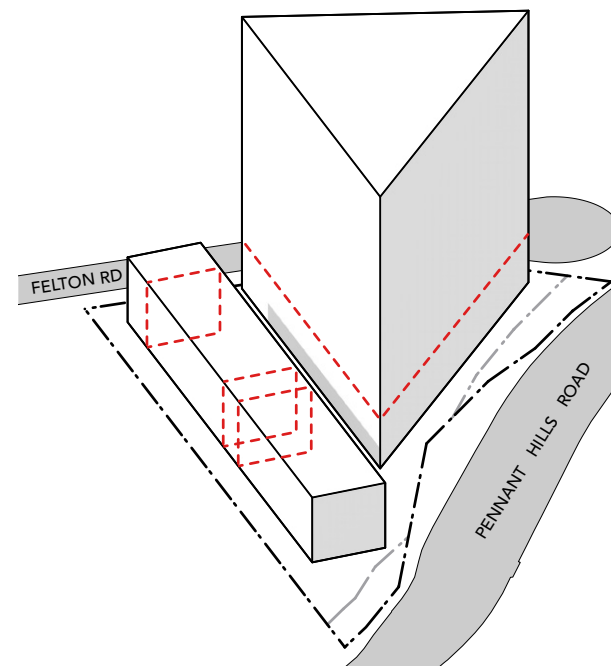
The principal site organisation aligns with the core concepts set out in the Planning Proposal.

Notably, the development is structured around a publicly accessible through-site link, featuring a taller 18-storey tower to the east and two smaller 4–5 storey buildings to the west.

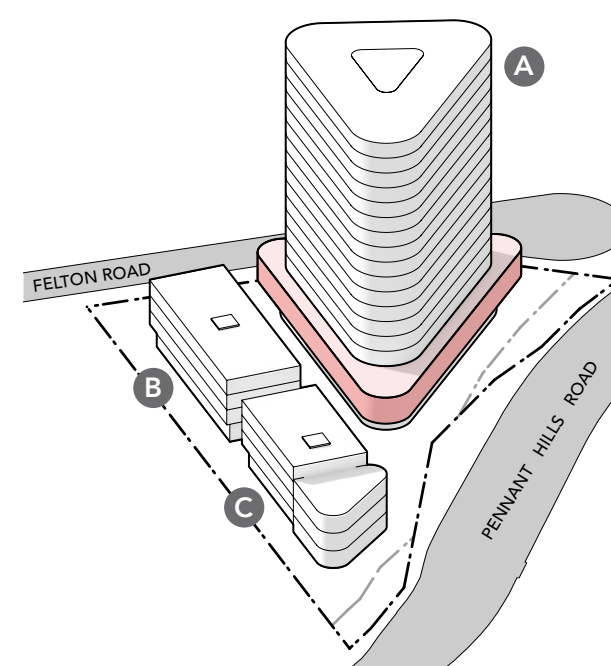
The additional height permitted under the in-fill affordable housing scheme is strategically concentrated in the northeast corner of the site to maintain the transition between the medium-density residential land to the west and the high-density local centre.

The design of the tower on the eastern portion of the site (Building A) has also been carefully considered to respond to the site's irregular triangular shape, as well as to minimise impacts on adjoining properties and resident amenity.

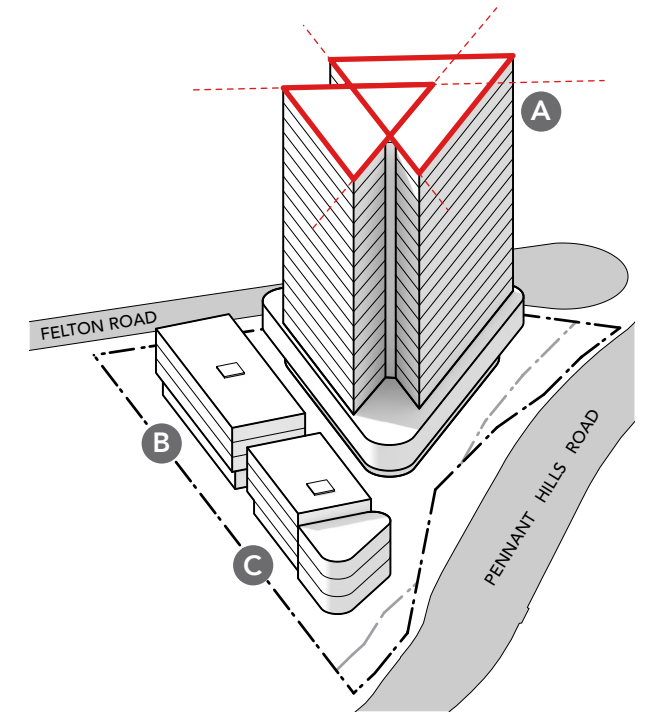
Upper levels of Building A will offer significant views across Sydney, including outlooks toward both Parramatta and the Sydney CBD.



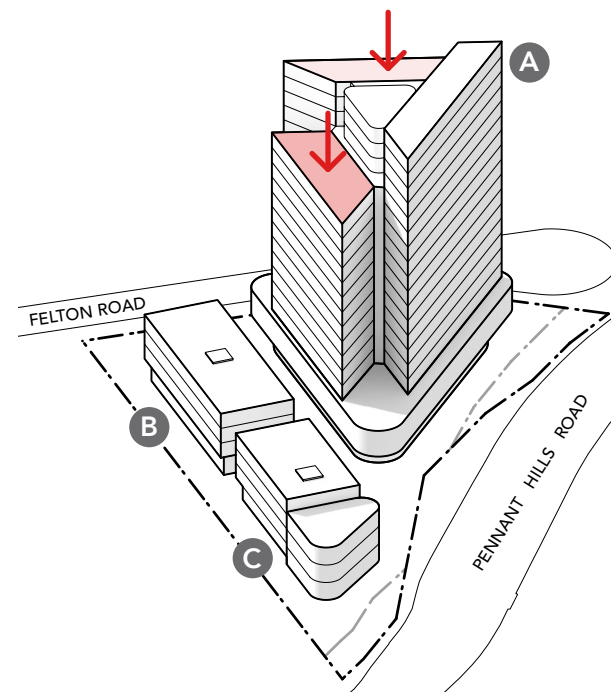
development volumes



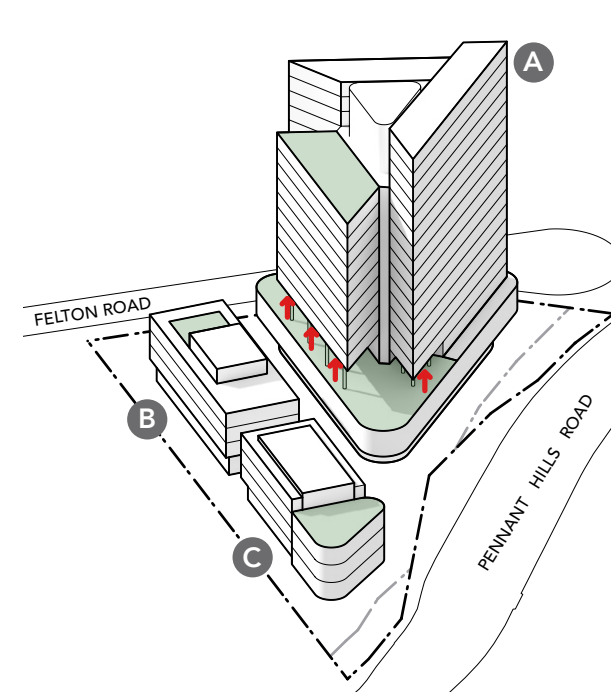
principal massing & form



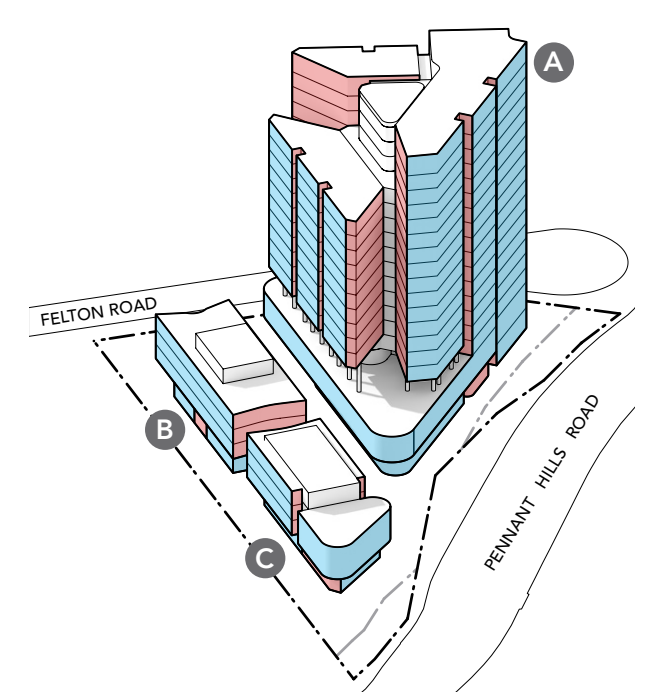
tower geometries



transitional heights



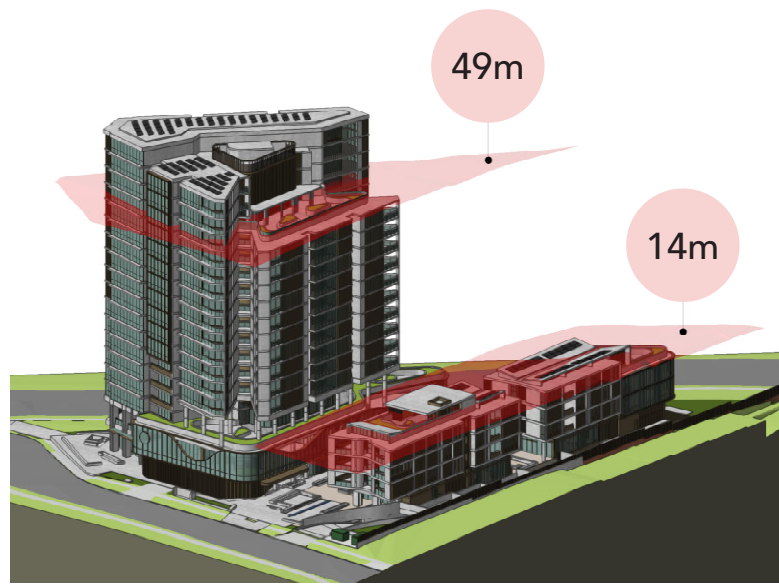
communal open space



detailed massing & articulation

1.14

proposed building heights



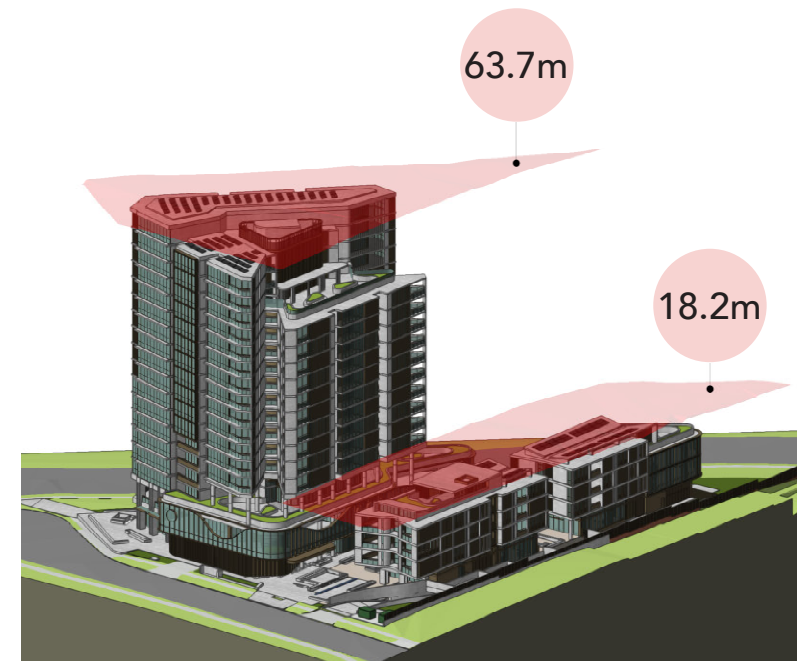
Proposal with LEP Height Plane

The diagram above shows the proposed development with the existing LEP building height planes across the site.

The diagram demonstrates that the 4–5 storey buildings in the western portion of the site (Buildings B & C) are generally within what is permissible under the existing LEP controls (regardless of the ARH bonus).



Affordable Housing Incentives



Proposal with +30% Height Plane

The diagram above shows the proposed development with the +30% height planes available under the Affordable Housing provisions and demonstrates the scheme's overall compliance with the building height controls.

Building A is fully compliant, whilst Buildings B & C are significantly below the height plane permissible under the ARH bonus.

2

scheme

2.1

proposed scheme

2.1

proposed scheme



aerial view (looking to south east)

2.2

connecting with country

2.2.1

connecting with country

Carlingford lies on the northern edge of the Cumberland Plain, noticeably elevated above Parramatta, where the Wianamatta Shale soils of the Cumberland Plain meet the Hawkesbury Sandstone plateau.

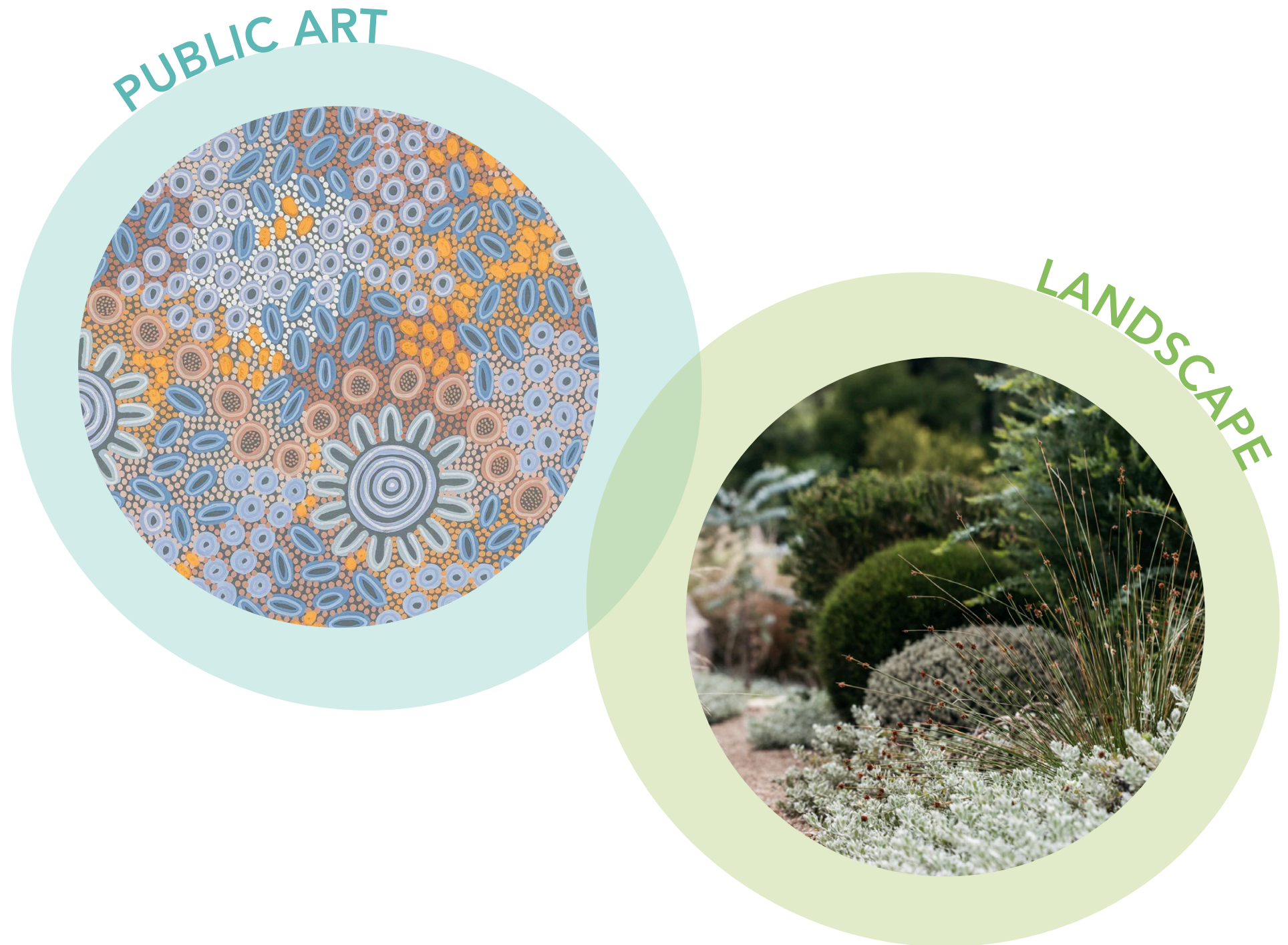
The subject site is situated on the traditional lands of the Wallumedegal (Wallumattagai) people, part of the Eora group. It holds cultural significance, particularly in relation to Pennant Hills Road, which is believed to have originally formed part of a traditional Aboriginal walking track network, serving as a connecting route between clans in Parramatta and Hawkesbury.

The site was first developed for non-Aboriginal use in the 18th century and has since been substantially altered through successive phases of development. Consequently, physical evidence of past Aboriginal occupation is considered to have been lost.

In response, the project team has focussed on a Connecting with Country strategy, aimed at fostering broader recognition of the site's pre-European heritage. Consultation with registered Aboriginal stakeholders, including the Local Aboriginal Land Council, is envisaged to occur during the documentation phase. This process will be carefully managed to ensure it is meaningful, avoids tokenism, and delivers tangible and clear physical outcomes within the project.

As an initial step, the project team has developed a preliminary strategy centered on two highly visible and symbolic public art and landscape initiatives being:

- A. working with a first nations artist to integrate public art, focused on local story telling, into the paving and planter walls of the through-site link.
- B. focusing on the use of native and indigenous sensory, medicinal and edible species throughout, but with a particular emphasis on the through-site link and Childcare.



2.3

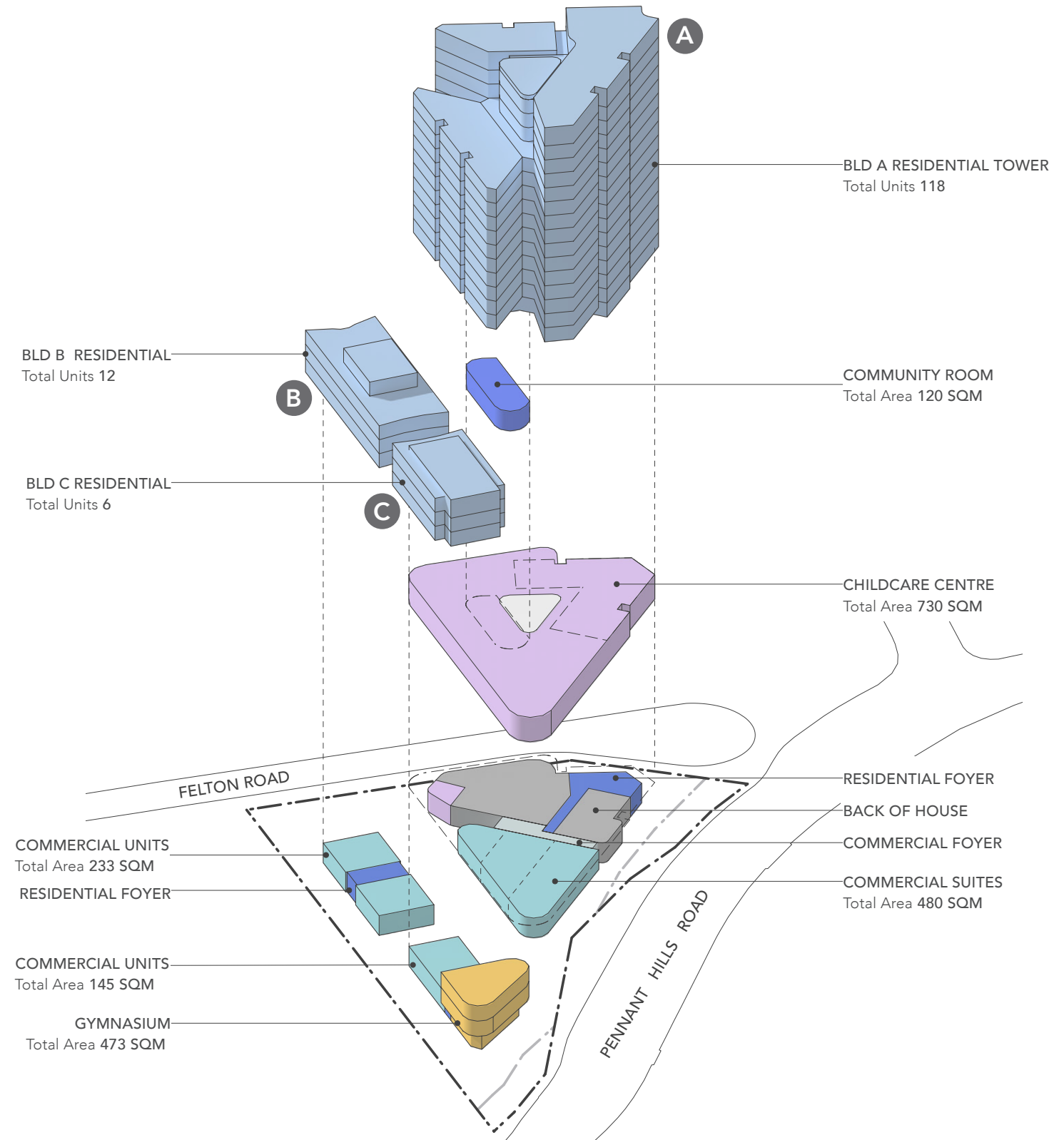
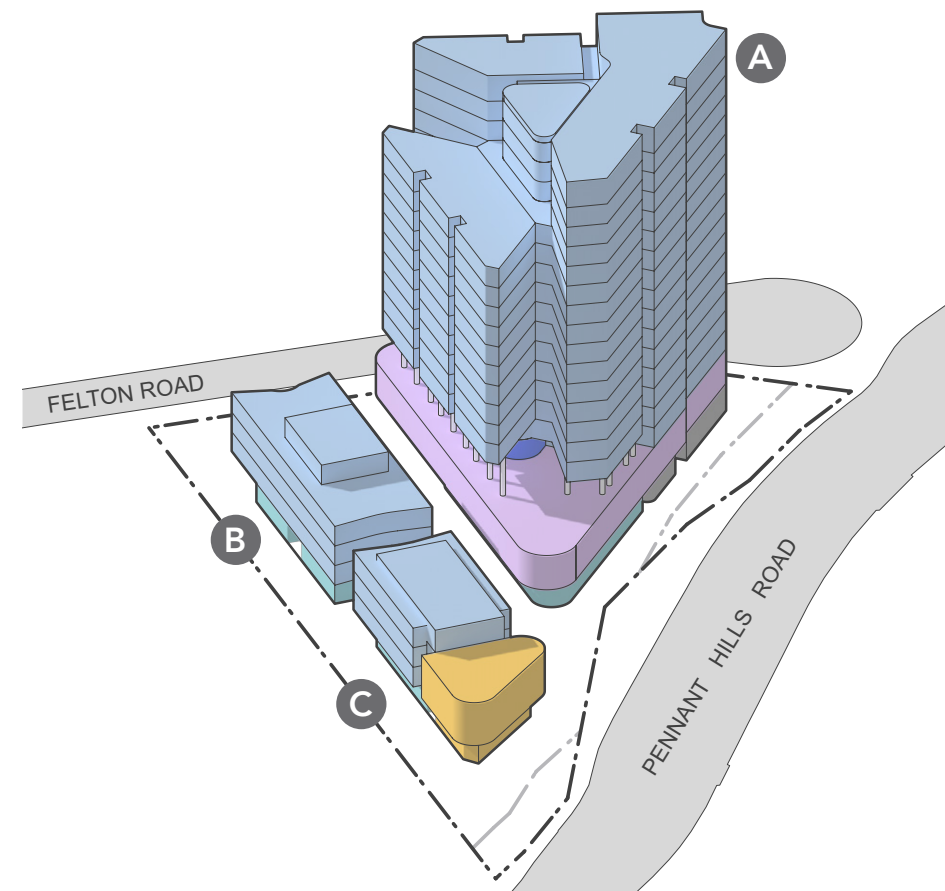
site strategy

2.3.1

site program

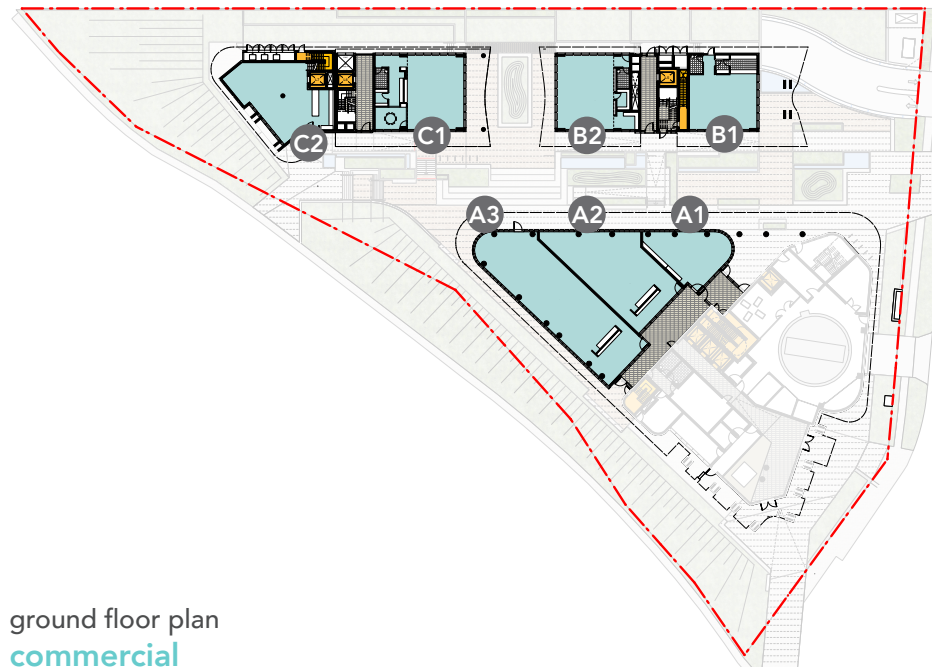
As a mixed-use shop-top development, the proposal offers a diverse layering of uses across the site, including:

- a series of up to 6 commercial suites
- a 3-storey gymnasium (commercially operated)
- a 98-place childcare centre
- 136 residential units
- a generous community room (for residents) capable of being subdivided into two spaces and connected directly to communal open space
- a series of communal open spaces over multiple levels

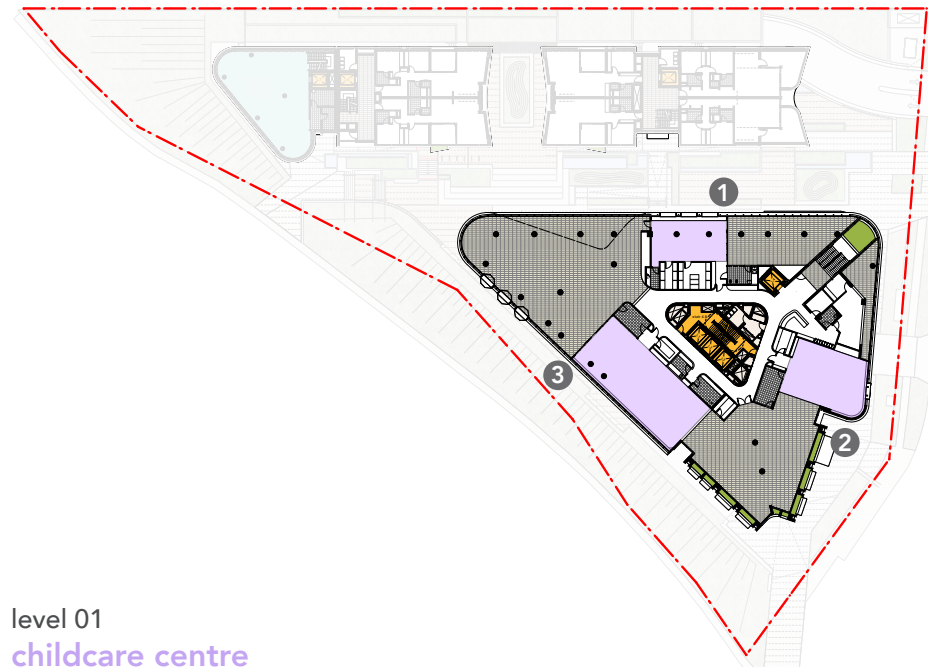


2.3.2

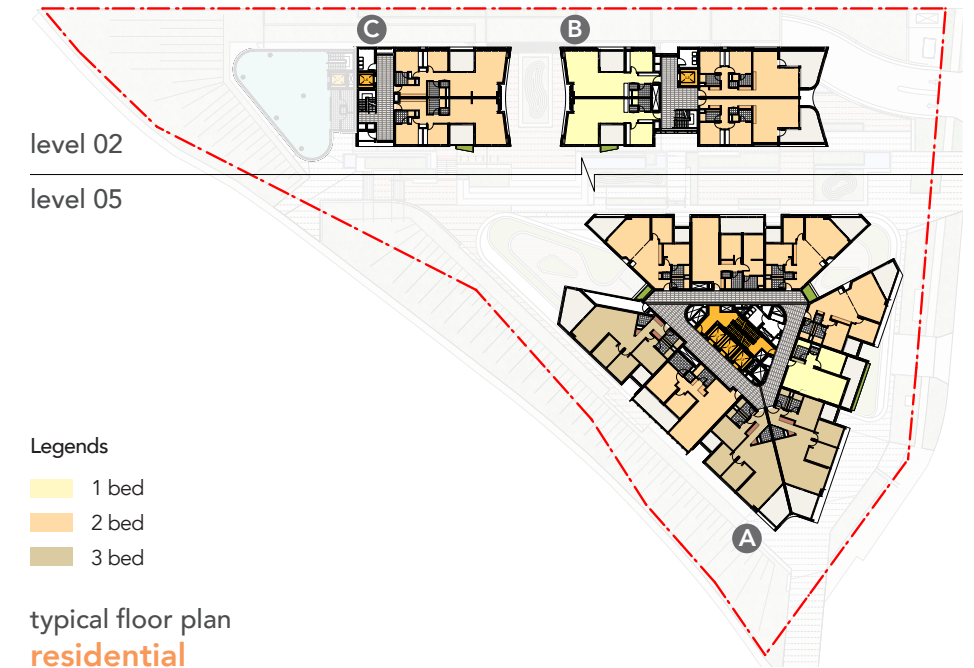
development uses



No.	Tenancy No.	Area (sqm)
1	Tenancy A1	79
2	Tenancy A2	166
3	Tenancy A3	235
4	Tenancy B1	111
5	Tenancy B2	122
6	Tenancy C1	145
7	Gymnasium C2	473
Total Commercial Area		1330 sqm



No.	Age Group	Indoor Play Area (sqm)	Outdoor Play Area (sqm)	No. of Children
1	0-2 years	68	110	15
2	2-3 years	102	233	30
3	3-6 years	174	372	53
Total		345 sqm	715 sqm	98
Total GFA		730 sqm		

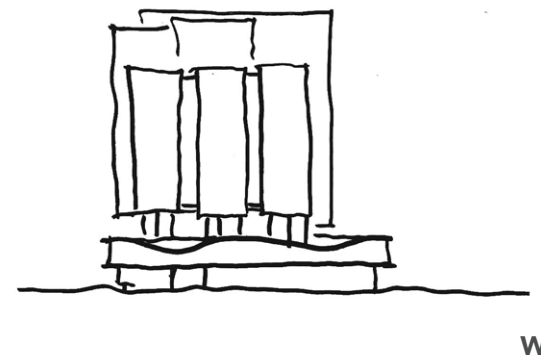
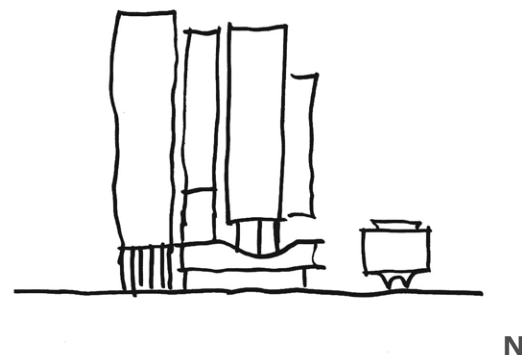
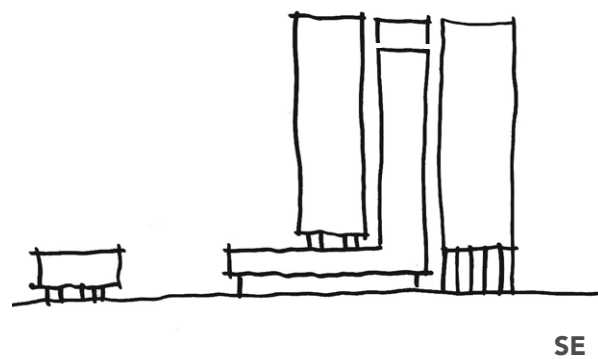


Type.	No. of Units	Affordable	Adaptable	Liveable
1 bed	20	3	10	14
2 bed	70	14	14	14
3 bed	45	8	-	-
4 bed	1	-	-	-
Total Units	136	25	24	28

Building No.	No. of Units
A - Tower	118
B	12
C	6
Total Units	136

2.3.3

built form - massing & articulation



The massing is composed of two distinct built forms:

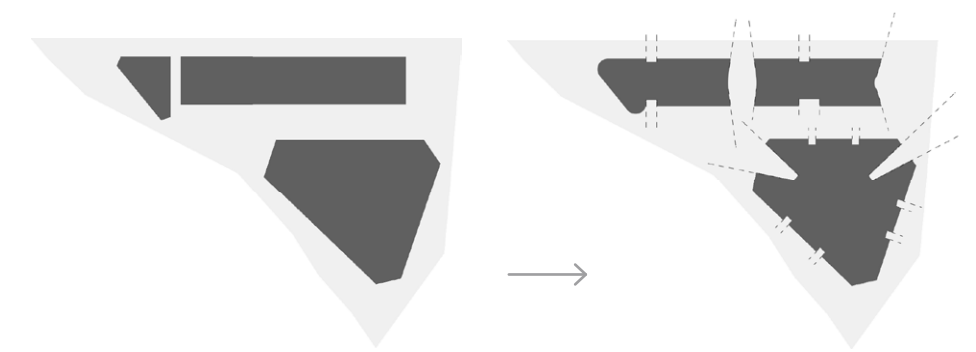
- an 18-storey tower building to the east (Building A) and
- two 4-5 storey buildings to the west (Buildings B and C)

The tower (Building A) responds to the triangular geometry of the site, while the lower buildings (Buildings B and C) are more rectilinear in form.

The three sides of the tower massing are further articulated through a series of recessed balconies, creating a tripartite composition within each facade that emphasizes verticality over horizontality.

The podium and tower forms have been carefully modelled to create a dynamic architectural expression, where portions of the podium flow upward into the tower, generating a visually engaging interplay, smooth transition, and a sense of movement between these two elements.

The façades incorporate subtle design nuances that respond to their specific orientations and building performance requirements, addressing solar protection, reflectivity, acoustic mitigation, as well as privacy and outlook.



2.3.4

built form - setbacks & building separation

The proposal has been designed to provide the following setbacks:

- 4–17.5 metres to Felton Road
- 6 metres from Pennant Hills Road and the western boundary

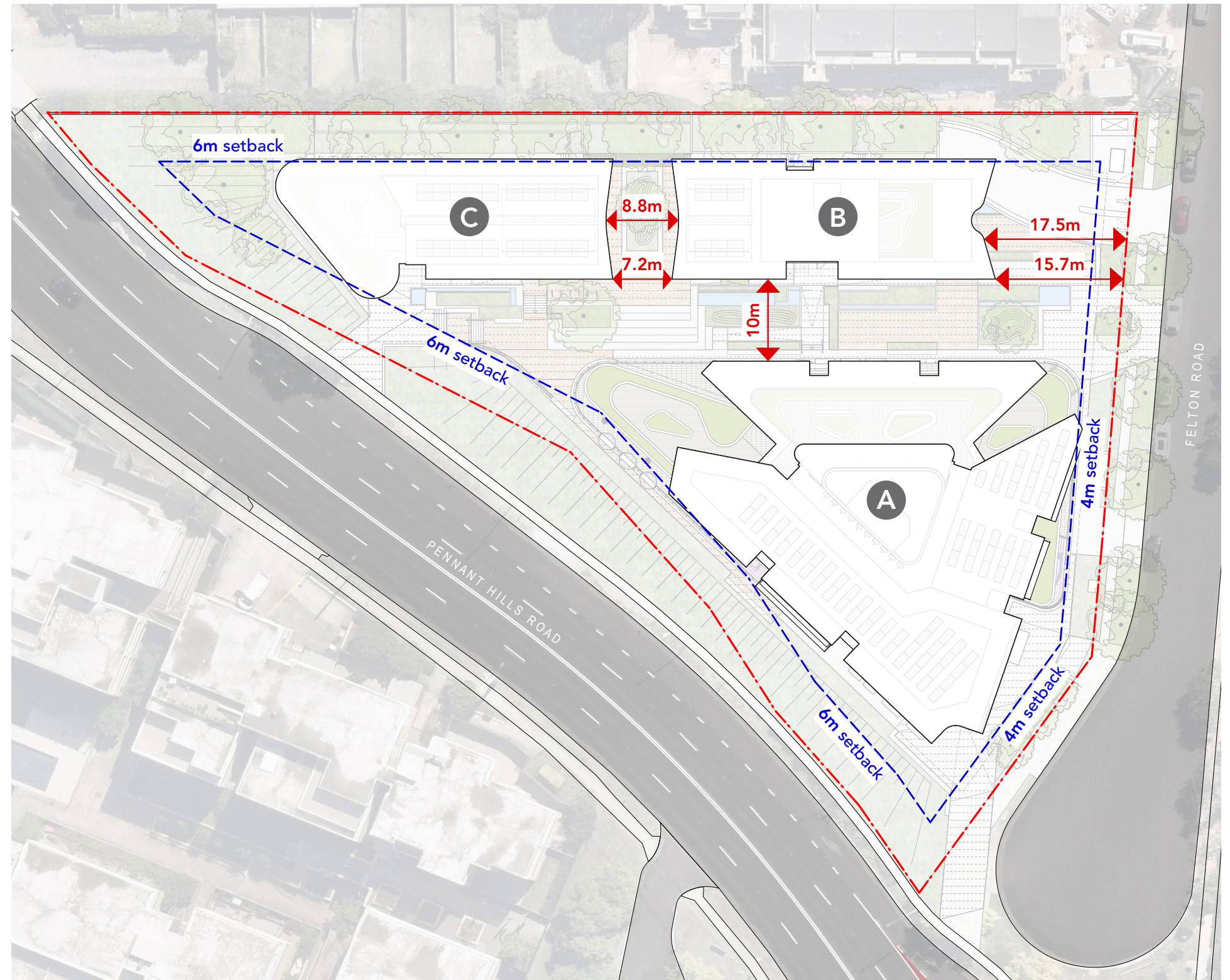
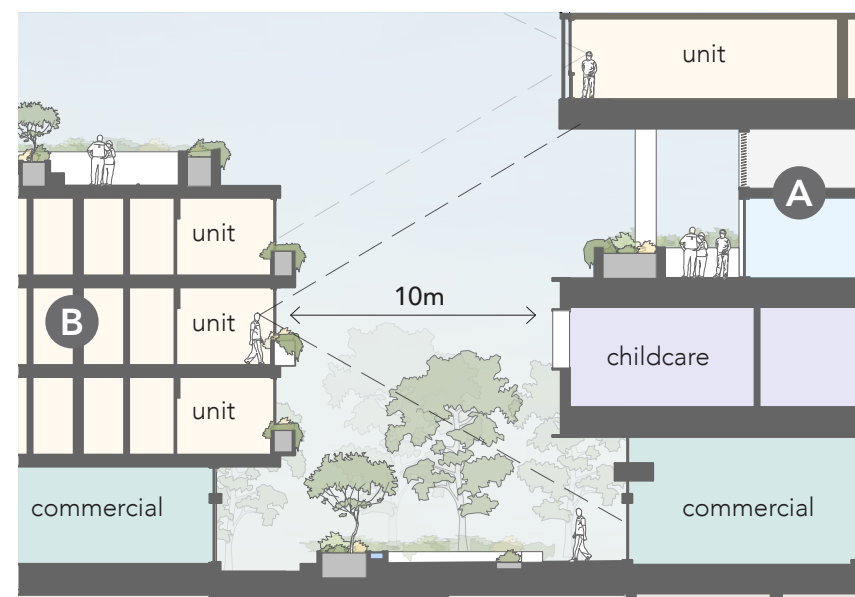
Building separation within the site ranges between 7.2–10 metres.

The configuration of residential units has been carefully designed to minimize amenity impacts on both adjoining properties and within the development itself.

For example, the residential units in Buildings B and C not only comply with ADG building separation requirements but have also been provided with a series of screening devices to ensure the privacy of the adjoining neighbours.

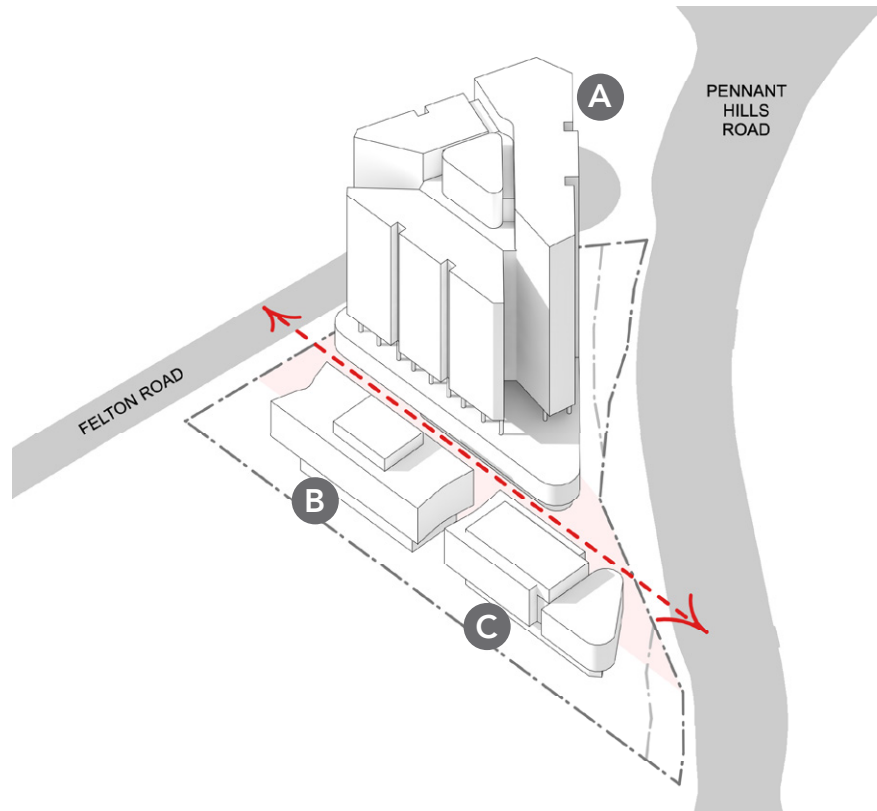
Similarly, the units in Buildings B and C do not directly face other residential units in Building A; instead, they have outlooks to the childcare centre and communal open spaces, where privacy issues are addressed through obscure glazing to the child care centre and substantial perimeter planting to the communal open spaces.

In other areas, such as between Buildings B and C, the building separation objectives of the ADG are achieved between secondary frontages of units with solid wall treatments and screened windows.



2.3.5

through-site link



The 1,570 sqm through-site link has been conceived as linear green corridor, an internal street, providing a fully accessible path of travel connecting Pennant Hills Road and Felton Road.

The link not only connects Pennant Hills Road and Felton Road but also provides pedestrian access to all commercial spaces, as well as the childcare centre and the residential units of Buildings B and C.

The street steps down over 2.5 metres from Felton Road to Pennant Hills Road, while maintaining a fully integrated accessible path throughout.

The multiple tenancies and apartments overlooking the link provide a high level of passive surveillance.

The landscape treatment incorporate generous stairs, a series of sculptural stepped concrete planters, numerous gathering and seating areas, substantial planting and a series of interconnected cascading ponds stepping down through the space.

A combination of brick paving and timber decking define the spaces and paths of travel including areas for outdoor seating and informal gathering.



2.3.6

pedestrian and vehicular access

Three main pedestrian access points have been provided: at the northern and southern ends of the through-site link, and at the northeast corner of the site—closest to Carlingford Town Centre and the railway—which serves as the main entry point for residents of the primary tower building (Building A). Residential foyers for Buildings B and C, as well as the primary entry points for the commercial spaces, are located off the through-site link.

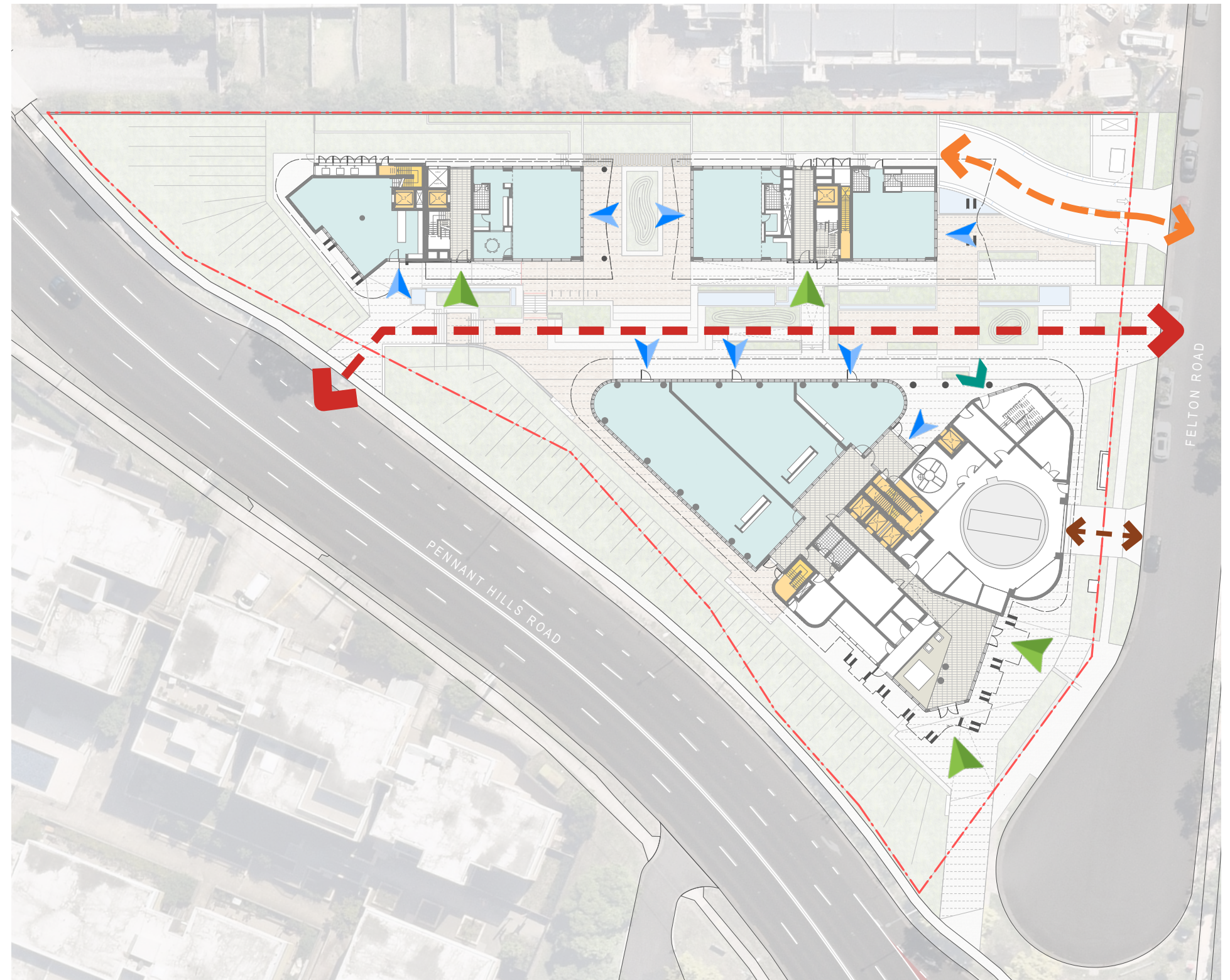
During the Planning Proposal engagement process, Transport for NSW advised that site access from Pennant Hills Road would not be permitted, as it is a classified state road. Consequently, all vehicular access has been provided via Felton Road.

Vehicular access to the three levels of basement parking is provided via a ramp in the northwest corner of the site, which curves around an existing kiosk substation. This location was selected during the design development process as it frees up more of the site's frontage for activation—particularly at the street connection of the through-site link—enhancing pedestrian safety.

Commercial and waste loading facilities are located on the ground floor of Building A, with direct access from Felton Road.

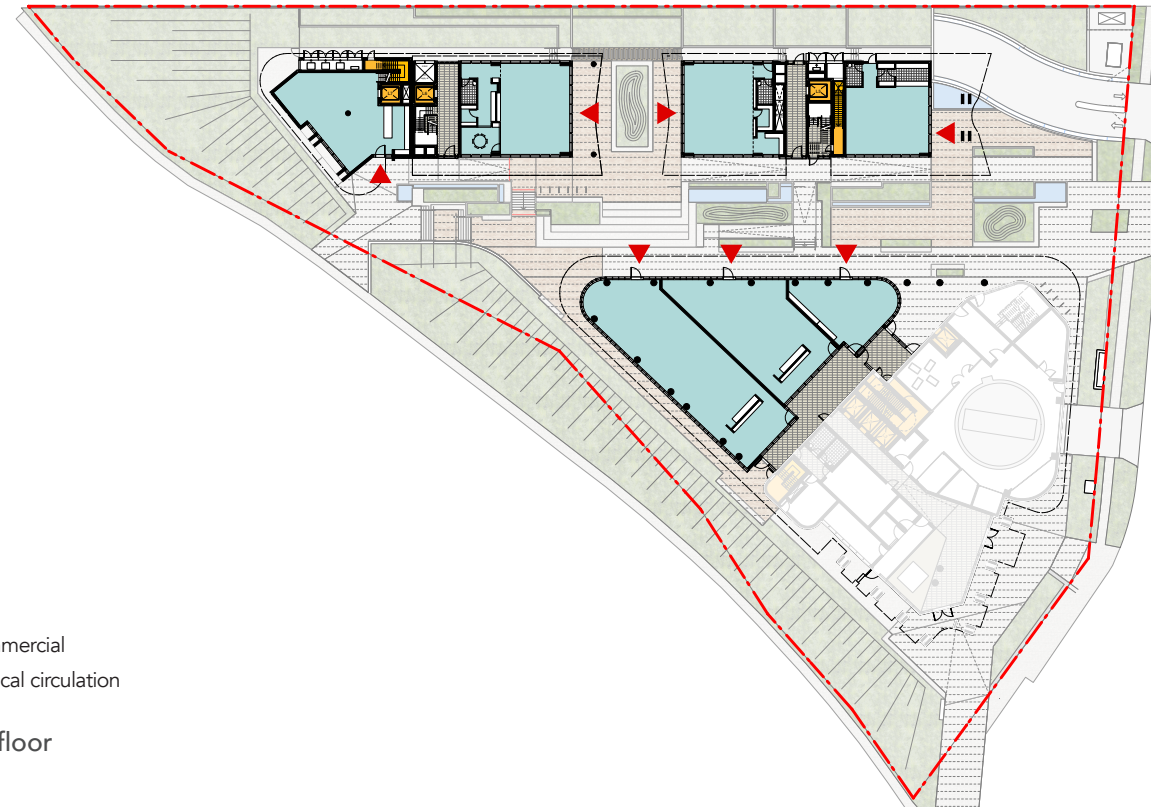
Legends

- [] subject site
- commercial
- ➔ through-site link
- ➔ vehicular entry/exit
- ➔ service entry/exit
- ➔ residential entry/exit
- ➔ commercial entry/exit
- ➔ childcare entry



2.3.7

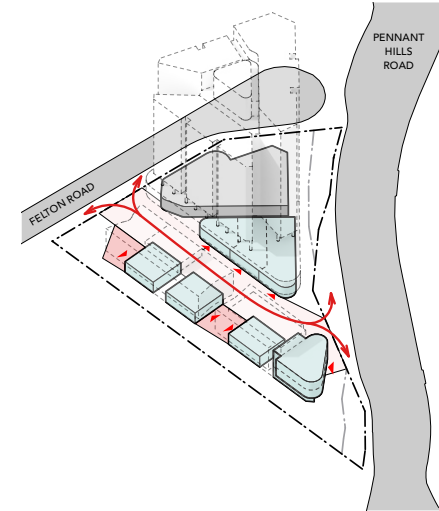
commercial activation



Legends

- site
- commercial
- vertical circulation

ground floor



The ground floor of the development is primarily dedicated to a diverse range of commercial uses providing direct benefit to the surrounding community, enhancing local services, amenity, and street-level vibrancy.

Specifically, the development provides:

- between 4 and 6 commercial units
- 3-storey gymnasium (commercially operated)
- a 98-place childcare centre (located on Level 01)

The primary entries for the commercial units are oriented off the through-site link, promoting activation of the publicly accessible space and internal street.

The commercial areas have been designed to accommodate a variety of uses, including offices, showrooms, retail, and cafés, ensuring maximum flexibility and adaptability for future tenants.



2.3.8

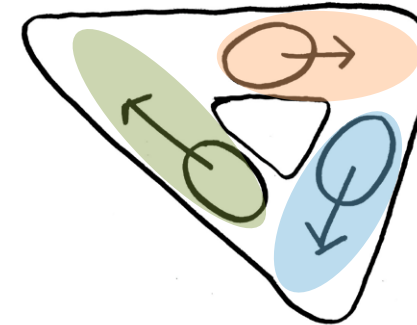
early childcare centre



Legends

- site
- child care centre
- vertical circulation

level 01



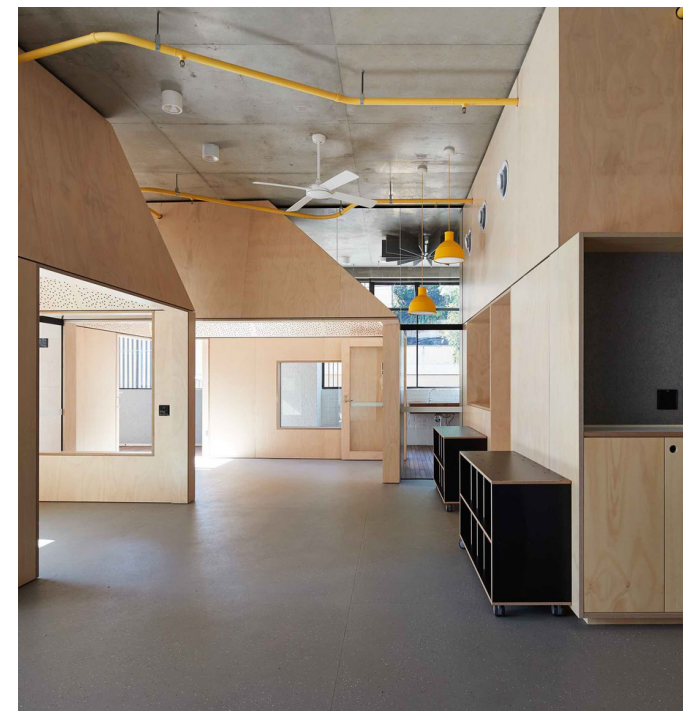
The proposal includes a childcare centre located on Level 01 of the tower building (Building A), providing a total of 98 places, allocated as follows:

- 0 – 2 years: 15 places
- 2 – 3 years: 30 places
- 3 – 6 years: 53 places

Total: 98 places

Access to the childcare centre is provided either via a lift, accessible from both the basement car park and ground level, or through a stairwell within a dedicated foyer off the through-site link.

The design of the childcare centre responds to the triangular geometry of the site and podium. Indoor play spaces for the three age groups are arranged around each side of the triangular core of the tower, while the corresponding outdoor play areas are located at the three corners of the podium. This arrangement offers direct access and flexible connections between age groups, maximizes amenity, and efficiently utilizes the site's geometry.



2.3.9

residential

The residential component of the development comprises 136 apartments, including approximately:

- 20 one-bedroom units (15%)
- 70 two-bedroom units (52%)
- 46 three-bedroom or larger units (33%)

The design prioritises two- and three-bedroom dwellings, which are generously proportioned and thoughtfully planned with families in mind.

In Building A, apartments are arranged around a triangular core, with three dwellings facing each frontage to provide nine units per floor. Articulated “negative corners” in the northwest and southwest create breaks in the massing that assist height transitions while maximising opportunities for cross-ventilation.

Buildings B and C are more intimate in scale, accommodating 2–4 apartments per floor. These dwellings are accessed via common corridors with east–west openings, ensuring natural light and ventilation. All apartments in Buildings B and C are designed as naturally cross-ventilated corner units, enhancing both amenity and liveability.



2.4

landscape

2.4.1

site plan

The landscape design is integral to the site strategy for the project.

It is a defining element of the proposal, underpinning the integration of buildings and open spaces to create a consistent and coherent landscape across the various levels of public and communal areas—from the street plantings along Felton and Pennant Hills Roads to the roof garden on Level 14 of Building A.

The design provides a variety of spaces for passive and active recreation, 'greens' areas maintained by the strata body, enhances the project's street presence, mitigates the harsh environment of Pennant Hills Road, and extends the landscape into the vertical plane.

A coherent landscape program is established in response to the site's local climatic conditions, ranging from highly exposed, sunlit plateau spaces (roof terraces) to cooler, shaded gullies (through-site link).

The landscape is intended to offer visual amenity for viewers from above, as well as physical comfort for those within the spaces.

Planting is carefully positioned in key locations to define, frame, and enhance the site and public spaces.



2.4.2

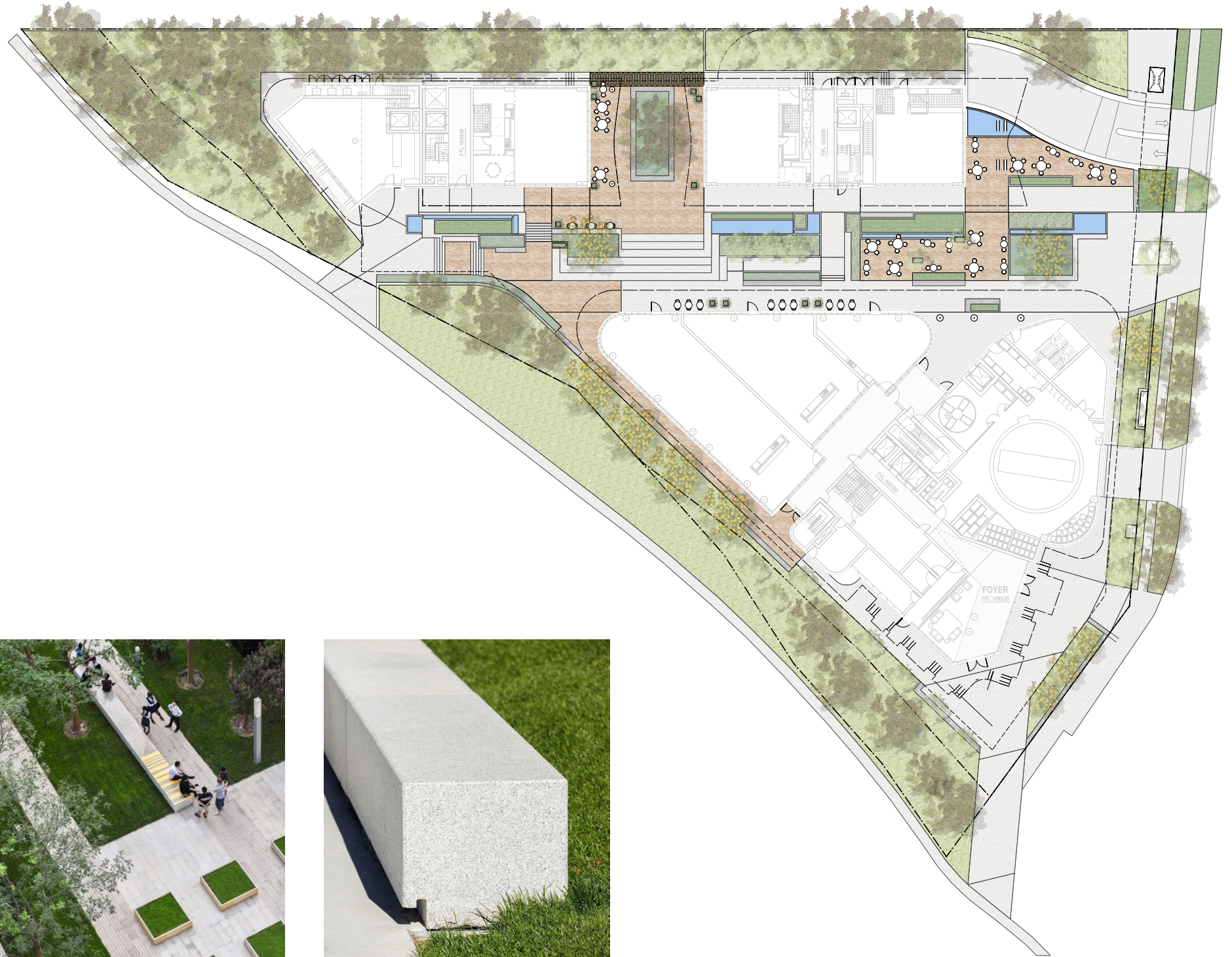
public space plan

The project proposes a number of significant improvements to the public realm, including a 1,570 sqm through-site link connecting Pennant Hills Road and Felton Road. This publicly accessible path enhances pedestrian connectivity and accessibility, providing safe, inclusive, and convenient movement for both residents and the wider community.

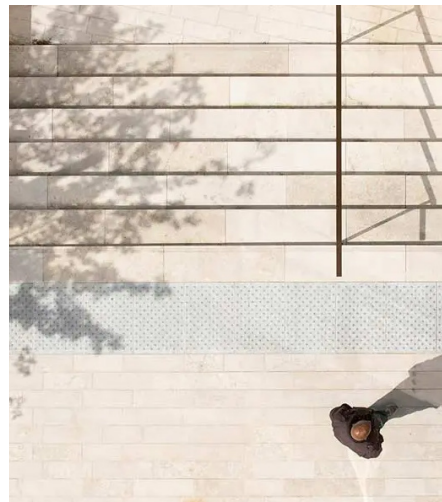
The through-site link is designed to be both engaging and functional. Outdoor seating areas offer spaces for rest, social interaction, and casual gathering, while visitor bicycle spaces encourage sustainable transport and support active travel.

High-quality materials, including brick paving and sculptural concrete planters, are proposed throughout the public areas to define movement, create visual interest, and seamlessly integrate landscaping elements. A series of water features step down through the space, enhancing the sensory experience and serving as focal points that draw people through the site.

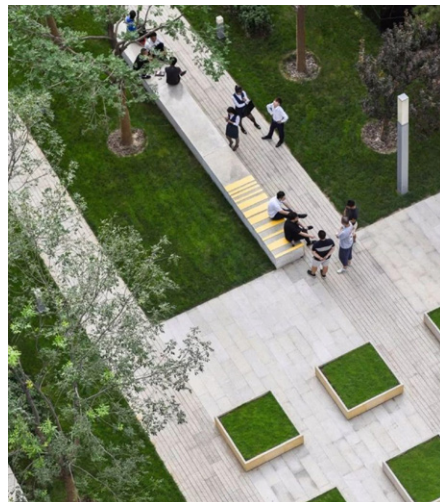
Crime Prevention Through Environmental Design (CPTED) principles have been carefully applied to ensure public safety. These include passive surveillance through building orientation, environmental lighting to maintain well-lit pathways, and activation of the link via ground-level commercial uses. Together, these measures foster a secure, welcoming, and vibrant public realm.



greenary



texture



movement



interaction

2.4.3

communal open space

The project provides 2,680 sqm of communal open space, (approximately 42% of the site), distributed across five locations: the publicly accessible ground plane, including the through-site link, three privately accessible rooftop terraces (one for each building), and a 648 sqm terrace over the Level 01 podium within Building A which adjoins the Community Room.

The design offers a rich tapestry of spaces, accommodating a variety of uses including spaces for groups, quiet retreat, diverse dining areas, larger seating zones, district and city viewpoints and edible gardens, creating vibrant and multifunctional outdoor environments for residents and visitors alike.



2.4.4

streetscape - pennant hills road

MASSSED PLANTING
& STREET TREES

PERIMETER PLANTER TO
ROOF & PODIUM TERRACES

THROUGH-SITE
LINK

VERTICAL PLANTERS OFF
COMMON CORRIDORS & BALCONIES

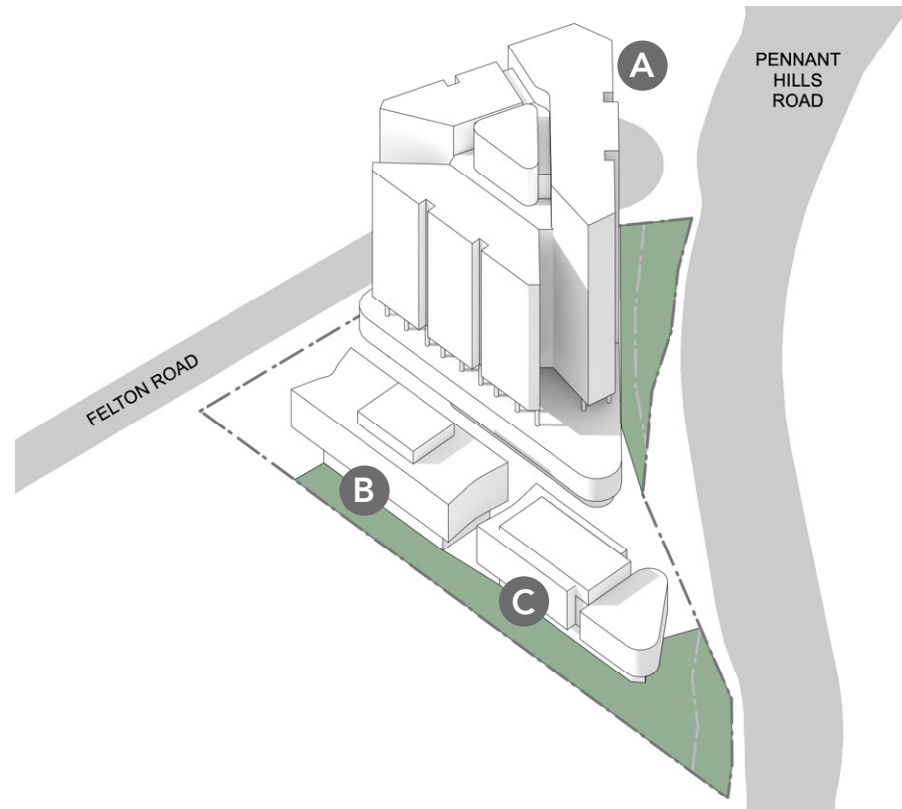
COMMERCIAL
FRONTAGES

GLAZED WINTER GARDENS TO
RESIDENTIAL UNITS
TO ADDRESS STREET NOISE



2.4.5

planting strategy



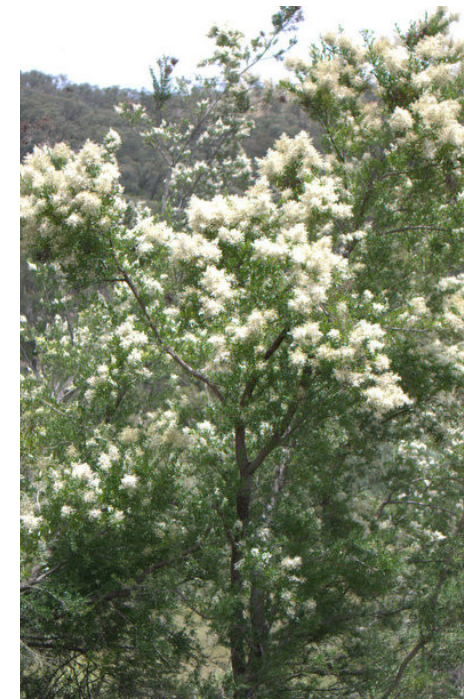
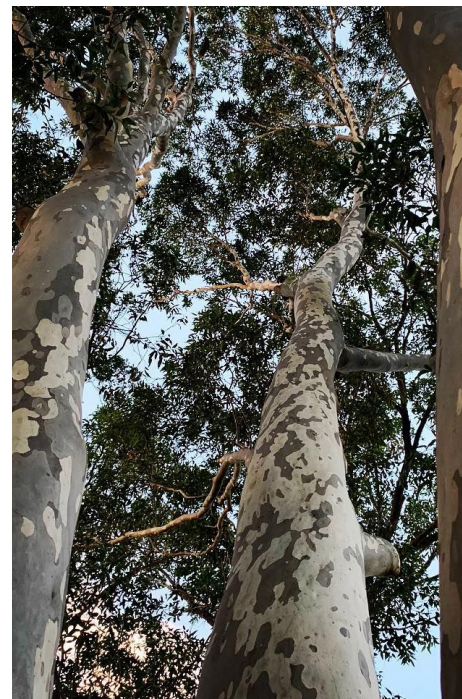
The planting strategy is based on an Australian native palette, focusing on species endemic to Wallumattagal land (Parramatta–Carlingford).

The selection prioritises hardy plants with attractive foliage and shade-tolerant trees, creating a resilient and visually engaging landscape, with a further focus on the use of native edible species in the through-site link and child care centre.

Deep soil is predominantly provided along the western and southeastern perimeters of the site, supporting substantial tree and shrub growth.

Zones for plantings have also been distributed throughout the development, with planters integrated into communal roof terraces as well as private and shared balconies, extending the landscape into the vertical plane.

The project proposes extensive street planting on both Felton and Pennant Hills Roads.

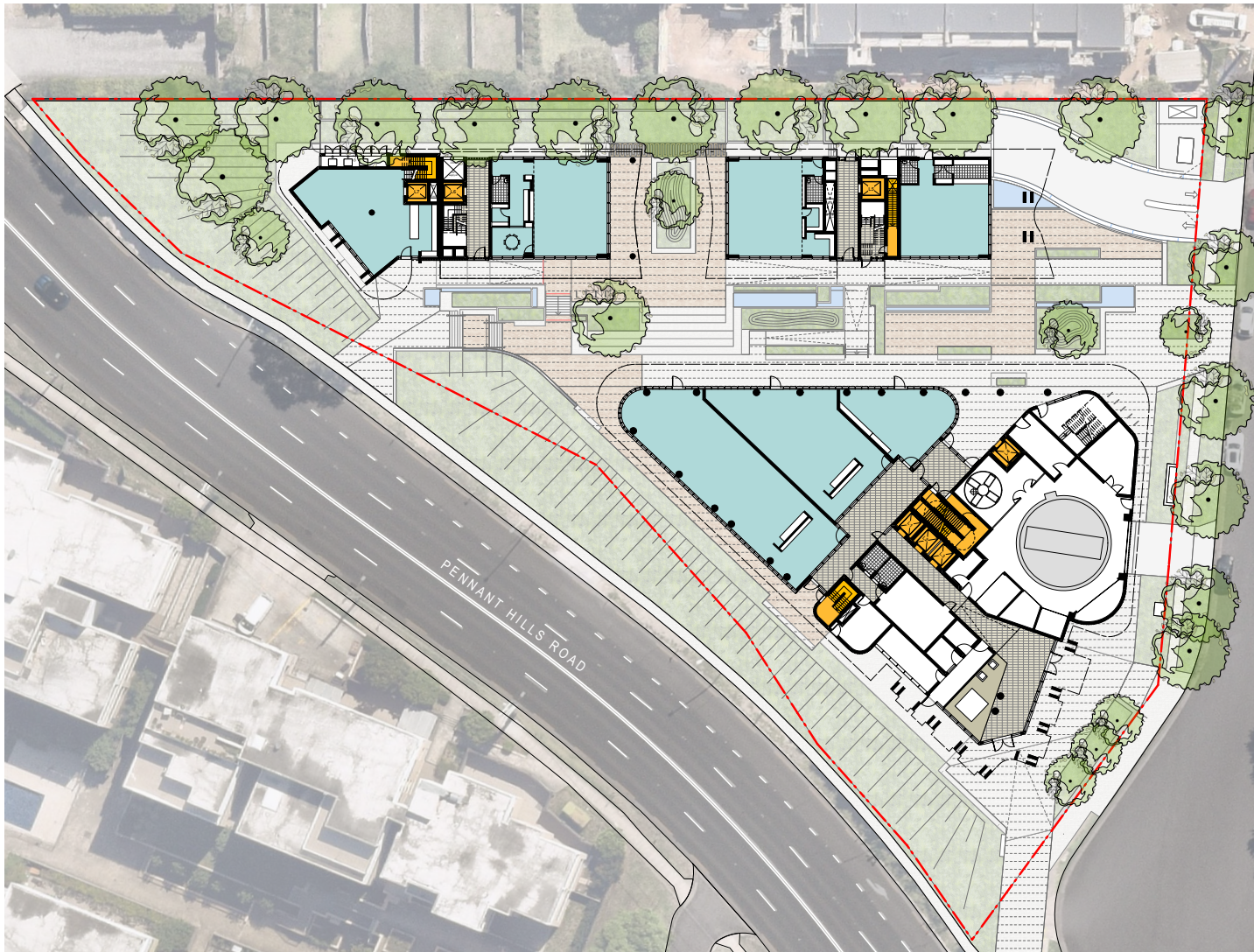


2.5

architecture

2.5.1

floor plans - ground floor to level 01



ground floor



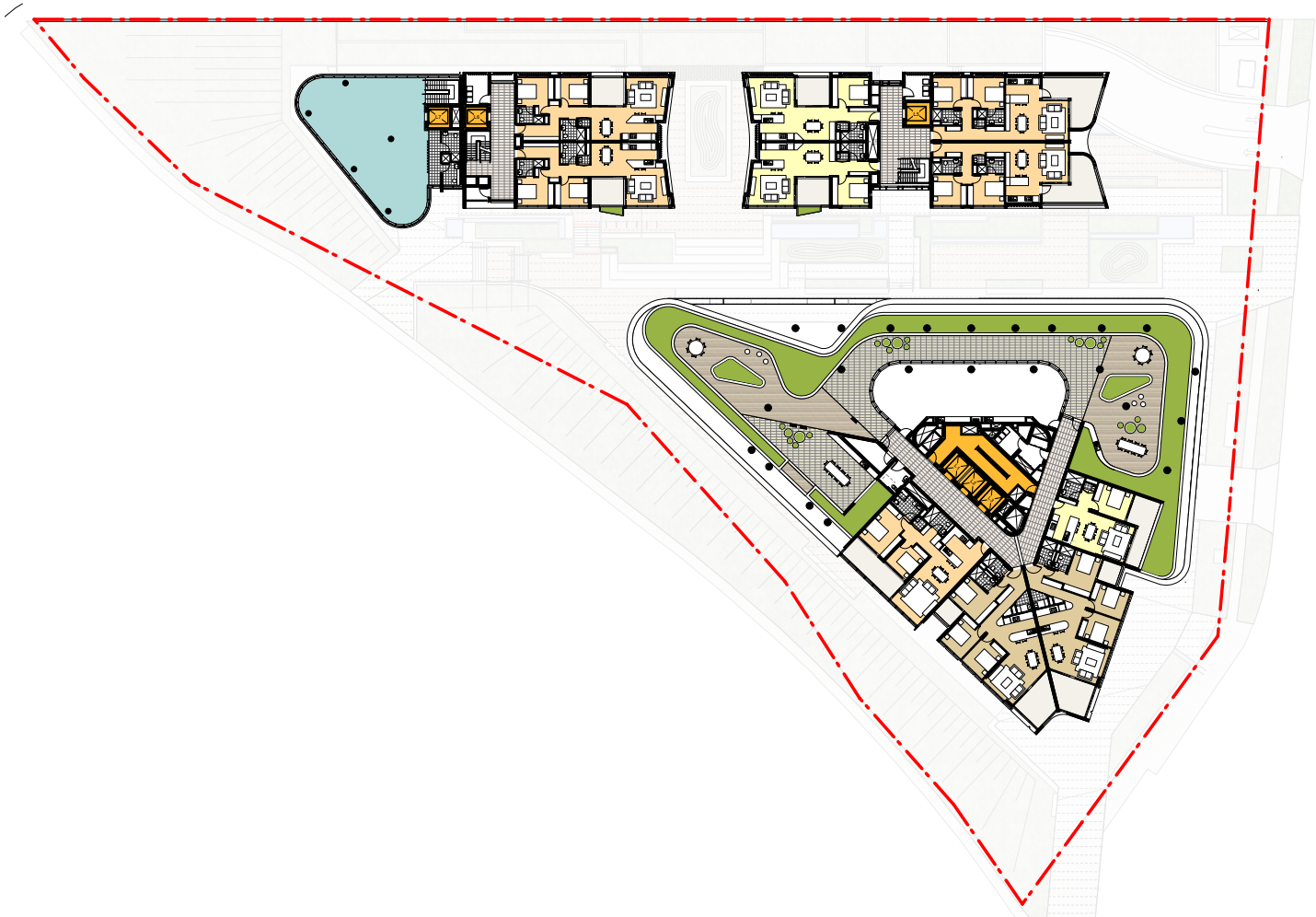
level 01

- Legends
- commercial
 - childcare centre
 - 1 bed
 - 2 bed
 - 3 bed

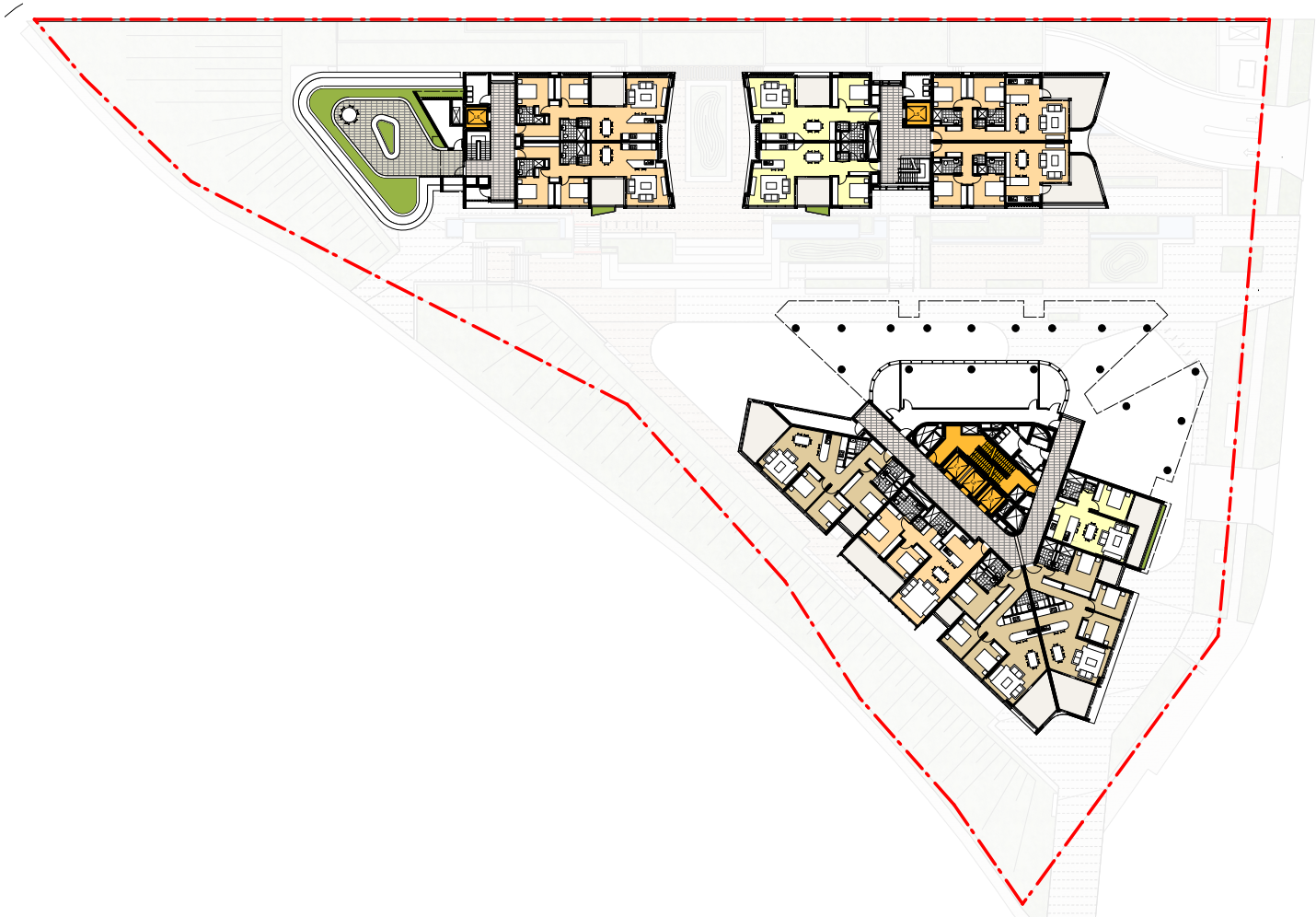


2.5.2

floor plans - level 02 to level 03



level 02



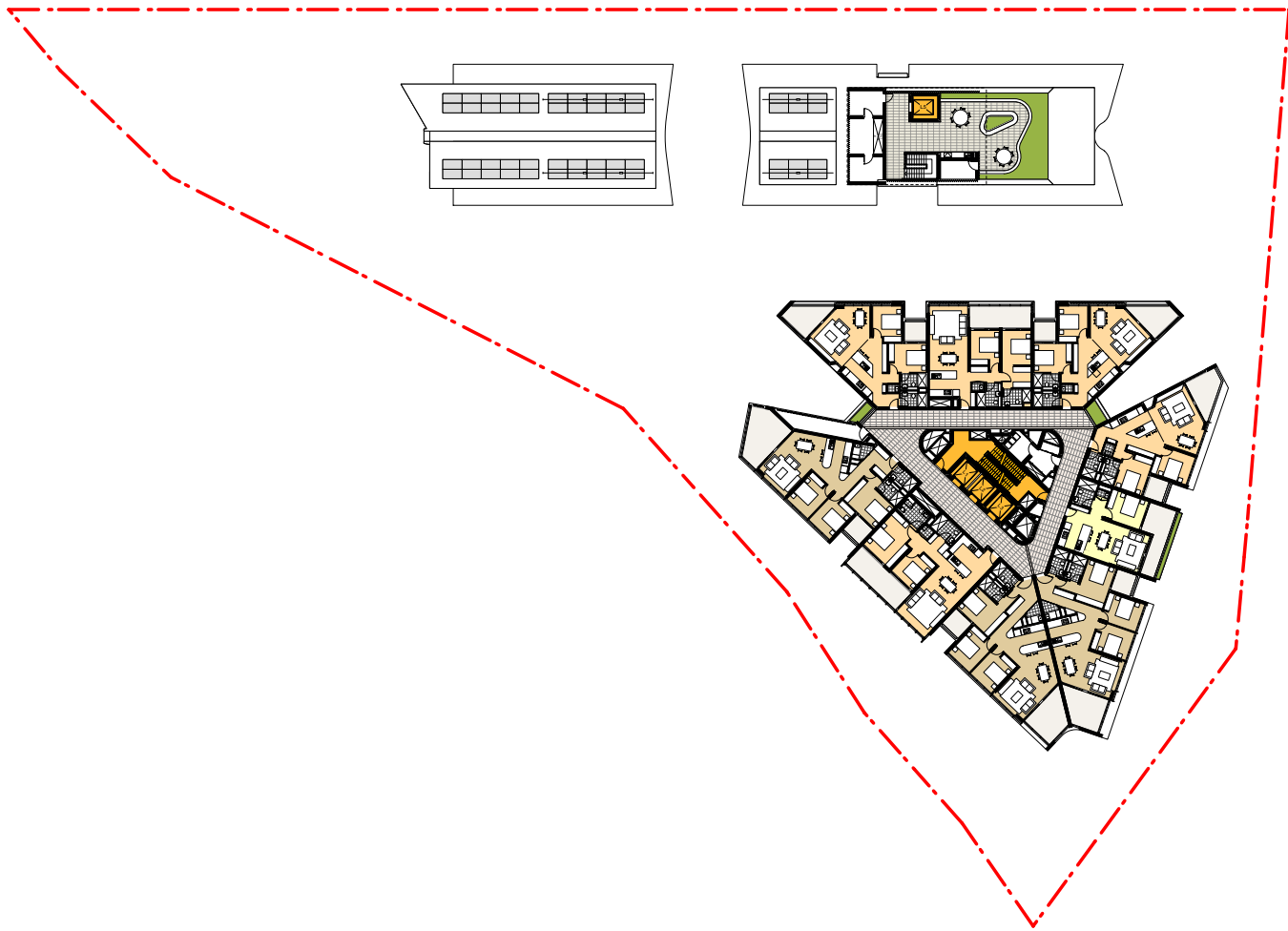
level 03

- Legends
- commercial
 - 1 bed
 - 2 bed
 - 3 bed

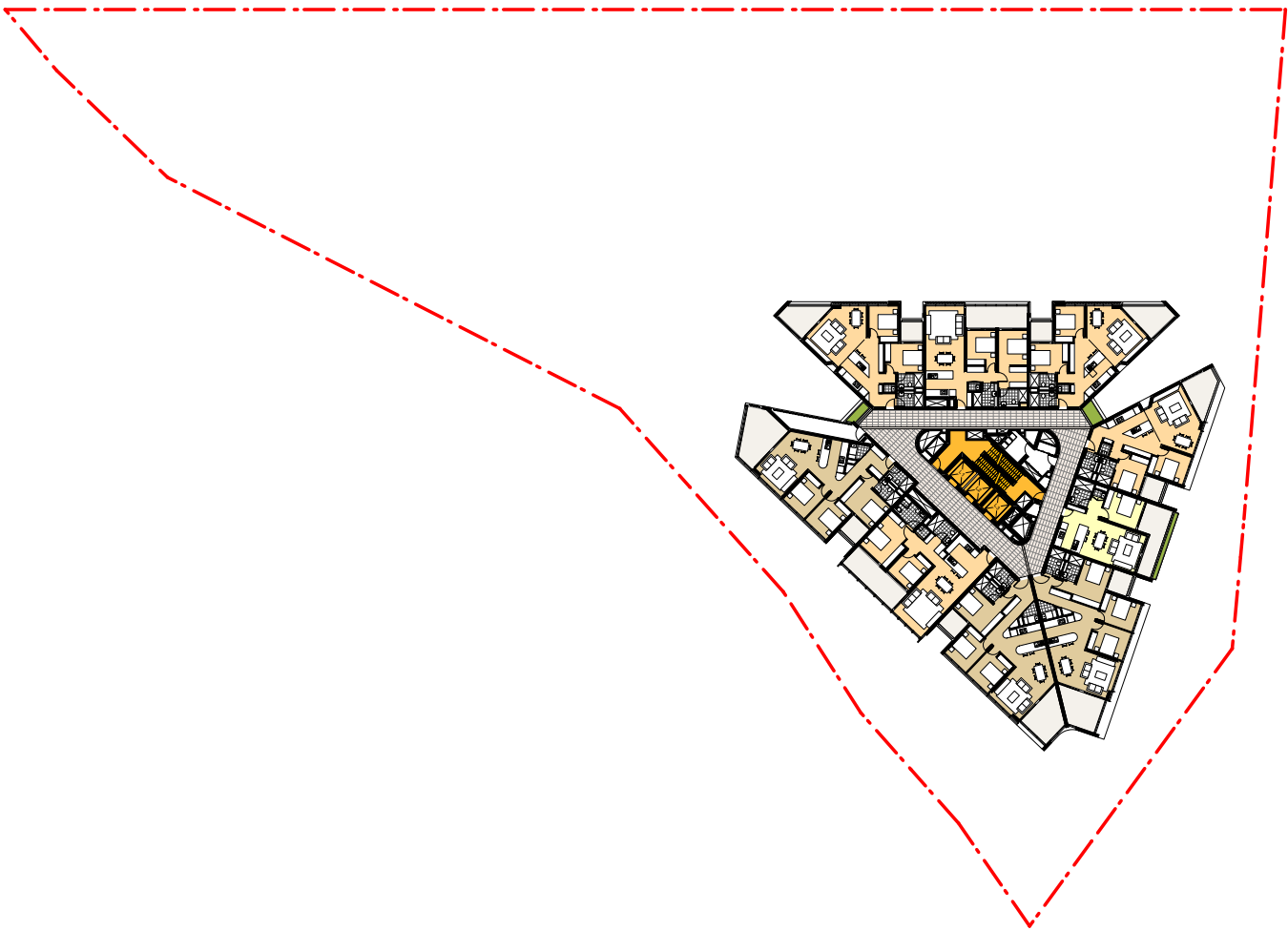


2.5.3

floor plans - level 04 & level 05 to level13



level 04



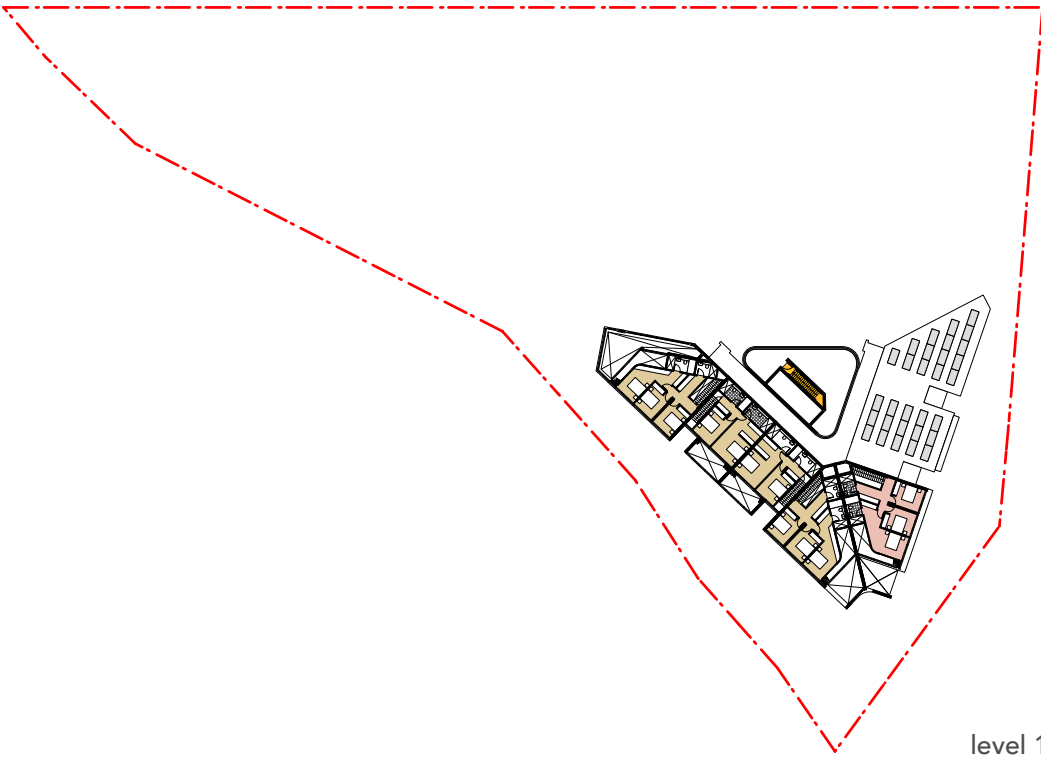
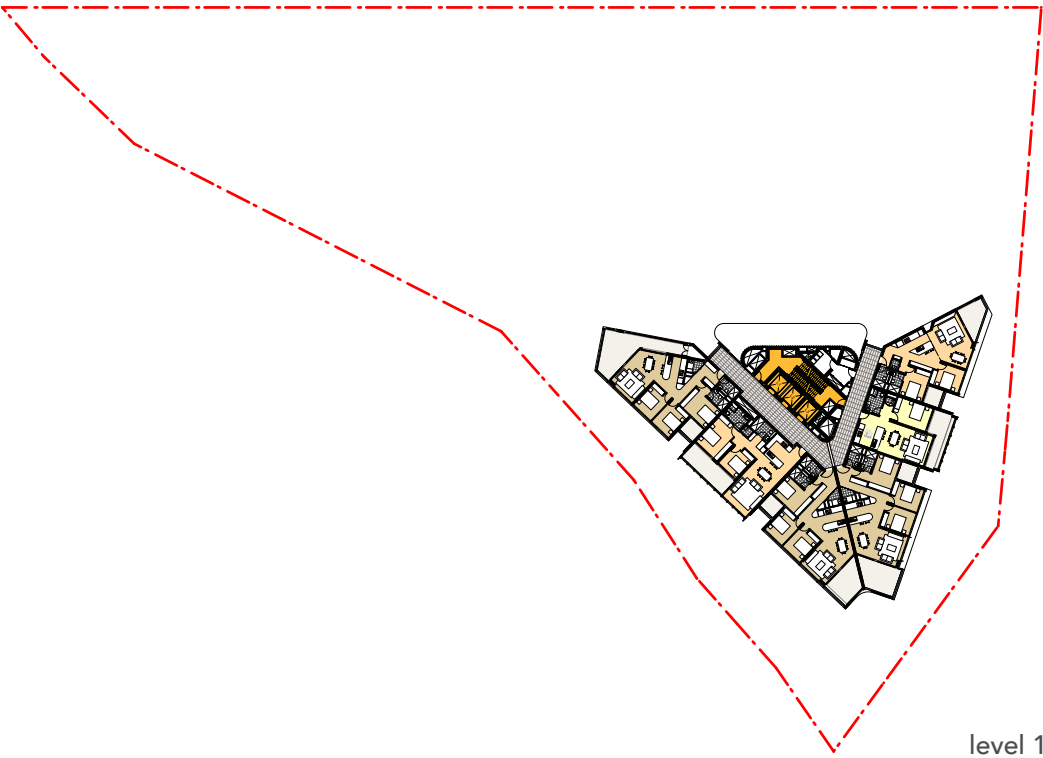
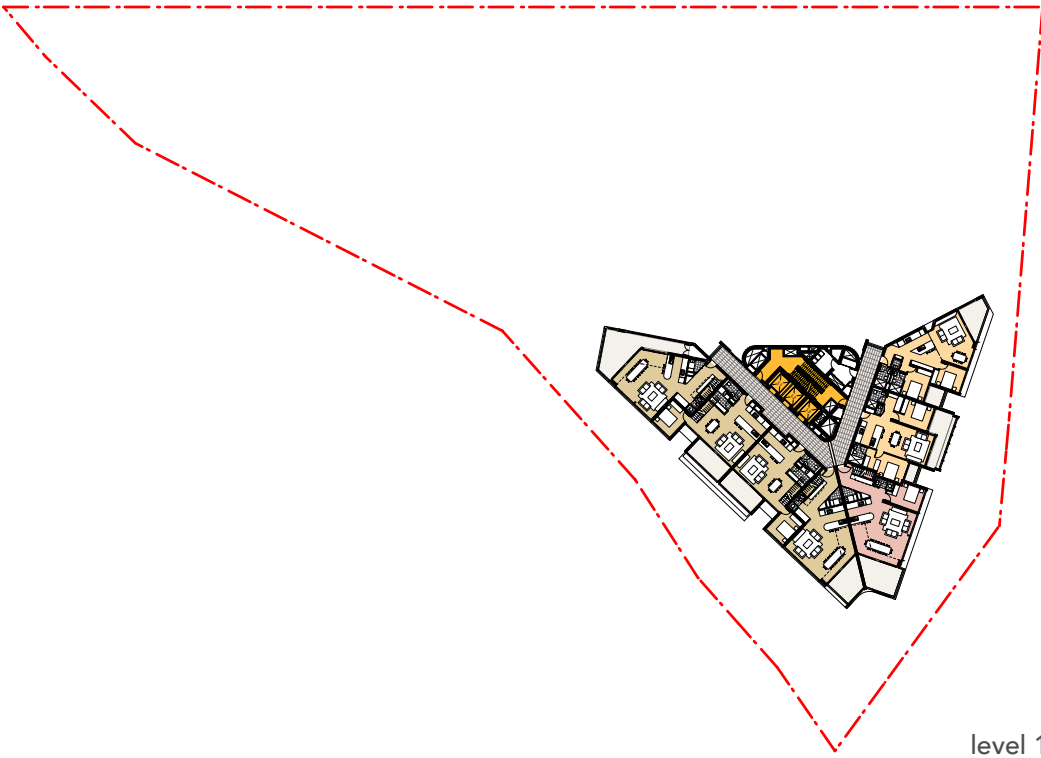
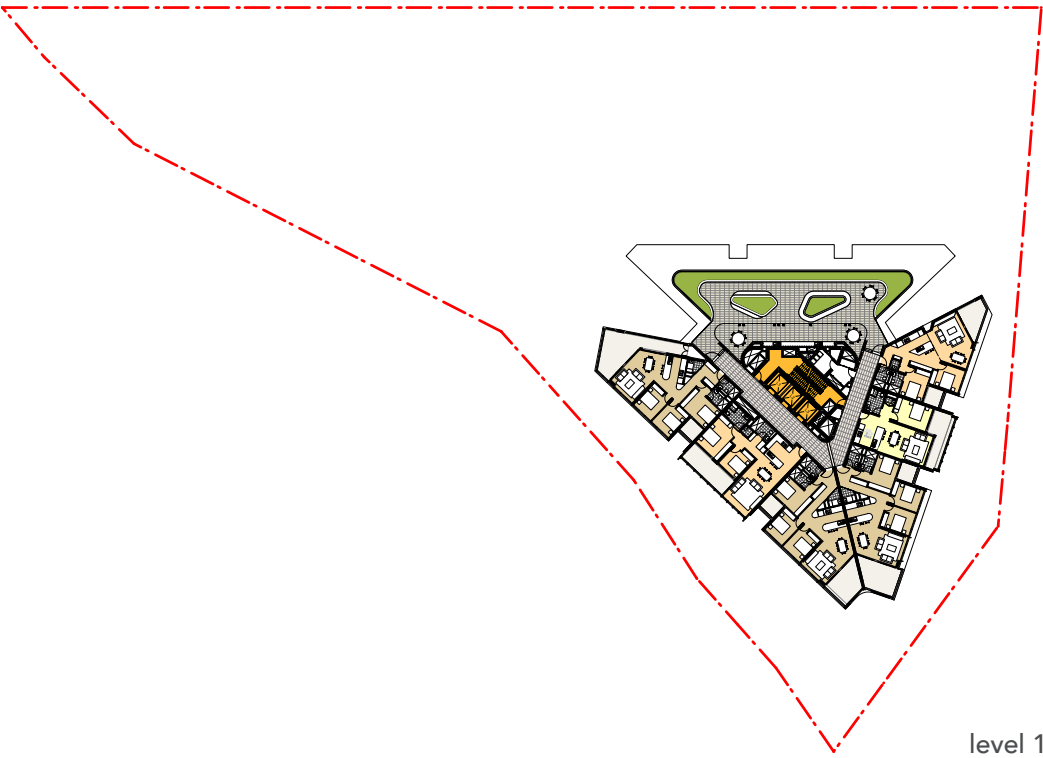
level 05 - level 13
typical floor plan

- Legends
- 1 bed
 - 2 bed
 - 3 bed

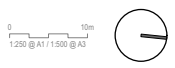


2.5.4

floor plans - level 14 to level 17

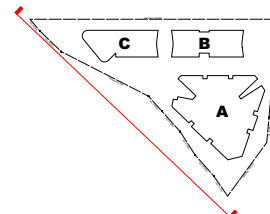


- Legends
- 1 bed
 - 2 bed
 - 3 bed
 - 4 bed



2.5.5

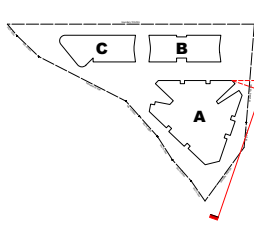
street elevations - south-east (pennant hills road)



0 10m
1:250 @ A1 / 1:500 @ A3

2.5.6

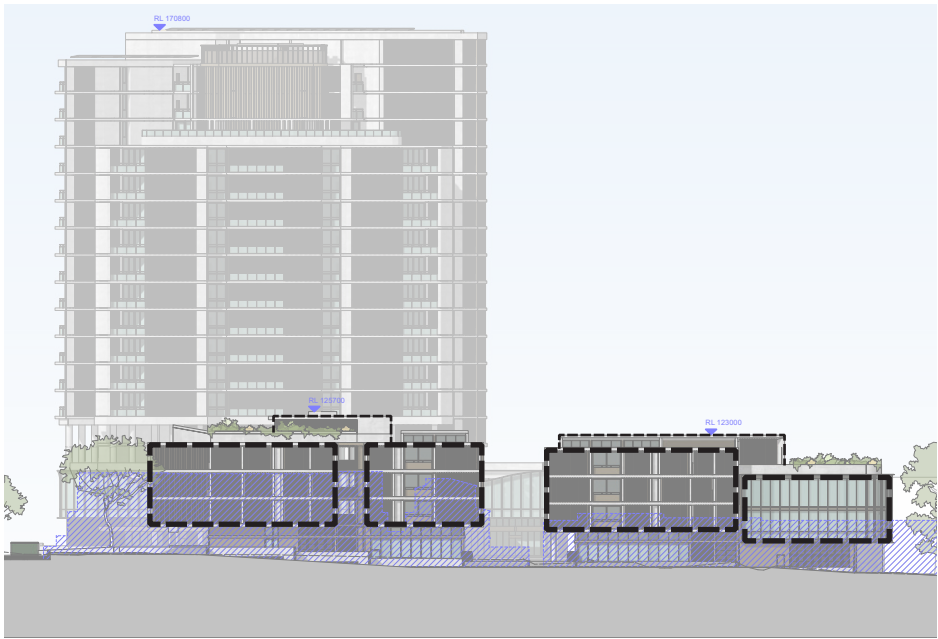
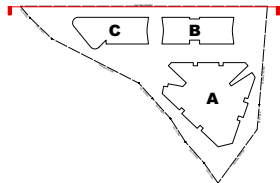
street elevations - north (felton road)



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1:250 @ A1 / 1:500 @ A3

2.5.7

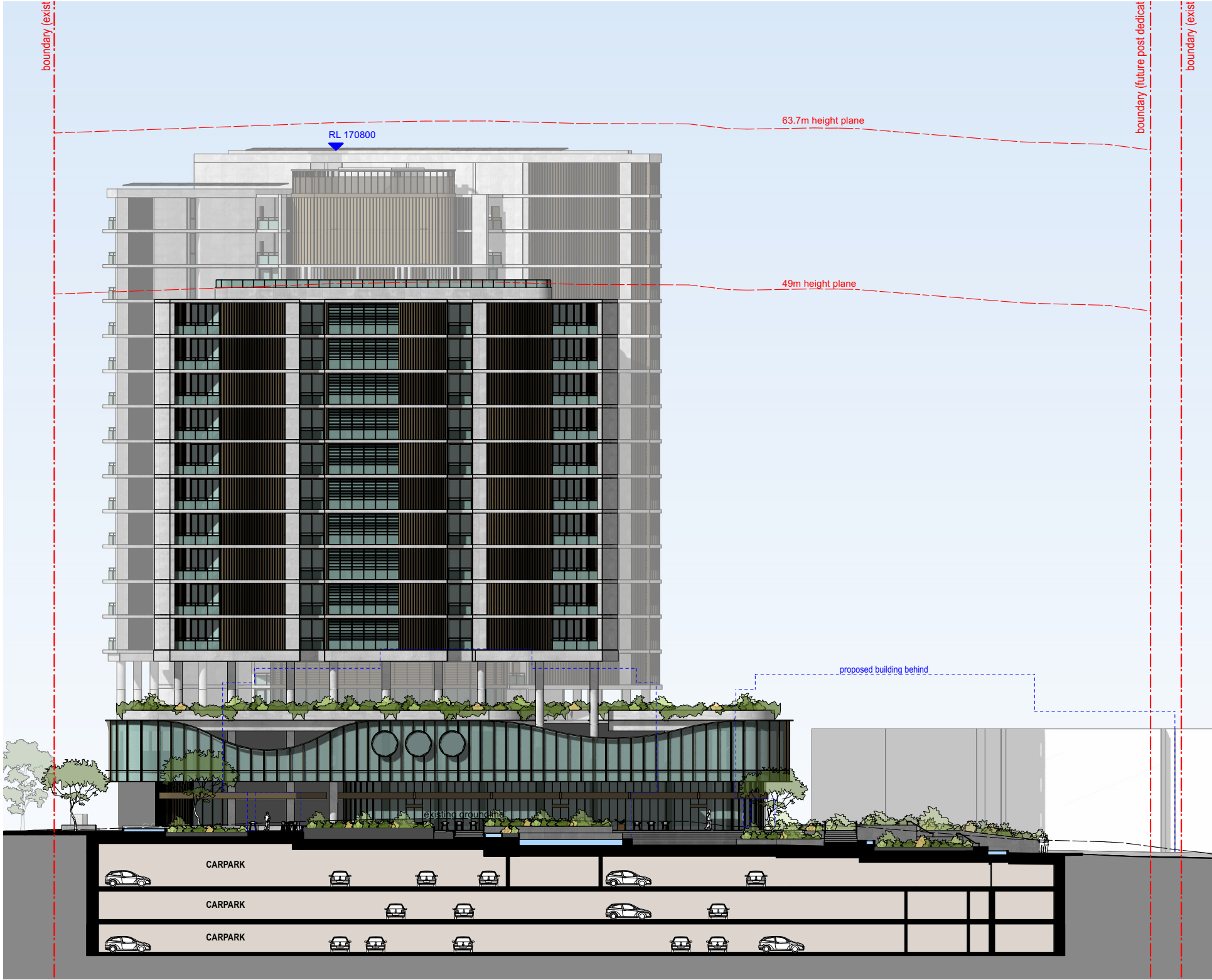
west elevation



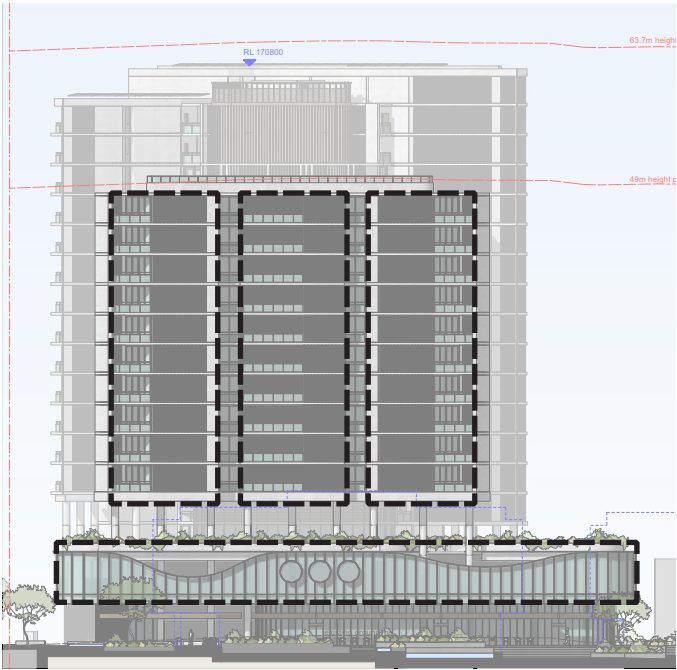
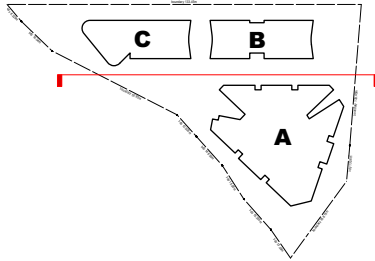
0 10m
1:250 @ A1 / 1:500 @ A3

2.5.8

section A



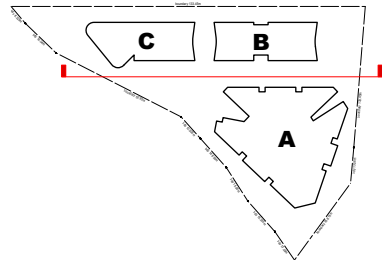
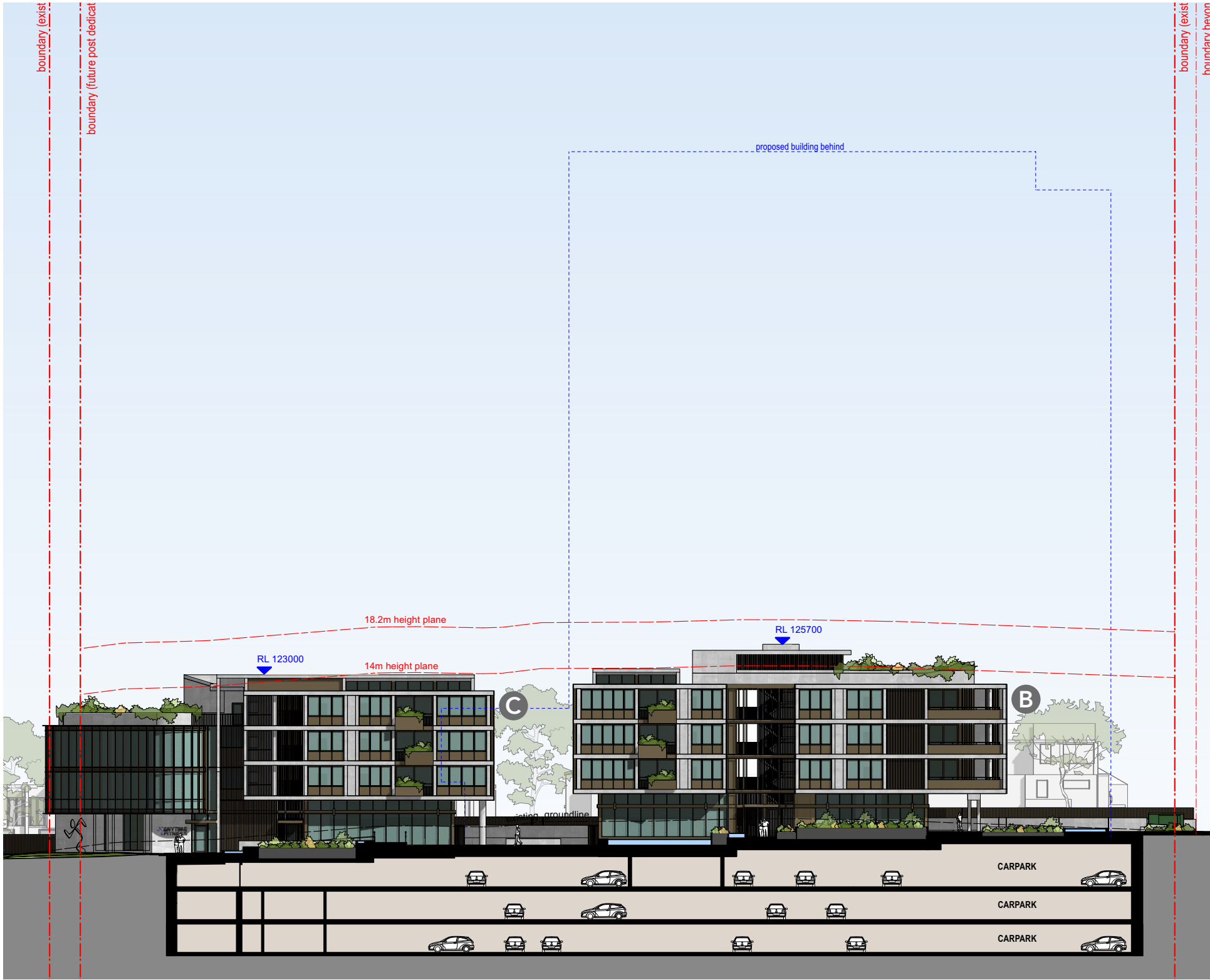
- FFL166800 (level 17)
- FFL163600 (level 16)
- FFL 160400 (level 15)
- FFL 157200 (level 14)
- FFL 154000 (level 13)
- FFL 150800 (level 12)
- FFL 147600 (level 11)
- FFL 144400 (level 10)
- FFL 141200 (level 09)
- FFL 138000 (level 08)
- FFL 134800 (level 07)
- FFL 131600 (level 06)
- FFL 128400 (level 05)
- FFL 125200 (level 04)
- FFL 122000 (level 03)
- FFL 118800 (level 02)
- FFL 114200 (level 01)
- FFL 108700 (level 00)
- FFL103575 (level -01)
- FFL100575 (level -02)
- FFL97575 (level -03)



0 10m
1:250 @ A1 / 1:500 @ A3

2.5.9

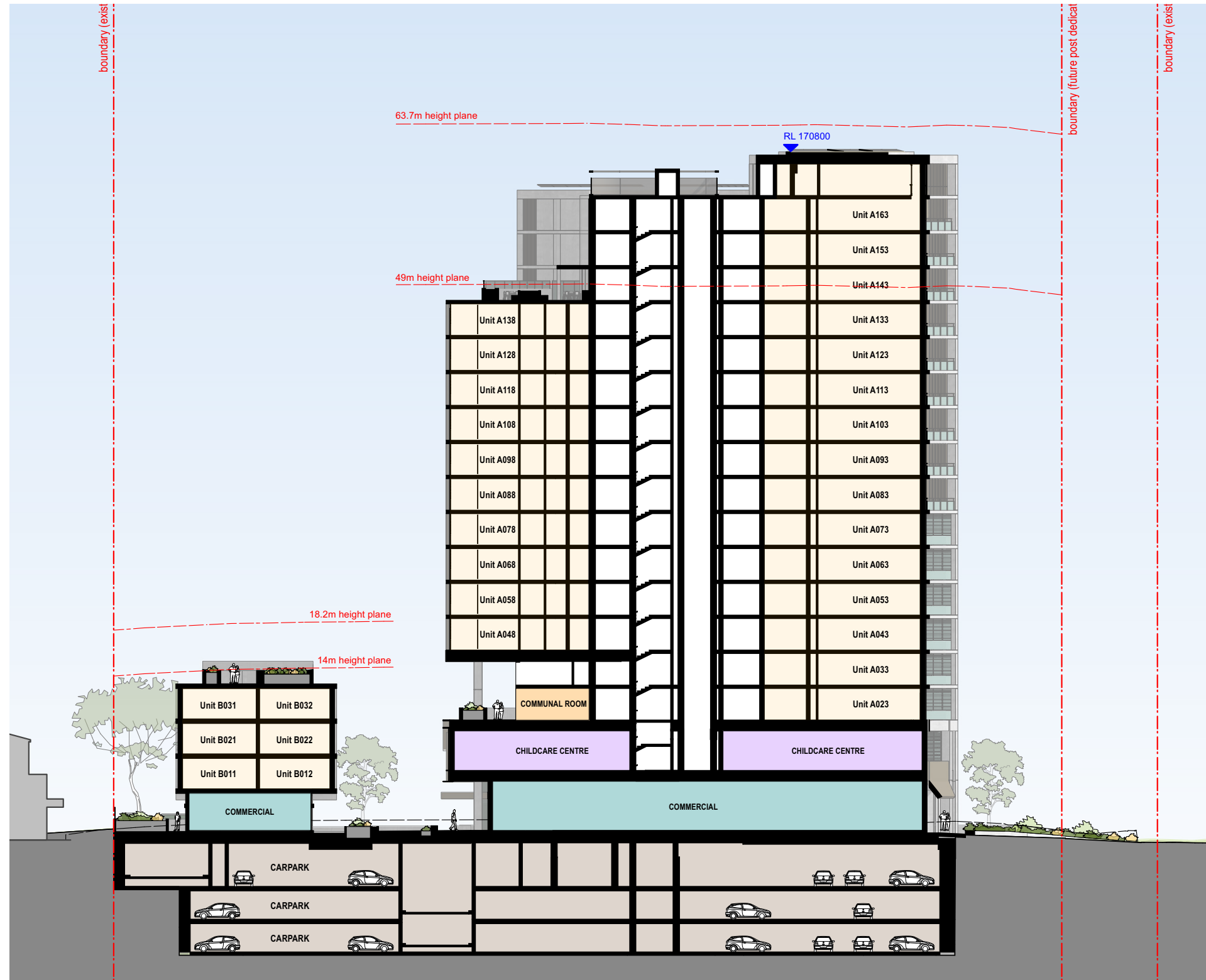
section B



0 10m
1:250 @ A1 / 1:500 @ A3

2.5.10

section C



FFL166800 (level 17)

FFL163600 (level 16)

FFL 160400 (level 15)

FFL 157200 (level 14)

FFL 154000 (level 13)

FFL 150800 (level 12)

FFL 147600 (level 11)

FFL 144400 (level 10)

FFL 141200 (level 09)

FFL 138000 (level 08)

FFL 134800 (level 07)

FFL 131600 (level 06)

FFL 128400 (level 05)

FFL 125200 (level 04)

FFL 122000 (level 03)

FFL 118800 (level 02)

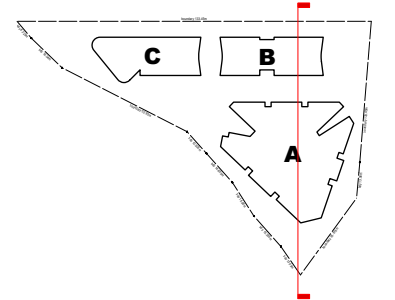
FFL 114200 (level 01)

FFL 108700 (level 00)

FFL 103575 (level -01)

FFL 100575 (level -02)

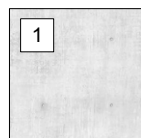
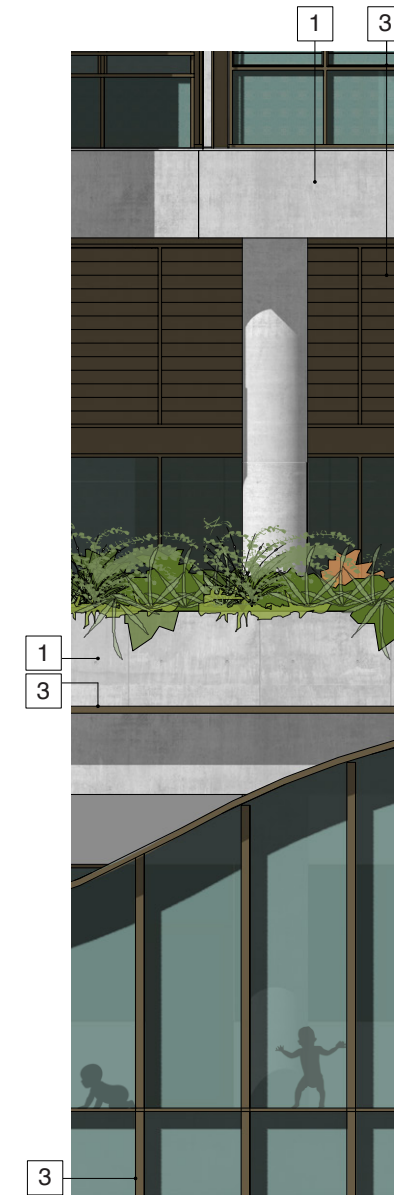
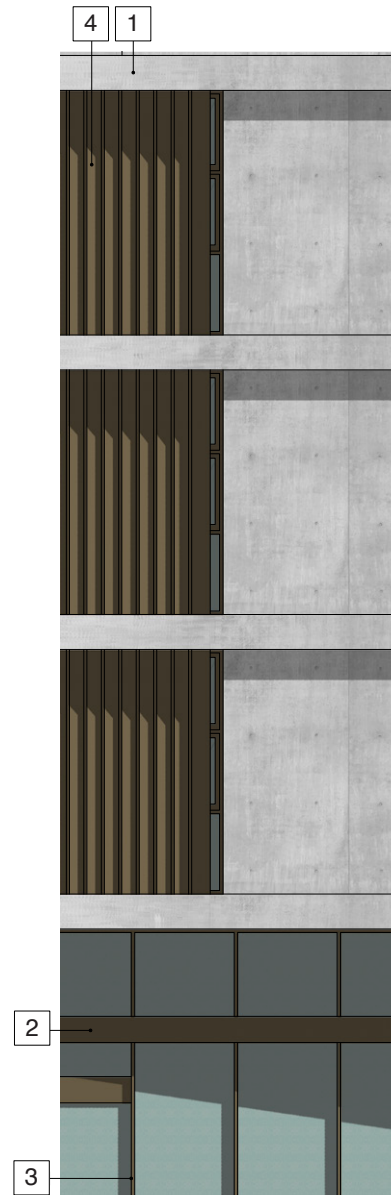
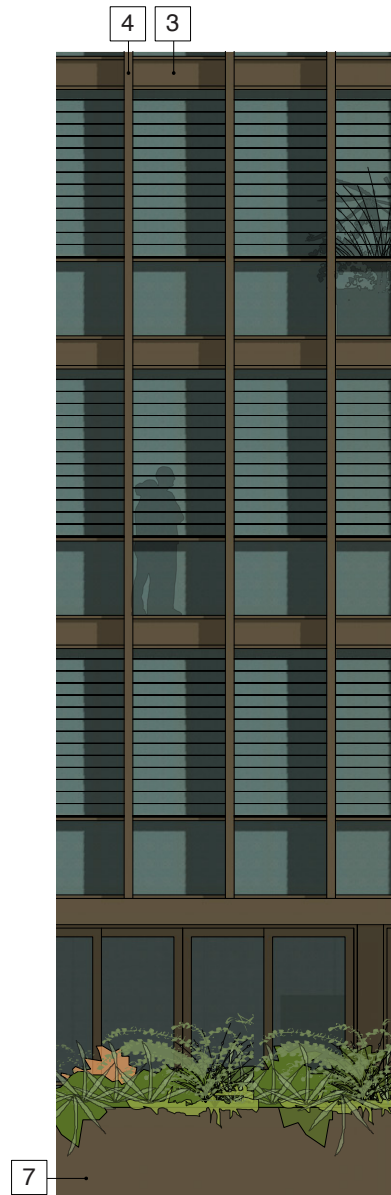
FFL 97575 (level -03)



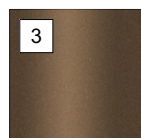
0 10m
1:250 @ A1 / 1:500 @ A3

2.5.11

materiality



Concrete
off form finish
colour - mid grey



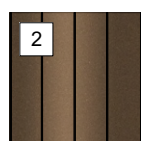
**Shading Hoods,
Window & Door framing**
powdercoated aluminium
colour - mid bronze



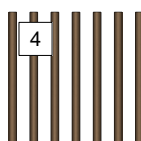
Balustrades
clear glass within powdercoated
aluminium frame
frame colour - mid bronze



Balcony Planters
prefabricated balcony planters
frame colour - mid bronze



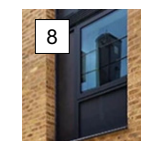
Metal Cladding
powdercoated aluminium
colour - mid bronze



Battens & Vertical Fin Screens
aluminium battens & fins
colour - mid bronze



Balustrades
clear glass within powdercoated
aluminium frame
frame colour - mid bronze



Spandrel Panels
bronze spandrel panels
colour - mid bronze

2.6

perspective views

2.6.1

view 1 - pennant hills road



2.6.2

view 2 - pennant hills road



2.6.3

view 3 - felton road



2.6.4

view 4 - felton road



2.6.5

view 5 - felton road



2.6.6

view 6 & 7 - felton road



2.6.7

view 8 - felton road



2.6.8

view 9 - felton road



2.6.9

view 10 - through site link



2.6.10

view 11 - through site link



2.6.11

view 12 - through site link



3

**environmentally sustainable design
(esd)**

3.1

ESD design principles

The design is based on the integration of passive design principles with effective systems and building management processes and procedures, leading to strong ESD outcomes – meeting or exceeding regulation and industry benchmarks. Measures include:

Carbon and energy

- Thermally efficient (>7-star NatHERS) and high efficiency appliances
- Onsite PV arrays and options to secure renewable electricity
- Target for embodied carbon reductions in concrete and steel

Water

- Water efficient appliances
- Rainwater harvesting and re-use

Materials and Waste

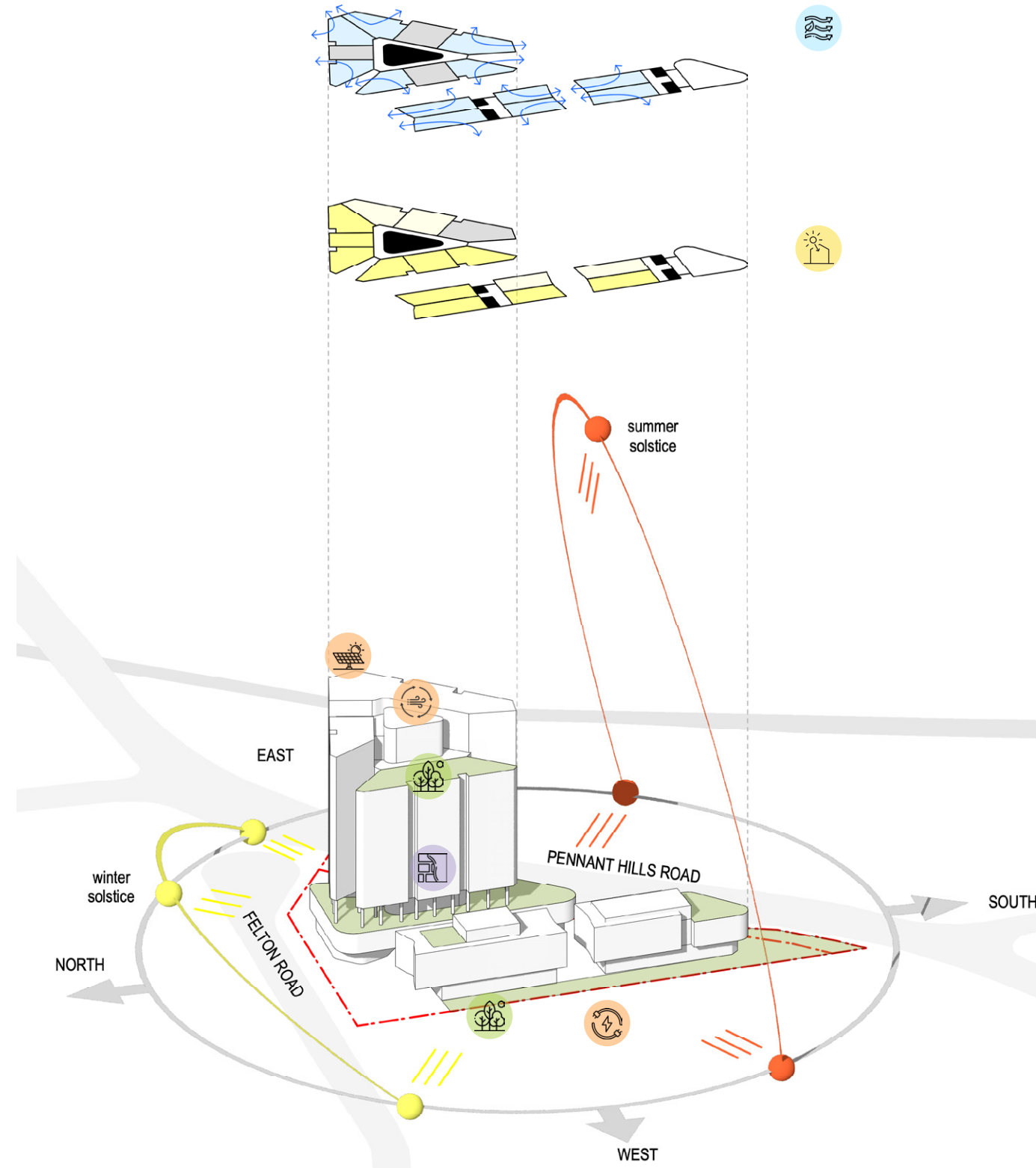
- Target for high proportion of waste recycling
- Onsite food recycling and composting facilities
- Materials targeted with environmental certification

Climate resilience

- Building and landscape design and materials to reduce urban heating effects

Human health and wellbeing

- ADG compliant cross ventilation, solar, and light access
- Acoustic treatment (wintergardens) to noise affected units on Pennant Hills Road
- Targets for low toxicity internal materials
- High amenity communal spaces



Passive Design

- 7 Star NatHERS Average
- Urban Heat Mitigation
- Natural Light
- Cross Ventilation

Systems Design

- All Electric Services
- Electric Bikes & EVs Provision
- Solar / PV Array - Onsite Renewable Energy
- Energy Efficient HVAC System
- Portable Water Saving

Materials & Management

- Material Recycling
- Environmental Plan & Certified Materials

3.2

wind and lighting



Wind

The building has been designed to address both prevailing winds and downdrafts.

The highly modelled and 'fractured' façades are designed to minimize impacts. Potential downdrafts around Building A are mitigated through a combination of façade and landscape treatments, including projecting slab edges, awnings, and indentations and breaks in the building's façades.

The Level 02 podium projects beyond the main building line of the upper tower. This, in combination with the single and double height voids associated with the communal open space works to disrupt the flow of downdrafts, collectively reducing wind impacts at ground level.

In particular, the Level 02 communal open space functions as a semi-open structure within the façade, allowing wind to dissipate rather than being funneled downward. The space is designed to provide a series of protected spaces within it facing different orientations.

Corner balconies within the tower are fitted with adjustable screens, allowing residents to control their environment and close off spaces, further enhancing comfort and usability during windy conditions.

Lighting

Lighting across the project will be designed in accordance with AS4282 (Control of the Obtrusive Effects of Outdoor Lighting).

The design incorporates a variety of lighting strategies to public and communal spaces.

These include downlighting, wall mounted lighting and low levels bollard lighting enhancing both visibility and way finding.

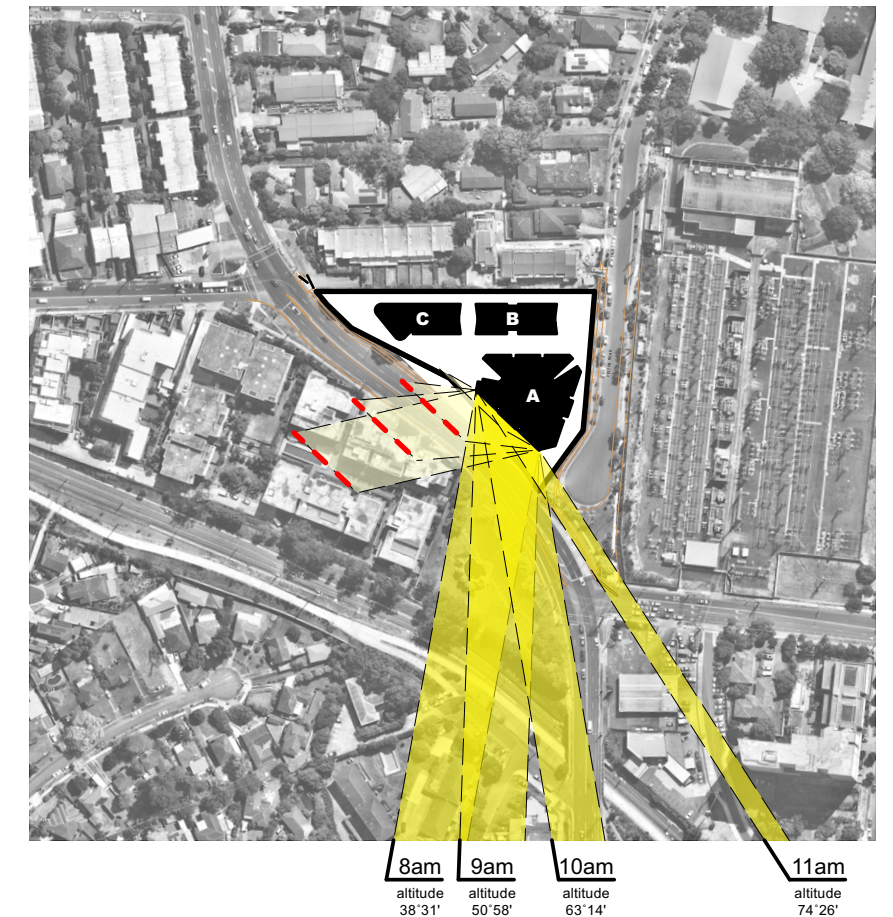
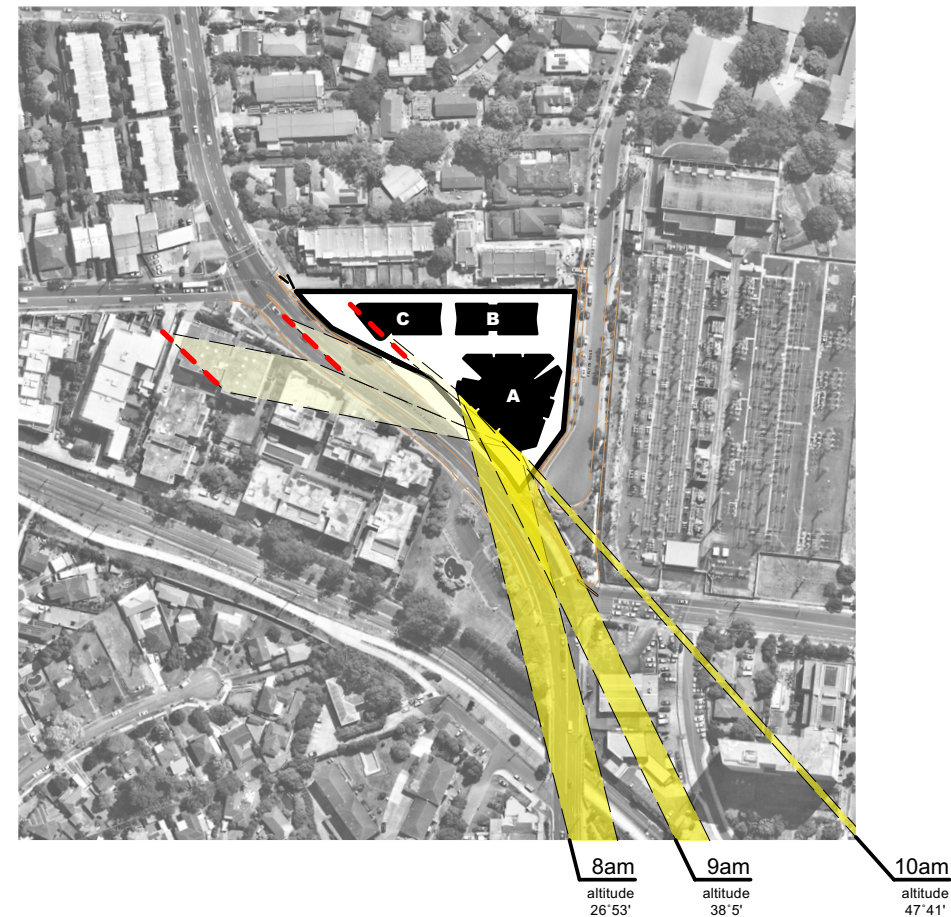
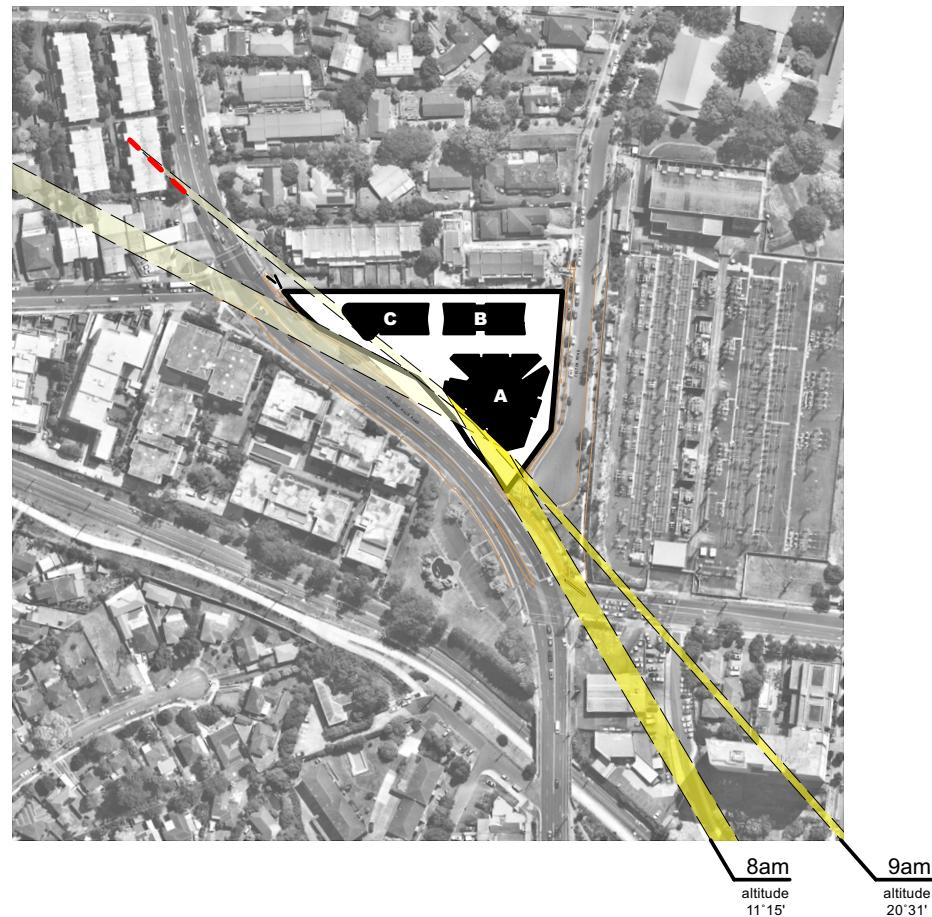
The project is designed to further mitigate impacts on neighbouring properties through both its massing and landscaping.

Public areas will be designed to comply with AS 1158.6 (Lighting for Roads and Public Spaces).



3.3

solar reflectivity



Reflectivity Analysis

Reflectivity impacts are expected to be limited to morning sunlight striking the south-east façade of the tower, with potential effects primarily on eastbound commuters along Pennant Hills Road. The accompanying diagrams illustrate the general extent of reflections across the year.

In winter, reflections from the south-east façade onto Pennant Hills Road are confined to narrow bands of light, with sunlight leaving the façade shortly after 9am. Glare during this period is expected to be minimal, and the curvature of Pennant Hills Road further reduces the likelihood of direct impacts on eastbound drivers.

At the equinoxes, reflections occur before 9am. While some minor impacts may arise, the reflection angle of approximately 38 degrees is relatively steep and is therefore not considered to present a substantial traffic hazard.

During the summer solstice, reflections occur later in the morning, at around 11am, but at a much steeper angle of approximately 75 degrees. Given both the angle and timing, these reflections are not expected to result in glare issues for commuters.

Overall, the glare risk is considered to be low. This reflects both the outcomes of the high-level analysis presented here and the local traffic context, where morning congestion and the series of traffic signals through the Carlingford centre generally result in slower vehicle speeds.

Mitigation Measures

While reflectivity impacts are expected to be low, a number of mitigation measures have been integrated into the building design to further reduce potential impacts.

Impacts are mitigated through the use of vertical fins, projecting slabs and low reflective glazing.

The central portion of the façade incorporates breaks in the facade, oversized window framing, projecting slabs and vertical fins to disrupt reflection.

In addition, the winter gardens are fitted with operable glass louvres which, when angled differently across consecutive floors, diffuse reflections and minimise impacts on the surrounding area.

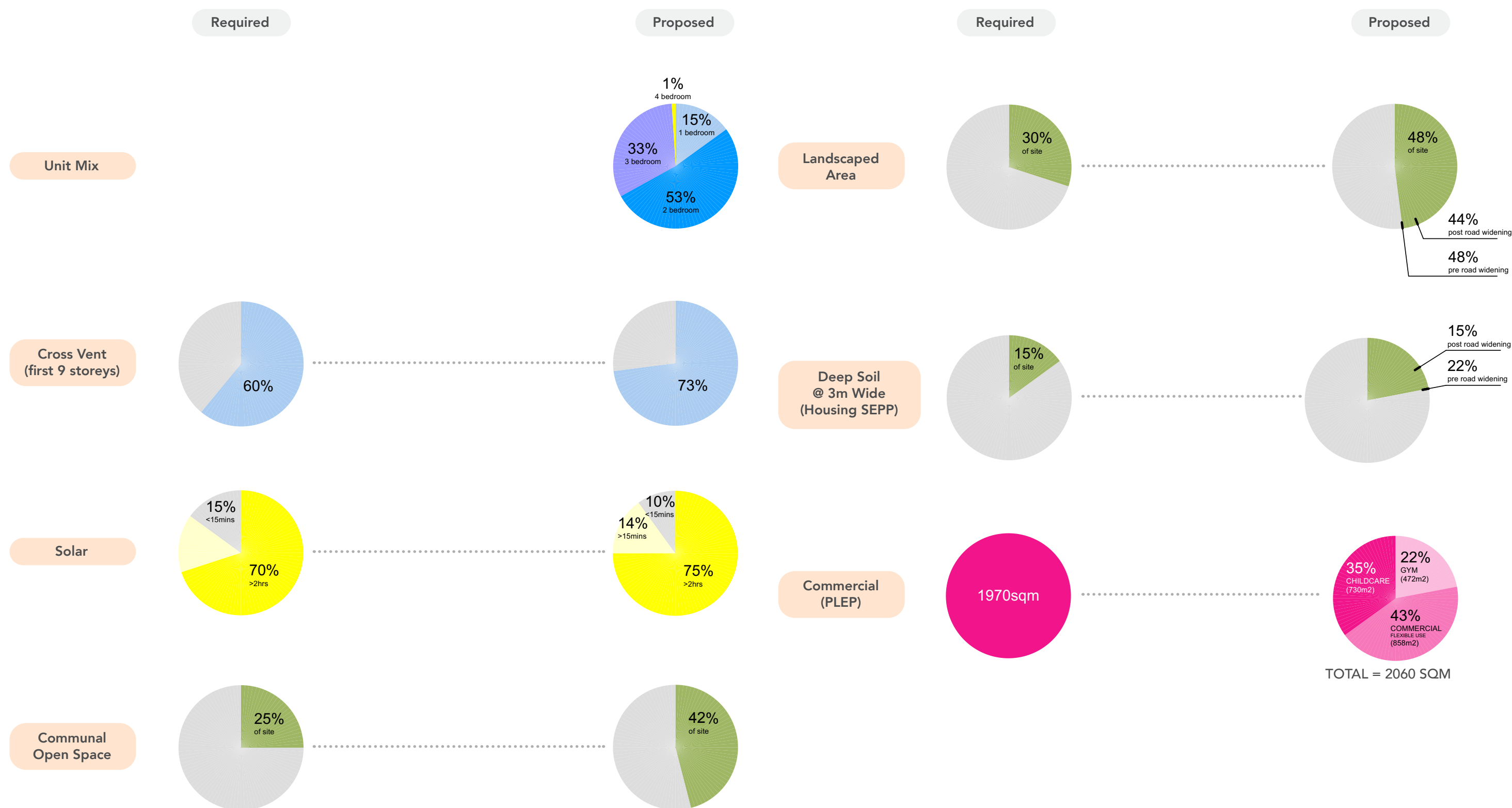


4

compliance

4.1

compliance summary



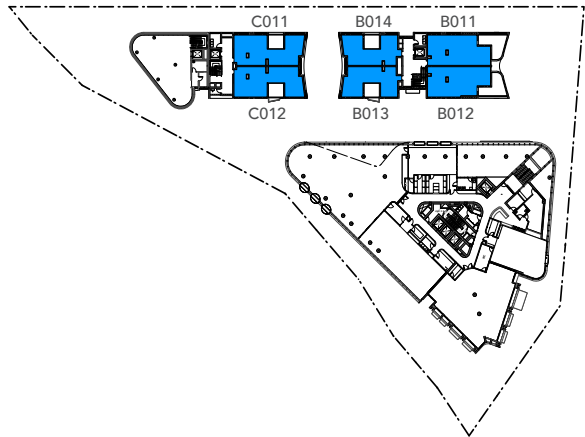
4.2

compliance & design analysis

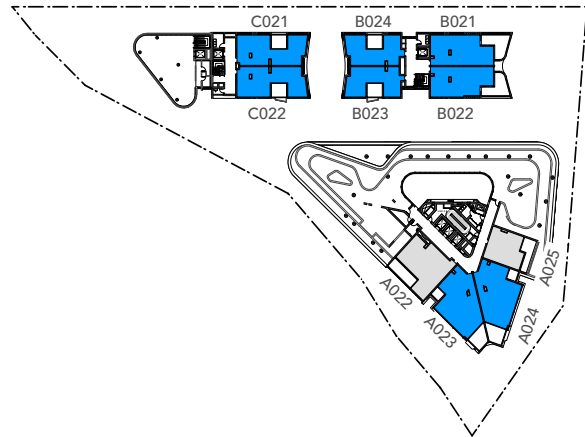
4.2.1

cross ventilation

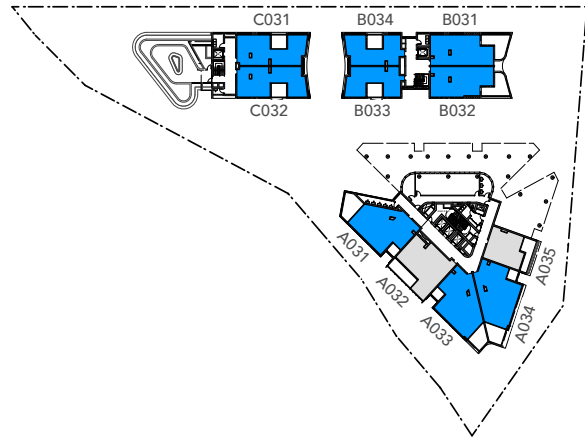
level 01



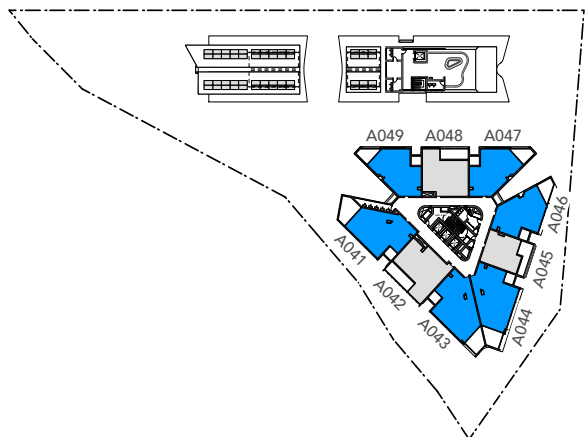
level 02



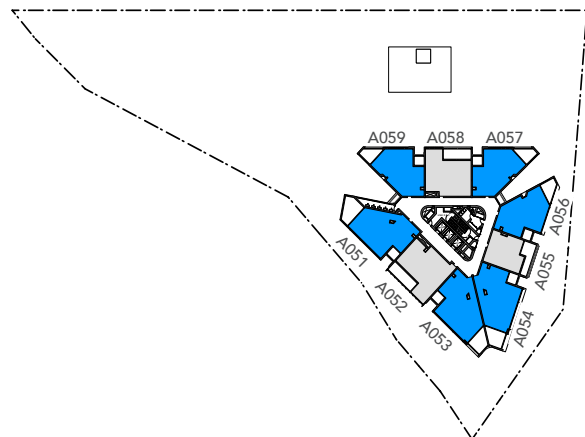
level 03



level 04



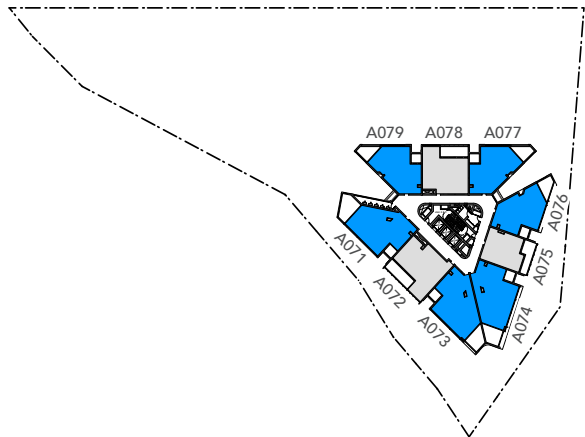
level 05



level 06



level 07



level 08



	Cross Vent Achieved (Y)	Cross Vent Not Achieved (N)	Total
Level 00	0	0	0
Level 01	6	0	6
Level 02	8	2	10
Level 03	9	2	11
Level 04	6	3	9
Level 05	6	3	9
Level 06	6	3	9
Level 07	6	3	9
Level 08	6	3	9
Total Units	53	19	72

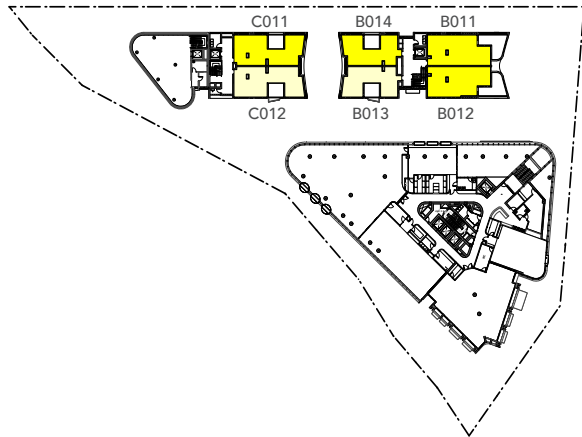
Min. required cross vent units (ADG)	44/72	60.0%
Total number of cross vent units	53/72	73.6%
Complies with ADG	✓	



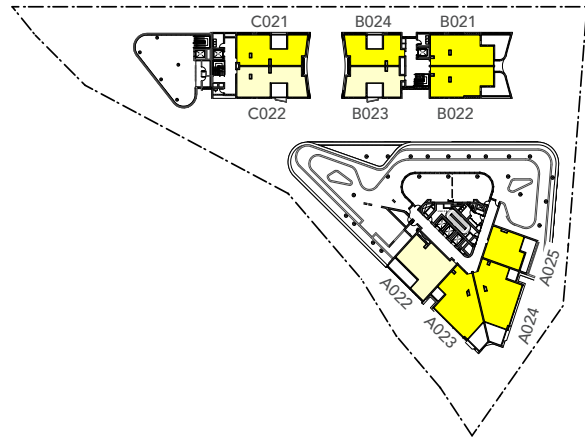
4.2.2

solar access

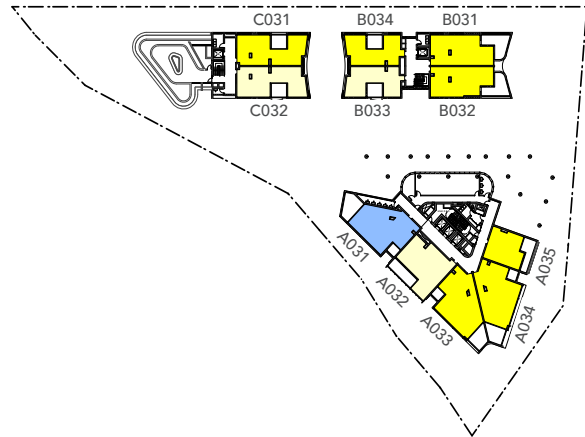
level 01



level 02



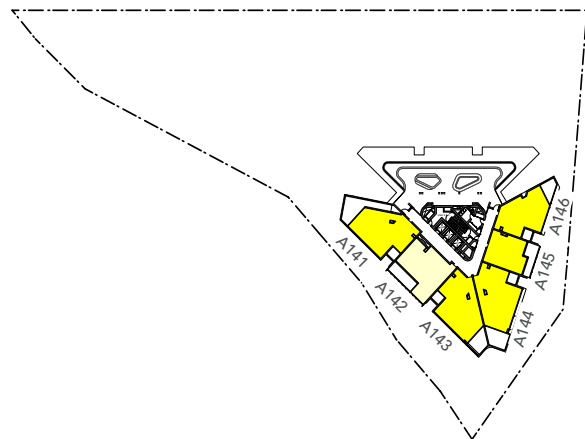
level 03



level 04-13



level 14



level 15



level 16



level 17



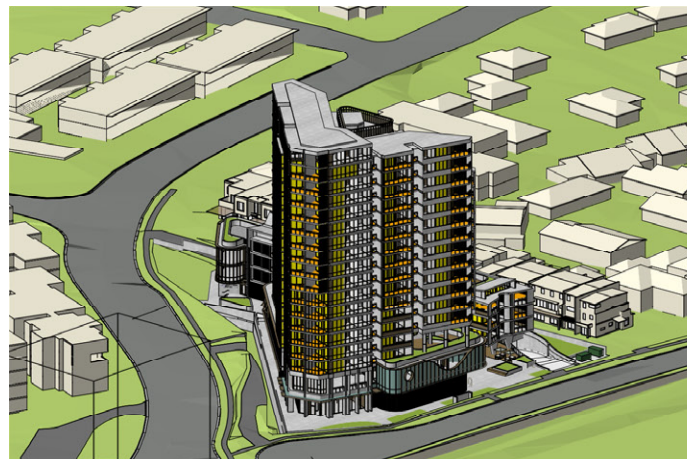
	No. of units receiving min. 2hrs sun	No. of units receiving min. 15mins sun	No. of units receiving less than 15mins sun	Unit Total
ADG requirement	min. 70% (96 units)		max. 15% (21 units)	
Level 00	0	0	0	0
Level 01	4	2	0	6
Level 02	7	3	0	10
Level 03	7	3	1	11
Level 04	7	1	1	9
Level 05	7	1	1	9
Level 06	7	1	1	9
Level 07	7	1	1	9
Level 08	7	1	1	9
Level 09	7	1	1	9
Level 10	7	1	1	9
Level 11	7	1	1	9
Level 12	7	1	1	9
Level 13	7	1	1	9
Level 14	5	1	0	6
Level 15	5	1	0	6
Level 16	5	0	2	7
Total Units	103	20	13	136
% of Total	75.7%	14.7%	9.6%	

Min. number units required to achieve 2hrs sun	96/136	70%
Total number of units receiving min. 2hrs sun	103/136	75.7%
Complies with ADG		✓

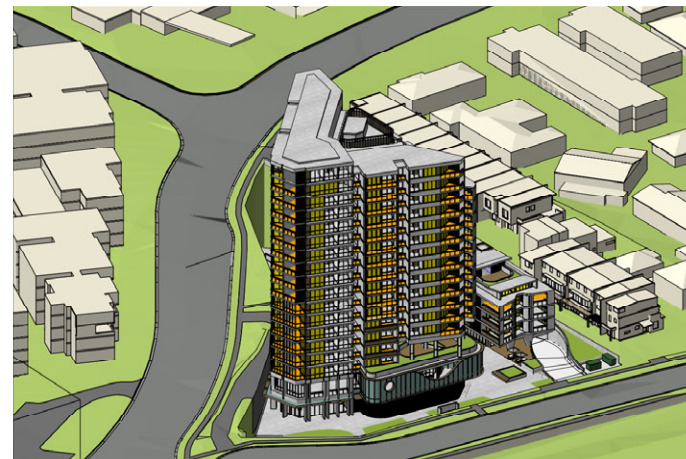
Max. number units permitted to receive no sun	20/136	15%
Total number of units receiving less than 15mins sun	13/136	9.6%
Complies with ADG		✓

4.2.3

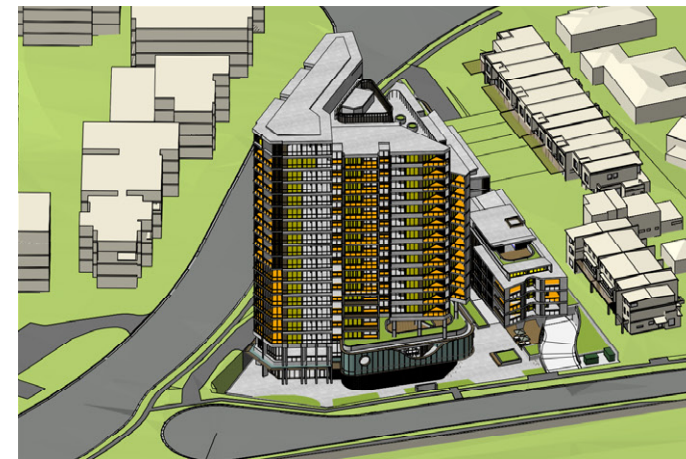
views from sun



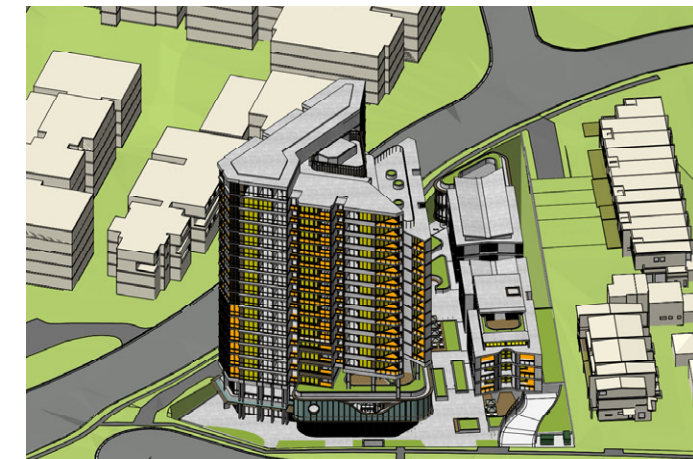
9:00am



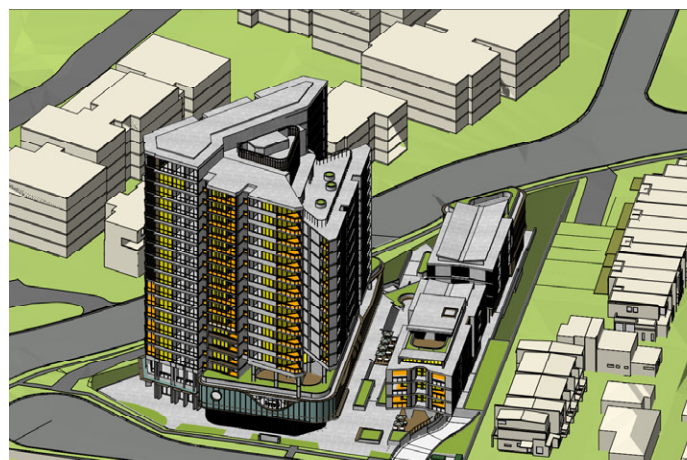
10:00am



11:00am



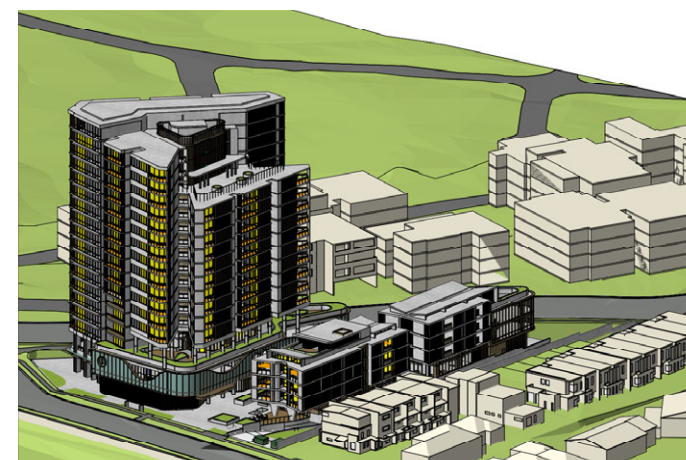
12:00am



1:00pm



2:00pm



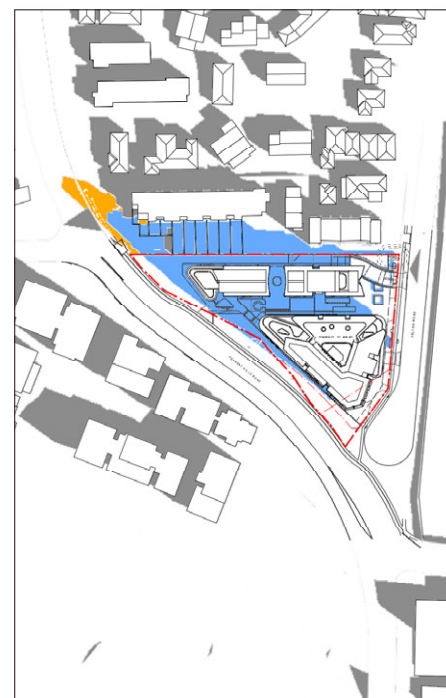
3:00pm

4.2.4

shadow analysis



9:00am



10:00am



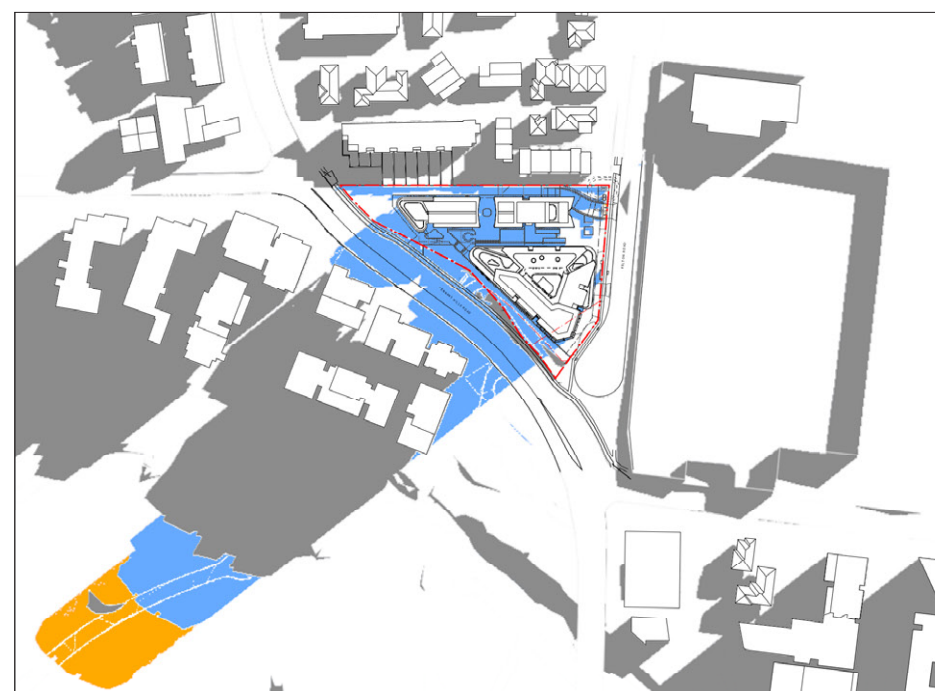
11:00am



12:00pm



1:00pm



2:00pm

Building A utilises 13m of the 14.7m (30%) additional height permitted under the In-fill Affordable bonus (Housing SEPP 2021), exceeding the existing LEP height plane by approximately three storeys.

An equivalent number of storeys are allocated for affordable housing.

Overshadowing impacts from the additional height and 15% affordable housing provision have been mitigated by locating the additional building massing in Building A toward the Pennant Hills Road frontage and limiting the height of Building B adjacent to neighbouring townhouses — maximising solar access to the existing developments to the west of the site.

That is:

- The height increase resulting from the ARH Bonus is limited to Building A, the tower building, which is stepped towards the north east away from adjoining properties.
- Building B and C remain extensively within the LEP height controls.

Given the context, the shadow impacts are reasonable.

extent of development above the existing 49m
LEP HOB shown highlighted in yellow

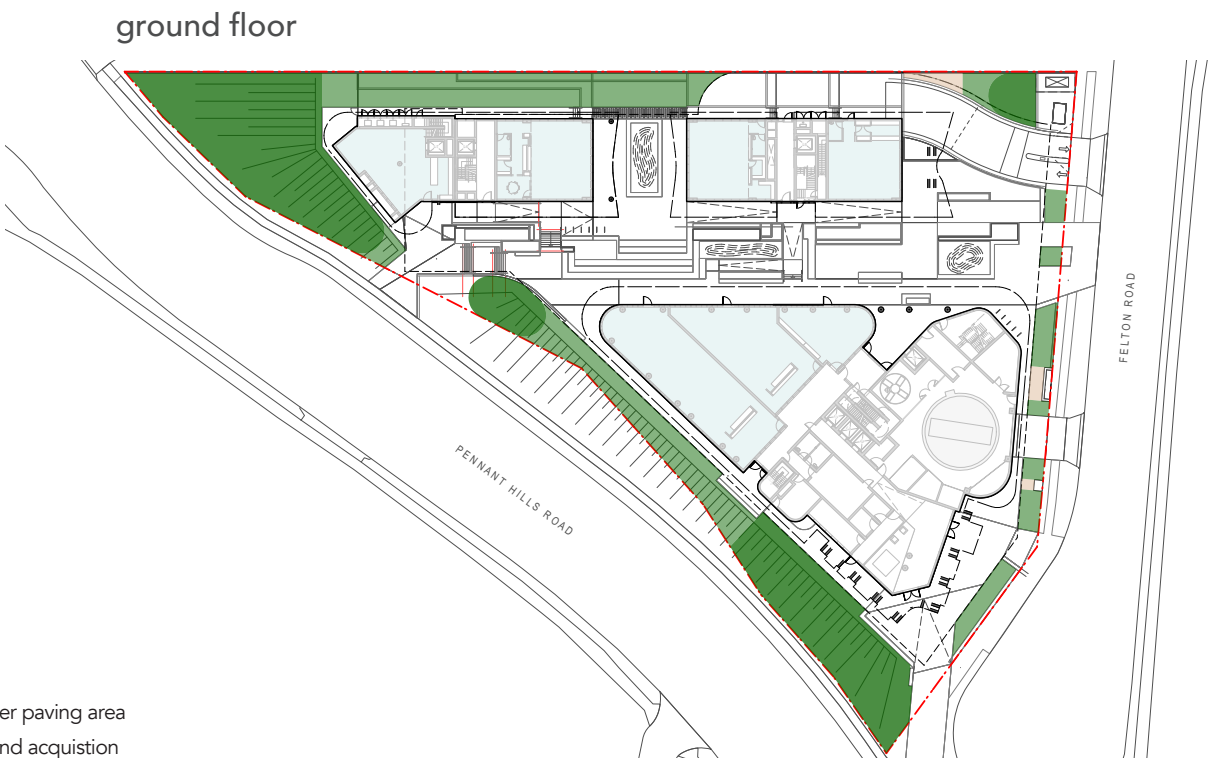
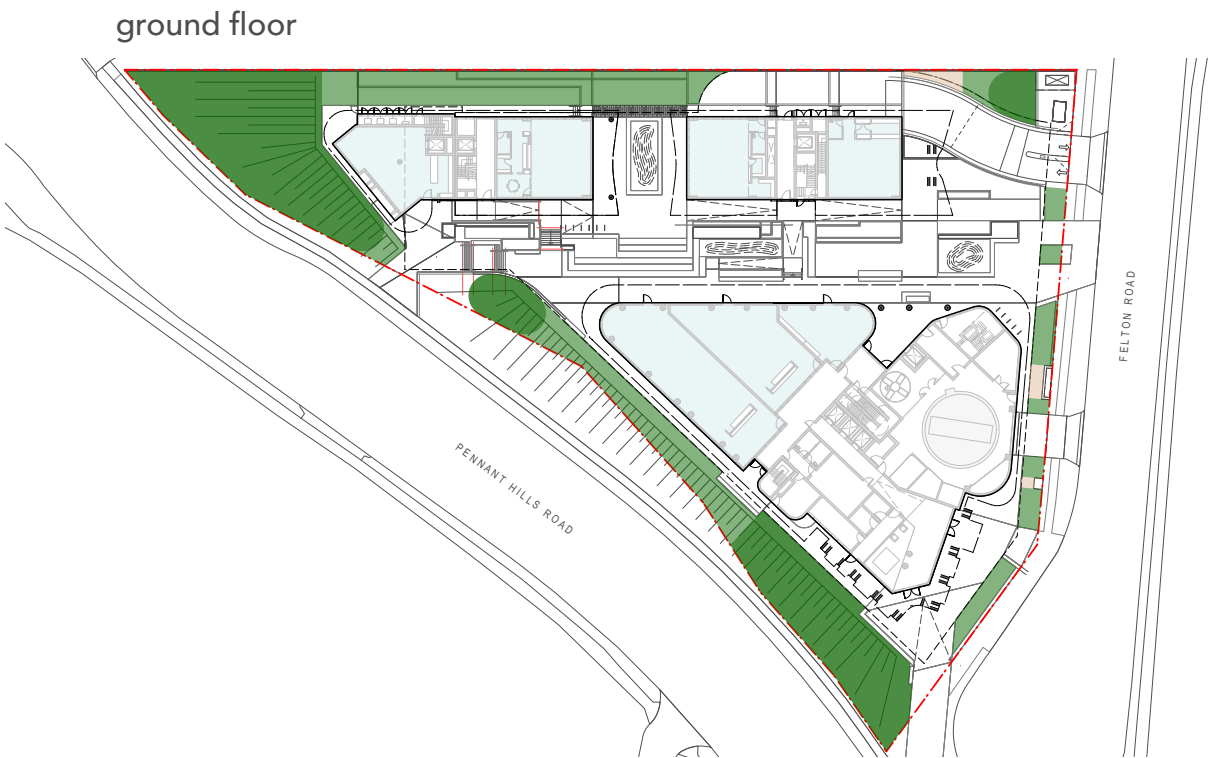


Legends

- shadow cast by existing buildings & fences
- shadow cast by proposed development above 54m height limit
- shadow cast by proposed development below 54m height limit

4.2.5

deep soil



- Legends
- deep soil zone >6m
 - deep soil zone >3m
 - deep soil zone <3m + under paving area
 - portion of site subject to land acquisition

pre road widening

Site Area (pre road widening)	6330 sqm		
Requirement	Min. Deep Soil Zone		Min. Dimension
	% of site area	sqm	
Housing SEPP 2021 (AH non discretionary standards)	15%	950 sqm	3m
Apartment Design Guide	7%	443 sqm	6m

	Proposed Deep Soil Zone		Complies
	% of site area	sqm	
Deep Soil <3m wide & under paving	0.5%	29 sqm	
Deep Soil > 3m & <6m wide	9.3%	589 sqm	
Deep Soil > 3m wide (Housing SEPP)	22.7%	1437 sqm	✓
Deep Soil > 6m wide (ADG)	13.4%	848 sqm	✓

post road widening

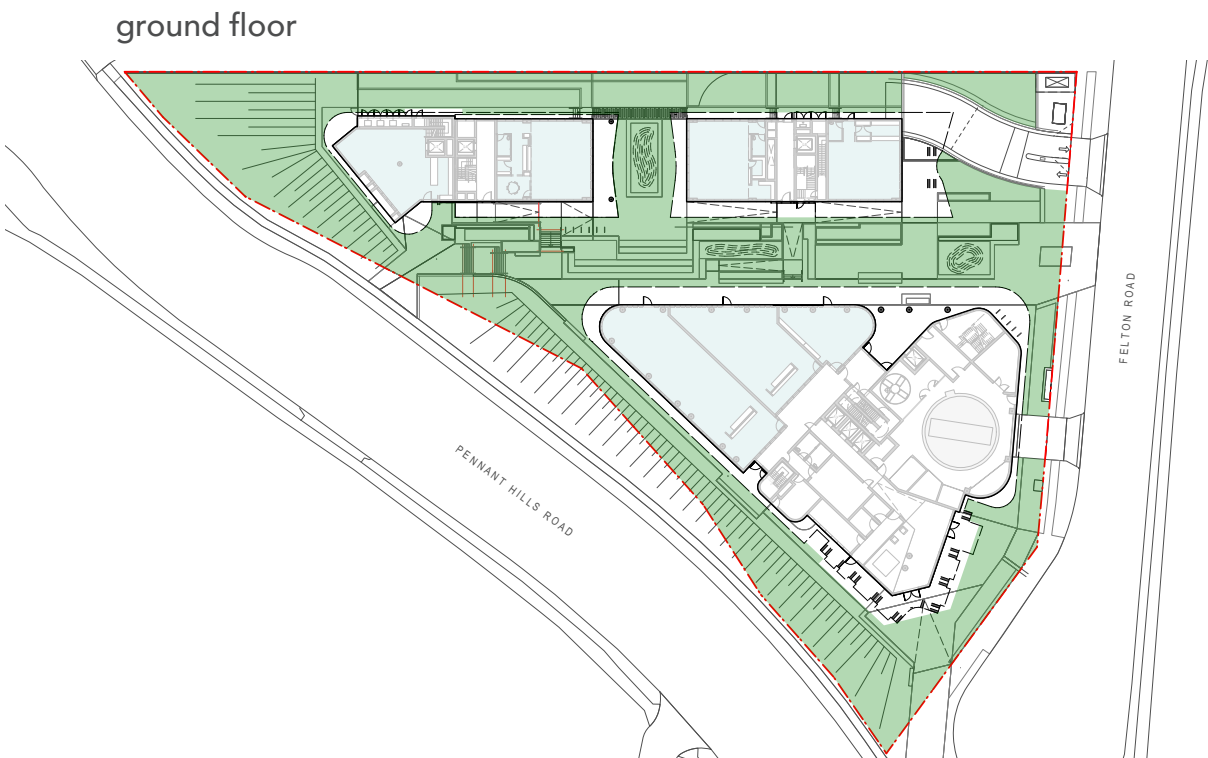
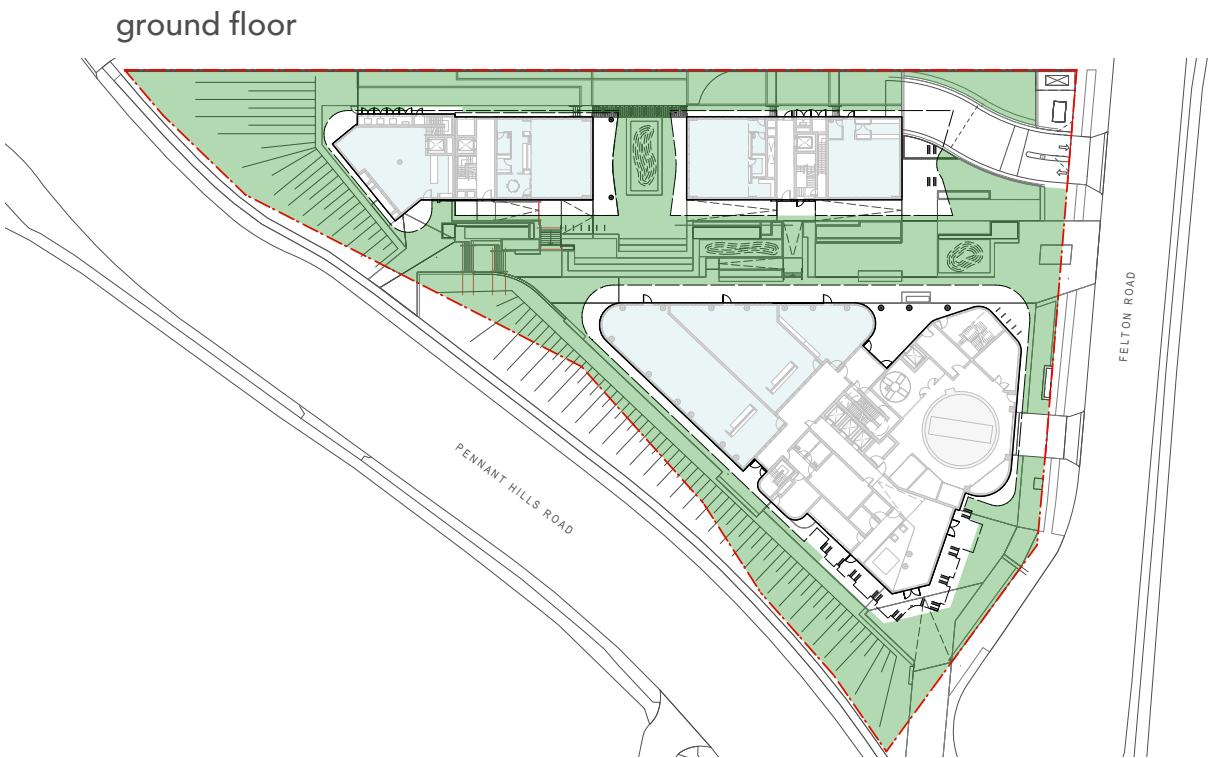
Site Area (post road widening)	5847 sqm		
Requirement	Min. Deep Soil Zone		Min. Dimension
	% of site area	sqm	
Housing SEPP 2021 (AH non discretionary standards)	15%	877 sqm	3m
Apartment Design Guide	7%	409 sqm	6m

	Proposed Deep Soil Zone		Complies
	% of site area	sqm	
Deep Soil <3m wide & under paving	2.2%	130 sqm	
Deep Soil > 3m & <6m wide	10.4%	608 sqm	
Deep Soil > 3m wide (Housing SEPP)	15.1%	882 sqm	✓
Deep Soil > 6m wide (ADG)	4.7%	274 sqm	



4.2.6

landscape



Legend

landscape area

pre road widening

Site Area (pre road widening)	6330 sqm			Proposed No. Units	136
	Landscaped Area		Complies		
	sqm	% of site area		Landscaped Area / Dwelling	Complies
Min. Required Landscaped Area (Housing SEPP 2021)	1899 sqm	30%		Min. 35 sqm	
Proposed Landscaped Area	3053 sqm	48.2%	✓	22 sqm	N/A

post road widening

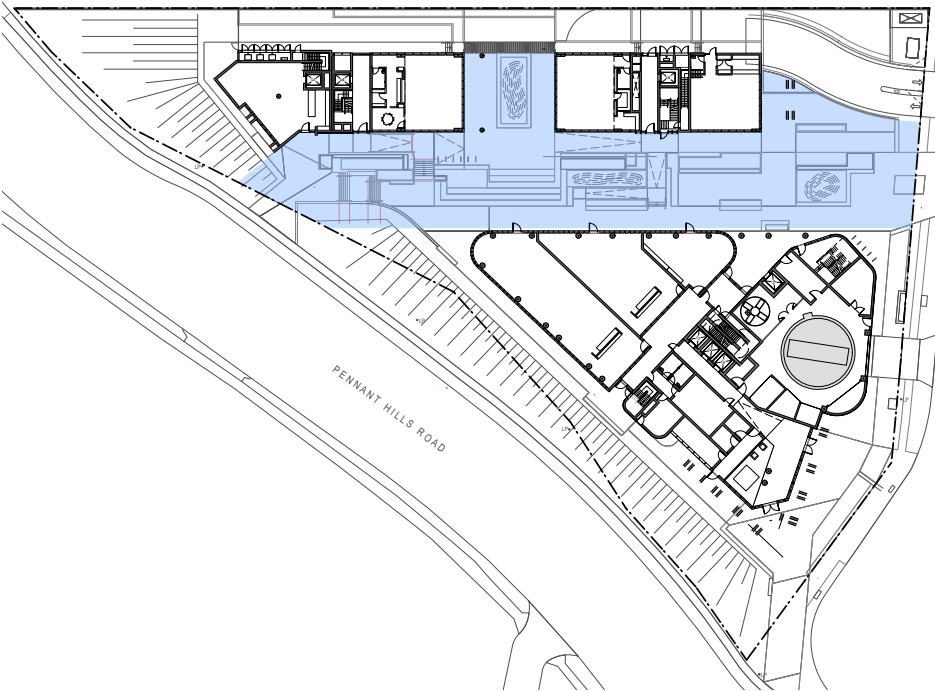
Site Area (post road widening)	5765 sqm			Proposed No. Units	136
	Landscaped Area		Complies		
	sqm	% of site area		Landscaped Area / Dwelling	Complies
Min. Required Landscaped Area (Housing SEPP 2021)	1730 sqm	30%		Min. 35 sqm	
Proposed Landscaped Area	2572 sqm	44.6%	✓	19 sqm	N/A



4.2.7

communal open space

ground floor - through site link



level 02



level 03



level 14

Site Area (post road widening) 5765 sqm
Min. required Communal Open Space (ADG) 25% of site area
= 1441.25 sqm

	Publically accessible communal open space		Privately accessible communal open space	
	sqm	% of site area	sqm	% of site area
Level 00	1571 sqm	27%	0 sqm	
Level 02			648 sqm	11%
Level 03			125 sqm	2%
Level 04			90 sqm	2%
Level 14			247 sqm	4%
Sub Total	1571 sqm		1109 sqm	19%

Total Communal Open Space	2680 sqm	46% of total site area
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Complies with ADG ✓

- Legends
- public space / through site link
 - communal open space
 - communal room

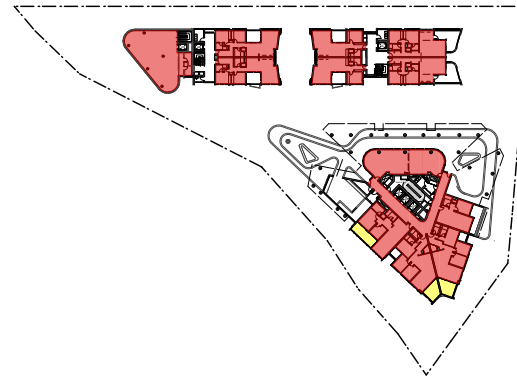
level 00



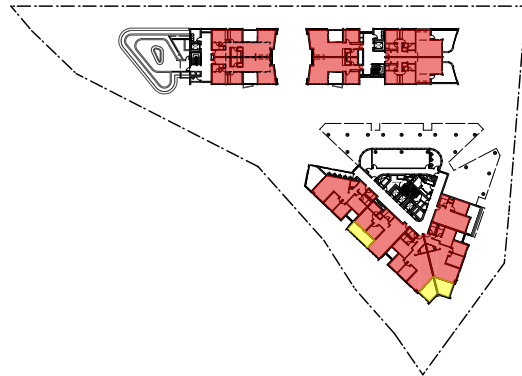
level 01



level 02



level 03



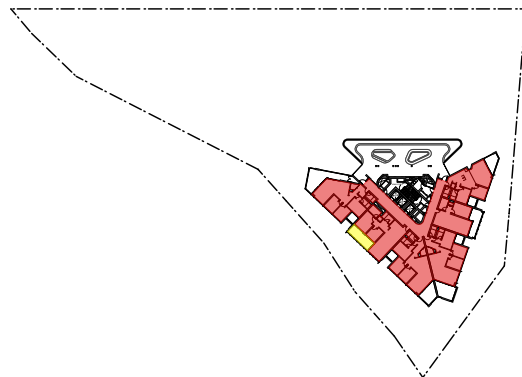
level 04-07



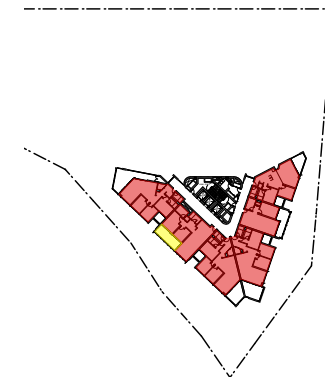
level 08-13



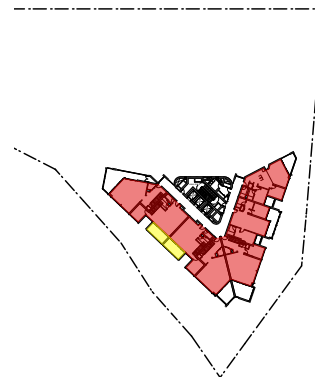
level 14



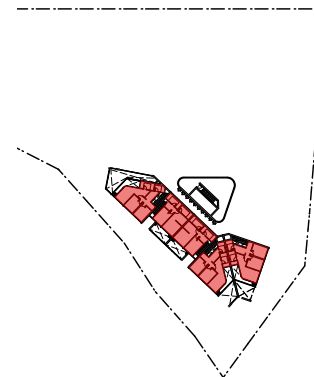
level 15



level 16



level 17



SITE AREA (post road widening)	5766 sqm
Existing FSR	2 : 1
Existing FSR + 30% AH bonus	3 : 1
Permissible GFA	15741 sqm

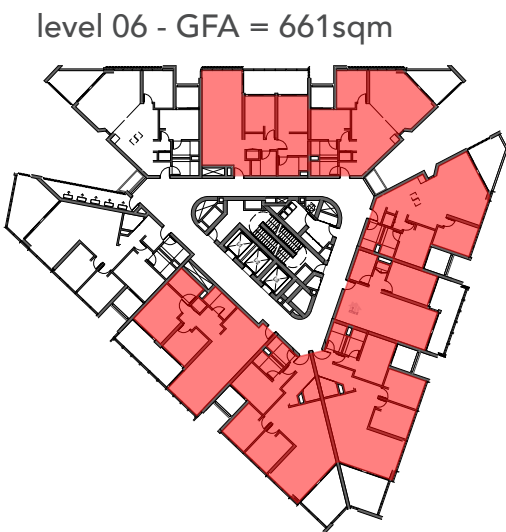
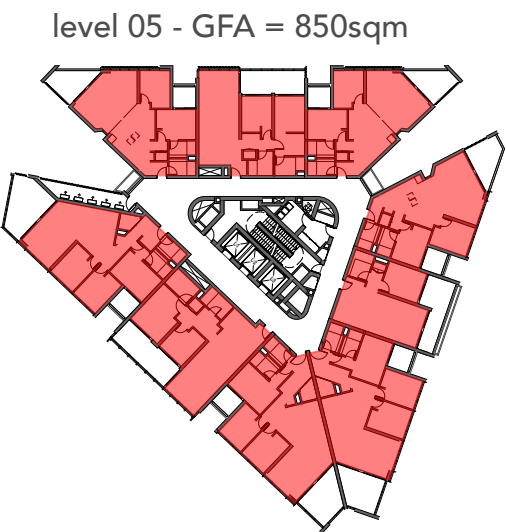
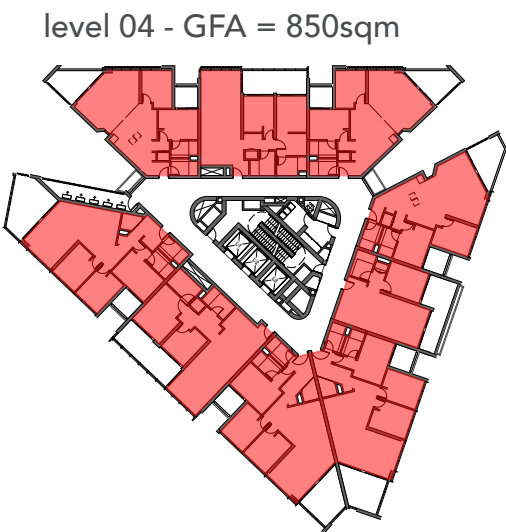
LEP winter gardens allowance	465 sqm
Permissible GFA including LEP winter gardens allowance	16206 sqm
Permissible FSR incl. 30% AH + LEP winter gardens allowance	3 : 1

LEVEL	commercial (sqm)	childcare (sqm)	gym (sqm)	AH residential (sqm)	residential (sqm)	total GFA per Floor (excl. winter gardens) (sqm)	WINTER GARDEN GFA (sqm)
LEVEL 0	857		121		264	1242	0
LEVEL 1		730	176		514	1419	0
LEVEL 2			176		1063	1291	52
LEVEL 3					951	1004	52
LEVEL 4				850	-52	850	52
LEVEL 5				850	-52	850	52
LEVEL 6				661	142	855	52
LEVEL 7					803	855	52
LEVEL 8					836	855	20
LEVEL 9					836	855	20
LEVEL 10					836	855	20
LEVEL 11					836	855	20
LEVEL 12					836	855	20
LEVEL 13					836	855	20
LEVEL 14					659	679	20
LEVEL 15					566	585	20
LEVEL 16					556	585	29
LEVEL 17					331	331	0
Sub Total	857	730	473	2361	10759	15680 sqm	500 sqm
Winter garden GFA minus 465sqm LEP wintergarden allowance							35 sqm
Total GFA (excl LEP winter garden allowance)						15715 sqm	
Total GFA (incl. LEP winter garden allowance)						16180 sqm	

Proposed FSR (excl. LEP winter garden allowance)	3 : 1	✓
Proposed FSR (incl. LEP winter garden allowance)	3 : 1	✓

4.2.9

affordable housing



level 06

Legends

- 1 bed
- 2 bed
- 3 bed

Unit Type	Proposed No. of AH Units	%
1 Bed	3	0
2 Bed	14	1
3 Bed	8	0
Total	25	

Proposed AH GFA	2361 sqm	15%
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Complies with ADG

TOTAL AH GFA = 2361 sqm = 15% of permissible GFA (15741sqm)
= 15.5% of proposed GFA (15680sqm)

4.3

design quality principles

4.3.1

design verification statement

To whom it may concern,

DESIGN VERIFICATION STATEMENT - SSDA

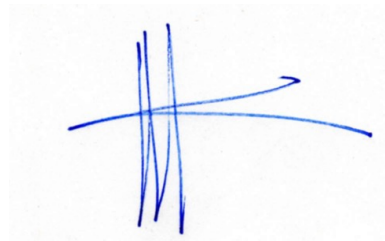
This statement has been prepared by Steve Kennedy (John Stephen Kennedy), director of Kennedy Associates Architects, (registered architect No 5828) with respect to:

the proposed mixed-use development
at:
241-245 Pennant Hills Road, Carlingford

In accordance with the requirements of Section 29 (1)(2) of the Environmental Planning and Assessment Regulation 2021, I verify that:

- a. I am a qualified designer, which means a person registered as an architect in accordance with the Architects Act 2003, as per the definition set out in Section 29 (1)(2) of the Environmental Planning and Assessment Regulation 2000.
- b. I directed the design of the residential apartment component of the mixed-use development at the above site.
- c. As detailed in the architectural drawings and documents listed below,
 - i. the design quality principles set out in Schedule 9 of State Environmental Planning Policy (Housing) 2021, Design Principles of Residential Apartment Development are achieved
 - ii. the objectives of Part 3 and Part 4 of the Apartment Design Guide are achieved

Yours Faithfully,



Steve Kennedy
Kennedy Associates Architects



4.3.2

sepp housing design principles

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.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

Response:

The subject site is located in Carlingford, on the northern edge of the Cumberland Plain, elevated above Parramatta where Wianamatta Shale meets the Hawkesbury Sandstone plateau. It sits on the traditional lands of the Wallumedegal (Wallumattagai) people of the Eora group, with cultural significance linked to Pennant Hills Road, historically part of an Aboriginal walking track connecting clans in Parramatta and the Hawkesbury.

Strategically positioned on the western edge of the Carlingford Local Centre, the site is less than 400m from the Parramatta Light Rail station and within close proximity to Carlingford Court, providing strong connectivity and access to urban amenities. The precinct is divided into a transit core around the light rail and a commercial core around the shopping centre, with high-density residential growth linking the two.

The site's triangular shape creates three frontages, with well-defined edges along Pennant Hills and Felton Roads. Building siting and massing provide a transition to the medium-density residential areas to the west, while a publicly accessible through-site link enhances neighbourhood connectivity.

The design enhances streetscape quality while aligning with recent State and local planning reforms that encourage increased density, greater building heights, and the provision of affordable housing, thereby contributing positively to Carlingford's evolving urban character.

Principle 2: Built Form & Scale

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

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Response:

The development achieves an appropriate scale and built form through a podium-and-tower arrangement. Building A rises to 18-storeys above a two-storey podium addressing Pennant Hills and Felton Roads, while Buildings B and C, at 4–5 storeys along the western edge, provide a sensitive transition to the lower-scale dwellings beyond. The triangular geometry of Building A defines its footprint and façades, presenting three distinct frontages that respond directly to each street. Massing is carefully articulated with 4–6m setbacks, 7–14m building separations, and recessed upper levels, reducing visual bulk while ensuring solar access, ventilation, and internal amenity.

The built form is informed by the previously approved planning proposal, which established transitional height controls across the site. This revised design increases gross floor area and height under the NSW Government's Affordable Housing Bonus Scheme while maintaining the core principles of the planning proposal, with a prominent tower in the northeast corner and smaller buildings along the western edge. Each building responds to its location, aspect, and constraints—including Pennant Hills Road—within a cohesive composition.

The development integrates seamlessly into the evolving Carlingford Local Centre, where buildings of up to 29-storeys are under construction. It strengthens both street frontages, introduces new public amenity, and enhances the streetscape through extensive street planting, delivering a built form that contributes positively to the area's changing character.

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.

Appropriate densities are consistent with the area's existing or projected population.

Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Response:

The project delivers 136 generously sized apartments, including 25 affordable dwellings, with a mix of 1, 2, 3, and 4-bedroom layouts optimized to support family living. This density is appropriate given the site's location within the Carlingford Local Centre and its proximity to transport, schools, open space, and community services. Importantly, the layouts are efficient, ensuring that higher density supports liveability while aligning with housing policy objectives. Notably, 70% of the apartments are dual aspect.

The development is situated within 400m of Carlingford Light Rail Station, offering a convenient 30-minute commute to Parramatta CBD every 10 minutes. It is supported by nearby infrastructure, public transport, and community facilities. The proposal aligns with broader planning objectives in Sydney to concentrate residential growth around key transport nodes, addressing housing supply pressures and affordability challenges, and is consistent with densities promoted through other government initiatives.

Beyond private apartment amenity, the project delivers over 1,100 sqm of private communal open space across the three buildings, plus a 120 sqm community room. These spaces cater to all age groups, providing intimate and large gathering areas, dining and BBQ facilities, edible community gardens, and roof terraces with city and district views. Collectively, the design offers a high-density development with excellent amenity suited to families.

4.3.2

sepp housing design principles

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. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

Response:

The development integrates sustainability at every level, delivering environmental, social, and economic benefits. The scheme is designed to achieve a high level of environmental performance, guided by environmental experts Design View to meet and exceed sustainability targets. Apartments are thermally efficient, achieving an average 7-Star NatHERS rating, and feature high-efficiency appliances alongside onsite rooftop PV arrays. The building form optimises solar orientation and cross-ventilation, reducing reliance on mechanical systems and lowering operational costs.

Materials have been carefully selected for durability, low embodied carbon, and environmental certification, with carbon reduction objectives pursued through rigorous analysis of concrete and steel components. Water efficiency is enhanced by a 25-kL rainwater harvesting system and water-efficient appliances, while low-toxicity internal finishes promote occupant health. EV charging infrastructure further reduces the development's operational footprint.

The landscape design enriches the physical environment, offsets urban heat effects, and provides social amenity through a series of podium and rooftop communal spaces, including a 120 sqm community room.

Corridors, which are open but protected, provide excellent natural light and airflow.

Planting incorporates indigenous, edible, and sensory species, supported by deep soil zones, substantial street planting, and generously sized planters integrated throughout. Composting and recycling facilities further promote sustainable living. Collectively, these initiatives reduce environmental impacts, support NSW Net Zero targets, and enhance liveability and community wellbeing.

Principle 5:
Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments 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.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co ordinating water and soil management, solar access, micro- climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

Response:

Landscape is a defining element of the proposal, underpinning the integration of buildings and open space into a cohesive and sustainable system. The project delivers 2,680 sqm of communal open space—equating to 46% of the site—distributed across ground, podium, and rooftop levels.

A core feature is the 1,570 sqm publicly accessible through-site link, conceived as a linear green corridor with seating, shade, water features, sculptural concrete planters, and a series of connected ponds. This element creates an inviting and welcoming space, softens the built form, and makes a positive contribution to the local community.

The design establishes a coherent landscape program that responds to the site's local climatic conditions, ranging from highly exposed, sunlit plateau spaces (roof terraces) to cooler, shaded gullies (through-site link).

Deep soil zones allow for substantial tree planting, particularly along the western edge to buffer neighbouring dwellings, while podium and rooftop gardens incorporate edible gardens, spaces for quiet reflection, and social areas that support resident wellbeing and accommodate a range of gathering sizes.

Planters across multiple levels are generous in both width and soil depth, supporting native and indigenous species selected for their cultural, aesthetic, and sensory qualities.

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.

Response:

The project has been designed to deliver high levels of internal and external amenity, contributing to positive living environments and long-term resident wellbeing. A strong focus has been placed on solar access, ventilation, apartment size, acoustic comfort, and the quality of communal facilities.

The triangular footprint of Building A results in a high proportion of corner apartments with excellent outlook and ventilation.

Overall, 75.7% of apartments achieve the minimum solar access standard, 73.6% comply with cross-ventilation requirements, and 70% feature dual-aspect layouts. Apartment sizes exceed ADG minimum area requirements by 15–53 sqm, with larger units specifically designed to accommodate families. Balconies are generous, exceeding minimum sizes by 5–8 sqm, further supporting everyday living and outdoor enjoyment. Wintergardens and acoustic glazing on the Pennant Hills Road frontage ensure comfortable internal environments.

The project offers over 17 unit types.

Adjustable louvres further enhance amenity and control for residents. Additionally, more than 1,100 sqm of private communal open space is provided across the three buildings, complemented by outdoor meeting areas, BBQ facilities, and a flexible 120 sqm community room.

Other features—including generous street entries, parcel and mail rooms, designated drop-off and courier parking, and 140 secure bicycle spaces—ensure the development delivers high amenity for both residents and neighbours.

4.3.2

sepp housing design principles

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.

Response:

Safety and security are fundamental to the design, achieved through the application of CPTED (Crime Prevention Through Environmental Design) principles, which guided the project's evolution.

Clear and visible street entries, active ground floor uses, and well-lit circulation areas promote passive surveillance of public and semi-public spaces, including the through-site link and communal open areas. A clear hierarchy between public, semi-public, and private zones ensures secure access and contributes to a well-managed, safe environment for residents and visitors.

Safety is further supported by secure access control and monitoring measures detailed in the Plan of Management, including key fob (or equivalent) entry to buildings, restricted access to residential floors, 24-hour CCTV monitoring, and controlled exterior lighting. These systems will be implemented and maintained by the building manager to ensure ongoing security.

The physical design also reinforces safety objectives. Street entries and foyers are highly visible from the public domain; commercial activation and passive observation enhance the through-site link; and blind corners have been deliberately avoided. Multiple circulation routes and accessible fire escape paths provide both safety and convenience, while communal areas benefit from passive surveillance from surrounding dwellings.

Collectively, these measures optimise amenity, safety, and security for residents, neighbours, and the broader public realm.

Principle 8:
Housing Diversity & 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, providing opportunities for social interaction amongst residents.

Response:

The project delivers a diverse mix of apartment sizes and types, providing housing choice for a wide range of household demographics, living needs, and budgets. The unit mix—14.7% one-bedroom, 51.5% two-bedroom, and 33.8% three-plus-bedroom apartments—responds to current market demand while accommodating families, singles, and couples.

Housing diversity is further enhanced through the inclusion of 24 adaptable apartments and 25 affordable dwellings, located on Levels 4, 5, and 6, to be managed by a Community Housing Provider (CHP). In addition, 28 apartments meet Silver Level Liveable Housing Design Guidelines, ensuring suitability for residents with mobility needs.

The development offers over 17 distinct unit types, with approximately 70% of apartments being corner or dual-aspect layouts, providing excellent natural light, ventilation, and outlook. Apartment interiors, balconies, and private open spaces are generously sized, exceeding industry benchmarks.

Social interaction and community integration are encouraged through a variety of communal spaces, including a flexible 120 sqm community room, podium gardens, rooftop terraces across all three buildings, and a publicly accessible through-site link. These spaces support both intimate and larger gatherings, fostering connection among residents.

The commercially activated through-site link further encourages interaction between residents and the broader local community.

Principle 9:
Aesthetics

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 well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

Response:

The project presents a contemporary and robust architectural language, utilising a restrained, durable, and sustainable palette of bronze-framed glazing, off-form & precast concrete, and bronze-toned metal screens and cladding.

The tower's triangular geometry produces a faceted form that changes character depending on orientation and viewpoint, creating a dynamic and distinctive skyline presence, while the lower buildings adopt a sinuous rectilinear form that complements the overall composition and provides a discrete transition to the neighbouring buildings to the west.

The three sides of the tower are further articulated via a series of recessed balconies and negative corners, producing a tripartite composition within each façade and emphasizing verticality.

The podium and tower forms have been carefully considered to generate a sense of movement, with portions of the podium flowing upward into the tower, creating a visually engaging transition. Podium levels feature tactile, pedestrian-friendly finishes, while integrated landscaping and planters soften edges and enhance the human scale.

Facades incorporate a range of subtle design nuances responding to orientation and performance requirements, addressing solar protection, acoustic mitigation, privacy, and outlook. The material palette supports a variety of expressions, from precast concrete walls to projecting slabs, window fenestration, louvres, and awnings, allowing each element to be individually expressed while maintaining cohesion.

Overall, the composition balances the bulk of the buildings, resulting in a dynamic, muscular and confident, site-specific design that contributes positively to Carlingford's emerging urban character.

4.4

apartment design guide (adg)

4.4.1

adg compliance table

Objective	Comment	Complies
Site Analysis 3A		
Objective 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	Site analysis information is included in the architectural drawing set. Refer to drawings 1804-SD022 to 1804-SD025.	✓
3B Orientation		
Objective 3B-1		
Building types and layouts respond to the streetscape and site while optimising solar access within the development	The proposed development is comprised of three separate 'shop-top' mixed use buildings, being two lower scale buildings (Buildings B & C) and a taller 'tower' building (Building A). These buildings are structured around a publicly accessible through-site link connecting Felton Road and Pennant Hills Road. This pedestrianised 'street' provides frontages to all commercial spaces. The tower building located to the east of the through-site link has a triangular layout that responds to the irregular shape of the site and provides frontages to both Pennant Hills Road and Felton Road. Buildings B and C located along the western edge of the through-site link have rectilinear footprints that are aligned with, and provide transition to, the neighbouring residential developments to the west. The siting of the buildings and through-site link optimise solar access across the development.	✓
Objective 3B-2		
Overshadowing of neighbouring properties is minimised during mid-winter: Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access	Building A utilises 13m of the 14.7m (30%) additional height permitted under the Infill Affordable bonus (Housing SEPP 2021), exceeding the existing LEP height plane by approximately three storeys. An equivalent number of storeys are allocated for affordable housing. Overshadowing impacts from the additional height and 15% affordable housing provision have been mitigated by locating the additional building massing in Building A toward the Pennant Hills Road frontage and limiting the height of Building B adjacent to neighbouring townhouses — maximising solar access to the existing developments to the west of the site. Building B and C remain extensively within the LEP height controls. The height increase is limited to Building A, the tower building, which is also stepped. Given the context, the shadow impacts are reasonable. Refer to Shadow Analysis Plans 1804-SD431, 1804-SD432, and 1804-SD0435.	✓

Objective	Comment	Complies
3C Public Domain Interface		
Objective 3C-1		
Transition between private and public domain is achieved without compromising safety and security	Residential units and communal open spaces are located on Level 01, or above, and are physically separated from the publicly accessible areas at ground level, including the through-site link. Residential entries are located in prominent locations within the public domain and are visible from upper level units and the ground floor commercial units. Entries will be well-lit, accessible, and secure.	✓
Objective 3C-2		
Amenity of the public domain is retained and enhanced	The amenity of the public domain is enhanced by a 1570m ² through-site link that connects Felton Road to Pennant Hills Road. This link which provides a sequence of spaces, is activated on both sides by ground floor commercial spaces, contributing to a vibrant and accessible environment.	✓
3D Communal and Public Open Space		
Objective 3D-1		
An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	The proposal offers a variety of communal open spaces, over several levels. In addition to the publicly accessible through-site link, private communal areas are located on Levels 2 and 14 of Building A, as well as on the rooftops of Buildings B and C.	✓
Design Criteria:		
1. Communal Open Space has a minimum area equal to 25% of the site	A total of 2680m ² , approximately 46% of the total site area is provided as communal open space. Of the 2680m ² of communal open space, 59% (1570m ²) is provided throughout the ground level as a series of publicly accessible spaces. The remaining 41% (1110m ²) is privately accessible communal open space, distributed proportionality across the three buildings proposed on the site.	✓
2. Developments achieve a minimum of 50% direct sunlight to the principal useable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)	Each building within the development has a roof level communal open space that meets and exceeds the minimum solar access requirements specified under this design criteria. Building B has also been provided with increased street setbacks (i.e. 15m to Felton Road) creating a mini plaza at the northern end of the through-site link which receives continuous sun throughout the winter solstice hours.	✓

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	Communal open space is provided in both publicly and privately accessible forms, offering a broad spectrum of uses—from the commercially activated through-site link to more intimate podium and rooftop terraces for residents. Across these spaces, a diverse range of amenities is offered to cater for all age groups and activities. These include intimate and larger seating areas, small and large dining zones with BBQ facilities, community vegetable gardens, and a multi-purpose communal room. Landscaping has been integrated throughout the development on all levels, to create attractive, inviting, and comfortable settings. The 120m² communal room adjoining the Level 02 podium terrace, facilitates a range of indoor–outdoor activities for residents. The room is provided with internal partitions, enabling flexibility to accommodate a range of group sizes and functions. The rooftop and podium terraces also provide valuable outlooks, with district and city views enhancing the quality of these communal spaces.	✓
Objective 3D-3 Communal open space is designed to maximise safety	At ground level, the publicly accessible communal open space will be activated by the adjacent commercial tenancies, promoting natural surveillance and activity. Passive surveillance will be further enhanced by residential units overlooking the area. All lighting within the public domain will be designed in accordance with AS/NZS 1158: Lighting for Roads and Public Spaces, ensuring appropriate illumination levels and safety standards are met. Above ground level, privately accessible communal open spaces will be separated from the public domain to ensure privacy and controlled access for residents.	✓
Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	The through-site link connecting Pennant Hills Road and Felton Road forms the core public open space within the development. It has been designed to respond to the character of the connecting streets. The link narrows at the southern, busier & noisier, Pennant Hills Road frontage, while expanding to the north to create a small plaza that engages with the quieter, sunny, Felton Road frontage. The space is commercially activated, with outdoor seating areas, integrated landscaping and water features. Eating and gathering areas cater to a variety of uses, including potential spaces for formal café seating and informal spaces for casual meetings or rest, creating an engaging, inviting, and vibrant public realm. A number of significant improvements to the public domain are also proposed within the surrounding street verges of Felton Hills Rd and Felton Rd. These include the integration of landscaping and street trees within the verges, as well as paving and footpath upgrades around the site, enhancing pedestrian amenity and strengthening connections to the Carlingford Local Centre.	✓

Objective	Comment	Complies												
3E Deep Soil Zones														
Objective 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:														
1. Deep soil zones are to meet the following minimum requirements:		Substantial deep soil zones have also been achieved through the effective use of the western side setback, allowing for meaningful landscaping and tree planting opportunities.												
<table><tr><th>Site Area</th><th>Minimum Dimension</th><th>Deep soil zone (% of site area)</th></tr><tr><td>Less than 650m²</td><td>-</td><td rowspan="4">7%</td></tr><tr><td>650m² – 1500m²</td><td>3m</td></tr><tr><td>>1500m²</td><td>6m</td></tr><tr><td>>1500m² with significant existing tree cover</td><td>6m</td></tr></table>		Site Area	Minimum Dimension	Deep soil zone (% of site area)	Less than 650m ²	-	7%	650m ² – 1500m ²	3m	>1500m ²	6m	>1500m ² with significant existing tree cover	6m	Deep soil landscaping has also been incorporated into parts of the site identified for future road widening, providing interim and long-term amenity should the widening not proceed.
Site Area	Minimum Dimension	Deep soil zone (% of site area)												
Less than 650m ²	-	7%												
650m ² – 1500m ²	3m													
>1500m ²	6m													
>1500m ² with significant existing tree cover	6m													
		The deep soil zone pre widening achieves 23% deep soil with a width greater than 3m and 16% greater than 6m wide complying with both ADG and Housing SEPP.												
		Out of the 5847m ² site area post road widening the development provides 15.1% deep soil zone with a width of 3m or greater (882m ²) and complies with the Housing SEPP's non-discretionary standards.												
3F Visual Privacy														
Objective 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:		Buildings A, B, and C have been designed to maximise outlook and minimise direct lines of sight between units in accordance with the recommendations of the ADG.												
<table><tr><th>Building Height</th><th>Habitable rooms and balconies</th><th>Non habitable rooms</th></tr><tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr><tr><td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table>		Building Height	Habitable rooms and balconies	Non habitable rooms	up to 12m (4 storeys)	6m	3m	up to 25m (5-8 storeys)	9m	4.5m	over 25m (9+ storeys)	12m	6m	Units within the tower building generally have unimpeded outlooks with all units comfortably exceeding the minimum building separation requirements.
Building Height	Habitable rooms and balconies	Non habitable rooms												
up to 12m (4 storeys)	6m	3m												
up to 25m (5-8 storeys)	9m	4.5m												
over 25m (9+ storeys)	12m	6m												
		A 6m setback to rear boundary retains adequate building separation to the neighbouring developments to the west.												
		A 10m building separation is provided through the through-site link between Building A and Buildings B & C. Units have been strategically positioned to avoid direct overlooking between buildings. For example, units in Buildings B and C overlook either the communal open space in Building A or the childcare facility, whose operating hours are not expected to significantly conflict with residential use.												
Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties		Between Buildings B & C, a 7.5m - 9m building separation is provided with privacy screens proposed to secondary living room windows to provide additional privacy and daylight control.												

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
Objective 3F-2 Site and building design elements increase privacy without compromising access to light and air balance outlook and views from habitable rooms and private open space	Unit layouts are designed to provide generous and unencumbered access to light and air. The proposed louvres, which are adjustable, are primarily to manage heat load.	✓
3G Pedestrian Access and Entries		
Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain	The development incorporates separate entry points to each building from their respective frontages. The residential entry to the Building A is prominently located at the NE corner of the site along Felton Road and is designed to provide a comfortable but sufficiently large enough lobby for the several hundred residents of Building A. The entries to Buildings B and C are located off the publicly accessible through-site link and are more intimately sized, proportionate to the scale of the buildings. All commercial spaces have been designed with active frontages with direct and primary access from the through-site link, reinforcing its role as a vibrant and engaging public space.	✓
Objective 3G-2 Access, entries and pathways are accessible and easy to identify	The building entries are positioned with a direct line of sight to and from either Felton Road or the publicly accessible through-site link. The building entries and pathways are universally accessible and will be provided with clear wayfinding to ensure ease of navigation for all users.	✓
Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations	The publicly accessible and commercially activated through-site link provides a more direct connection between Felton Road and Pennant Hills Road and will allow pedestrians within community to by-pass the noisy footpath along Pennant Hills Road.	✓

Objective	Comment	Complies
3H Vehicle Access		
Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	All vehicular access to and from the site is via the Felton Road frontage, with dedicated entries provided for the basement car park and the, at grade, waste collection and loading facilities. Vehicular access to the basement car parking levels is via a ramp located in the north-west corner of the site, which bends around an existing kiosk substation. The MRV loading facilities are contained within Building A behind a battened door, integrating the service entry point seamlessly within the façade. The vehicular entries and associated landscape treatments have been designed to sit discreetly between the main pedestrian access points along Felton Road, ensuring safety while contributing to high-quality streetscapes.	✓
3J Bicycle and Car Parking		
Objective 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 meters of a railway station or light rail stop in the Sydney Metropolitan Area - on land zoned, and sites within 400 meters of land zoned B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre	Carparking is provided in accordance with the relevant parking rates identified in both the Housing SEPP's Infill Affordable Housing Provisions and the Parramatta DCP. The development provides a total of 263 car spaces including: 81 commercial spaces 151 residential spaces 28 visitor spaces 3 car share spaces Within the total number of spaces provided 46 are accessible.	✓
The minimum car parking requirements for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed be the relevant council, whichever is less. The car parking need for a development must be provided off street.		
Objective 3J-2 Parking and facilities are provided for other modes of transport	A total of 140 secure residential bicycle spaces are provided within basement levels 02 and 03. In addition, 40 visitor and commercial bicycle parking spaces have been incorporated, including 10 employee spaces within the Level 01 basement and 30 publicly accessible visitor spaces located along the ground-level through-site link.	✓

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
Objective 3J-3 Car park design and access is safe and secure	The car parking design and access is clear, safe, and secure. Basement Level 1 is dedicated to commercial parking, while Basement Levels 2 and 3 are reserved for residential use with secure access. All lifts are provided with well-defined waiting areas on the basement levels and are protected with bollards to ensure convenience and safety for users.	✓
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised	The basement car park is fully underground. Mechanical ventilation will be provided in accordance with Australian Standards and will be fully integrated within the building design.	✓
Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised	Not applicable.	N/A
Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised	Not applicable.	N/A

Objective	Comment	Complies
PART 4 – DESIGNING THE BUILDING		
4A Solar and Daylight Access		
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space		✓
Design Criteria:		✓
1. 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	103 of 136 units (75.7%) receive direct sun for a minimum of 2 hours between 9am and 3pm in mid-winter.	
2. In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter	Not applicable.	N/A
3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter	13 of 136 units (9.6%) receive no direct sunlight between 9am and 3pm in mid-winter.	✓
Objective 4A-2 Daylight access is maximised where sunlight is limited	Units are provided with generous frontages and will be glazed to the maximum achievable within the BASIX requirements.	✓
Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months	The three sides of the tower building (Building A) have been carefully designed to optimise solar performance and mitigate glare, while maximising internal amenity and outlooks. The northern façade of the Building A tower has been carefully designed with projecting slab edges, providing protection from the summer sun. Vertical operable screens have been incorporated into the western façade of the tower to provide solar protection, particularly from the late-afternoon summer sun. The south-eastern façade enjoys strong outlooks to the city but is also impacted by noise from Pennant Hills Road. To address this, the façade is substantially glazed and incorporates a series of louvred winter gardens, which help mitigate acoustic impacts. Potential reflectivity for eastbound morning commuters has been considered and is not expected to be a material issue due to the design of the façade and the curved form of Pennant Hills Road.	✓

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
4B Natural Ventilation		
Objective 4B-1 All habitable rooms are naturally ventilated	All habitable rooms will be naturally ventilated via a combination of sliding and awning windows and doors.	✓
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation	The depths of single aspect apartments are designed to support cross ventilation and airflow with all units being naturally ventilated.	✓
Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	The project achieves natural ventilation for all units. 6 out of 9 units (65%) on the typical floor of the tower building are corner units.	✓
Design Criteria: 1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of a 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	Within the first nine storeys of the development, 53 out of 72 units (approximately 73.6%) are naturally cross-ventilated. All units in Buildings A and B are cross-ventilated corner units. On a typical floor of the tower building (Building A), 6 out of 9 units (approximately 65%) are cross-ventilated corner units.	✓
2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	Not applicable.	N/A

Objective	Comment	Complies												
4C Ceiling Heights														
Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access		✓												
Design Criteria: Measured from finished floor level to finished ceiling level, minimum ceiling heights are:	The following floor to floor heights have been provided:	✓												
Building A: - Level 00: 5.5m (commercial) with 4.5m clear height - Level 01: 4.6m (childcare) with 3.6m clear height - Level 02 - 17: 3.2m (residential) Building B: - Level 00: 3.9m - 5.1m (commercial) - Level 01 - 03: 3.2m (residential) Building C: - Level 00: 3.9m - 4.5m (commercial) - Level 01 - 03: 3.2m (residential) Generally, a minimum floor to floor height of 3.2m has been provided for the residential units. This ensures a minimum floor to ceiling height within units of 2.7m.														
<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 rooms</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 use 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	Minimum ceiling height for apartment and mixed-use buildings		Habitable rooms	2.7m	Non-habitable rooms	2.4m	For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30-degree minimum ceiling slope	If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use		
Minimum ceiling height for apartment and mixed-use buildings														
Habitable rooms	2.7m													
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For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area													
Attic spaces	1.8m at edge of room with a 30-degree minimum ceiling slope													
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use													
Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms	Ceiling heights comply with the recommendations of the ADG. A minimum floor to floor height of 3.2m has been provided.	✓												
Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building	To support flexible use over time the ground floor commercial spaces and residential foyers have been provided with the following increased floor to floor heights. - Building A: 5.5m - Building B: 3.9m - 5.1m - Building C: 3.9m - 4.5m	✓												

4.4.1

adg compliance table cont'd

Objective	Comment	Complies										
4D Apartment Size and Layout												
Objective 4D-1												
The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity		✓										
Design Criteria:												
1. Apartments are required to have the following minimum internal areas:	All apartments exceed the minimum internal areas required by this criteria.	✓										
<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>			Apartment Type	Minimum Internal Area	Studio	35m²	1 bedroom	50m²	2 bedroom	70m²	3 bedroom	90m²
Apartment Type	Minimum Internal Area											
Studio	35m²											
1 bedroom	50m²											
2 bedroom	70m²											
3 bedroom	90m²											
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												
2. 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	The proposal provides a high level of glazing to all units. The proposed glass area for habitable rooms is in accordance with, or exceeds, the requirements of the NCC.	✓										
Objective 4D-2												
Environmental performance of the apartment is maximised		✓										
Design Criteria:												
1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	The building has been designed to comply with the requirements of this criteria.	✓										
2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	A total of 125 out of 136 units (approximately 92%) achieve a maximum depth of less than 8m from a window. 11 units (comprising two types) exceed the 8m maximum depth by less than 1 m. While these units could be modified to achieve strict compliance, doing so would result in living spaces that are less generous and more difficult to furnish. Notably, 10 of the 11 units are adaptable units. They will benefit significantly from the additional circulation space provided by the slightly increased depth.	✓										

Objective	Comment	Complies															
Objective 4D-3																	
Apartment layouts are designed to accommodate a variety of household activities and needs		✓															
Design Criteria:																	
1. Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)	All master bedrooms are sized to meet or exceed this design criteria.	✓															
2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	All bedrooms are sized to meet or exceed this design criteria.	✓															
3. Living rooms or combined living/ dining rooms have a minimum width of:	All living rooms have a minimum width of 3.6m or 4m as required under this design criteria.	✓															
3.6m for studio and 1-bedroom apartments 4m for 2 and 3 bedroom apartments																	
4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	Not applicable.	N/A															
4E Private Open Space and Balconies																	
Objective 4E-1																	
Apartments provide appropriately sized private open space and balconies to enhance residential amenity		✓															
Design Criteria:																	
1. All apartments are required to have primary balconies as follows:	All units are provided with primary balconies that meet or exceed this design criteria.																
<table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom</td><td>10m²</td><td>2m</td></tr><tr><td>3 bedroom</td><td>12m²</td><td>2.4m</td></tr></table>		Dwelling Type	Minimum Area	Minimum Depth	Studio	4m²	-	1 bedroom	8m²	2m	2 bedroom	10m²	2m	3 bedroom	12m²	2.4m	
Dwelling Type	Minimum Area	Minimum Depth															
Studio	4m²	-															
1 bedroom	8m²	2m															
2 bedroom	10m²	2m															
3 bedroom	12m²	2.4m															
The minimum balcony depth to be counted as contributing to the balcony area is 1m																	
2. 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	Not applicable.	N/A															

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents	All balconies connect directly to the primary living areas and are generally located to maximise solar aspect and/or outlook.	✓
Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	The balcony design is a key element of the overall building composition and architectural response to the site. With the exception of single-aspect units, the primary balconies for all units are located at the corners of the building, forming a prominent part of its expression. Within the tower building, secondary balconies are provided off the main bedrooms; these are slightly recessed and repeat twice on each of the three facades, articulating the overall massing into a series of tripartite elevations. The balconies are generally contained within the main building line but have been treated strategically in a variety of ways to enhance performance and amenity, including winter gardens, adjustable screens and projecting planters.	✓
Objective 4E-4 Private open space and balcony design maximises safety	Typically, balcony balustrade heights are 1100mm.	✓
4F Common Circulation and Spaces		
Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments		✓
Design Criteria: 1. The maximum number of apartments off a circulation core on a single level is eight	The maximum number of apartments off a circulation core is 9 units. This occurs on levels 04 – 13. These units are serviced by a triangular service core containing 3 lifts. The corridor that wraps around the core is open at two of the three corners, providing direct access to natural daylight throughout the corridor. As such the arrangement is considered to achieve a high level of amenity and deliver the desired outcomes of the ADG.	
2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	Building A has a total number of 118 units and is serviced by 3 lifts. As such, the maximum number of units sharing a lift is less than 40.	✓

Objective	Comment	Complies										
Objective 4F-2 Common circulation spaces promote safety and provide social interaction between residents	The corridors have been designed to provided, not only a high level of amenity but also excellent natural light and ventilation. The corridor in Building A is looped around a triangular core with openings at two of the three corners providing outlooks to the NW & SW. All points within the corridor have a sightline to one or both of these openings ensuring access to daylight and ventilation throughout the corridor. The openings at each corner are treated with glass balustrades and low-height planters, maximising outlook and natural light while incorporating biophilic landscape features into the building composition. Similarly, corridors of Buildings B and C are provided with openings on both the east and western frontages. Clear sightlines are available along the length of each corridor. No tight corners or spaces are proposed. Legible signage will be provided.	✓										
4G Storage												
Objective 4G-1 Adequate, well designed storage is provided in each apartment		✓										
Objective 4G-1 1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:	All units are provided with storage in accordance with the requirements of this design criteria. At least 50% of the required storage volume is provided with each apartment. Additional storage cages for all of the units are provided within the basement.	✓										
<table><tr><th>Dwelling Type</th><th>Storage Size Volume</th></tr><tr><td>Studio</td><td>4m³</td></tr><tr><td>1 bedroom</td><td>6m³</td></tr><tr><td>2 bedroom</td><td>8m³</td></tr><tr><td>3 bedroom</td><td>10m³</td></tr></table>			Dwelling Type	Storage Size Volume	Studio	4m³	1 bedroom	6m³	2 bedroom	8m³	3 bedroom	10m³
Dwelling Type	Storage Size Volume											
Studio	4m³											
1 bedroom	6m³											
2 bedroom	8m³											
3 bedroom	10m³											
At least 50% of the required storage is to be located within the apartment												
Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments	Each apartment has convenient and accessible additional storage space within the basement, with over 50% of the minimum required area located within the apartments.	✓										

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
4H Acoustic Privacy		
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout	The buildings are designed to minimise units facing and impacting on each other.	✓
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments	Winter gardens proposed within the units of Building A fronting Pennant Hills Road are proposed to assist with acoustic amenity and noise mitigation.	✓
4J Noise and Pollution		
Objective 4J-1 In noisy or hostile environments, the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	A detailed acoustic assessment of the project was undertaken by a suitably qualified acoustic consultant, and the recommendations of their analysis have been incorporated into the design. The Acoustic Report prepared by Rodney Stevens Acoustics Pty Ltd confirms that the proposed development will comply with all relevant noise and acoustic standards. The report also provides a series of recommendations and specifications to be implemented during the documentation stage, including requirements for insulation, glazing types, and other measures necessary to ensure compliance with applicable acoustic performance standards.	✓
Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	As above – the detailed acoustic report includes recommendations for noise shielding which have been incorporated into the design.	✓
4K Apartment Mix		
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types and into the future	A mix of apartment types is provided including: 20 x 1 bedroom units (15%) 70 x 2 bedroom units (51%) 45 x 3 bedroom units (33%) 1 x 4 bedroom units (1%) Of the total 136 units, 25 are Affordable Housing units 24 are Adaptable units 28 are LHA Sliver Level Liveable units	✓

Objective	Comment	Complies
4L Ground Floor Apartments		
Objective 4L-1 Street frontage is maximised where ground floor apartments are located	Not applicable.	N/A
Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	Not applicable.	N/A
4M Facades		
Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area	The design of the project is founded on a contemporary architectural approach, utilising a limited yet durable and sustainable palette of external materials. These materials are employed to articulate and differentiate the various elements of the buildings, with bronze-framed glazing serving as the primary material and concrete providing a solid counterbalance. The palette accommodates a diverse range of forms and expressions, including precast concrete walls, projecting slabs, window fenestration, louvres, awnings, and screens.	✓
Objective 4M-2 Building functions are expressed by the facade	The composition of the building, an assemblage of forms, balances and refines the bulk of the buildings through the management of their proportions and the expression of each portion as a stand-alone element, with an emphasis on identifying the various functions from entry lobbies to individual apartments	✓
4N Roof Design		
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	The roof of Building A (the tower) is integrated into the overall massing and architectural articulation of the development. Buildings B and C feature roof elements that provide shelter to the rooftop communal open spaces and incorporate clerestory windows to enhance natural daylight and ventilation to the upper-level dwellings.	✓

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	Approximately 30–40% of the roof areas across each of the three buildings have been allocated for communal open space, maximising opportunities for outlook and amenity.	✓
Objective 4N-3 Roof design incorporates sustainability features	Onsite renewable energy generation is supported through the roof design, with the installation of PV arrays on the roofs of each of the buildings, with an approximate total capacity of 49kW.	✓
4O Landscape Design		
Objective 4O-1 Landscape design is viable and sustainable	The landscape design has been developed to respond to the site's elevated location along the Pennant Hills Road ridge and the development's varying sub-climatic conditions, ranging from the gully-like character of the through-site link to the exposed, plateau-like nature of the rooftop terraces. The design is primarily based on native and indigenous plant species, incorporating substantial tree planting, and indigenous and edible species, providing opportunities to educate residents and the community about Australian flora and traditional Aboriginal edible and medicinal plants.	✓
Objective 4O-2 Landscape design contributes to the streetscape and amenity	The project integrates landscaping into the street verges of both Pennant Hills Road and Felton Road, enhancing the public realm and reinforcing the development's connection to the surrounding streetscape. Upgrades to footpath connections improve continuity with the existing pedestrian network, creating a seamless and accessible public frontage. Planting has been designed to establish a generous avenue of trees encircling the building, guiding and inviting people to it and the through-site link. Additional planters are located throughout the through-site link, contributing to visual amenity, pedestrian comfort, and the overall quality of the public domain. Landscaping has been incorporated into parts of the site identified for future road widening, providing interim and long-term amenity should the widening not proceed.	✓

Objective	Comment	Complies
4P Planting on Structures		
Objective 4P-1 Appropriate soil profiles are provided	All planter beds on structures will include soil volumes capable of supporting a variety of plant types and sizes.	✓
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	The species selection, which is predominantly native and indigenous, has been selected both for its suitability to the site (including both location and planter size) and to ensure the development delivers a successful, convincing, varied and beautiful landscape setting and character.	✓
Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	Substantial and appropriate planting is incorporated within the planters forming part of the ground-floor through-site link and within the communal open spaces on the podium and roof levels.	✓
4Q Universal Design		
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members	The proposed development includes 24 (17.6%) adaptable apartments. These units incorporate the LHA Silver Level universal design features in their 'pre-adapted' configuration. Additionally, a further 28 units incorporate LHA Silver Level features, providing a total of 52 (38%) units with Universal Design Features.	✓
Objective 4Q-2 A variety of apartments with adaptable designs are provided	As stated above, 24 units (17.6%) are designed to be adaptable with 24 accessible parking residential parking spaces provided. Adapting these units will require minimal structural modifications and will not compromise residential amenity.	✓
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	Apartment layouts are designed to be flexible, allowing future occupants to adapt spaces according to their needs. For instance, 2+ bedroom units can be configured to include a separate television room, study, or home office. Living areas are designed to accommodate multiple simultaneous activities, supporting functional and adaptable use.	✓

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
4R Adaptable Reuse		
Objective 4R-1 New additions to existing buildings are contemporary and complementary and enhance and area's identity and sense of place	Not applicable.	N/A
Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse	Not applicable.	N/A
4S Mixed Use		
Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	The proposed development contributes positively to the public domain by providing an active street frontage via the commercial premises and a publicly accessible through-site link connecting Felton Road and Pennant Hills Road.	✓
Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	Residential building entrances are located either on Felton Road or accessed via the through-site link. These entry lobbies will be clearly defined through architectural detailing and supported by appropriate wayfinding signage. Vehicular access and parking areas are separated from the residential entrances to ensure safety and clarity of movement throughout the site. Privately accessible communal open spaces and landscaped areas are provided on Levels 02, 03, 04, and 14, and are designed to operate independently without impeding other functional uses within the development.	✓
4T Awnings and Signage		
Objective 4T-1 Awnings are well located and complement and integrate with the building design	Awnings are typically most effective in streetscapes with a continuous commercial frontage, such as King Street, Newtown. While this site is well-connected to the local centre, it does not have a traditional continuous shopfront context, and the neighbouring sites to the west, which transition to residential use, do not provide awnings. In response, the design incorporates cantilevered podiums and building elements that provide shelter through the site and clearly mark the entry points to residential foyers. These elements complement the overall building design, offering functional protection while maintaining a clear and legible connection to the surrounding centre.	✓

Objective	Comment	Complies
4U Energy Efficiency		
Objective 4U-1 Development incorporates passive environmental design	The development will incorporate passive environmental design principles to achieve a 7-star NatHERS average.	✓
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer	Passive design strategies will include: • Installation of PV panels on the roof. • Integration of winter gardens along Pennant Hills Road • Tree canopy coverage along the site frontage to provide shade and mitigate heat. • Landscaping design and extensive planting to reduce urban heat effects. • Material and finishes selections that are responsive to the local climate.	✓
Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation	53 units out of 72 units (73.6%) within the first nine storeys are naturally cross ventilated. Adequate natural ventilation is provided to habitable rooms and common circulation corridors to minimise reliance on mechanical systems.	✓
4V Water Management and Conservation		
Objective 4V-1 Potable water use is minimised	Water efficiency measures will be implemented as per the requirements of the project's BASIX Certificate. A 25-kL rainwater tank has incorporated into the onsite stormwater detention system for irrigation across the site, and water-efficient appliances will be utilised throughout the development. Drought-tolerant, low-water-use plants will be incorporated into the landscaped areas.	✓
Objective 4V-2 Urban stormwater is treated on site before being discharged	An on-site detention tank has been provided. The project's stormwater management system will be in accordance with relevant regulations.	✓
Objective 4V-3 Flood management systems are integrated into site design	Not applicable.	N/A

4.4.1

adg compliance table cont'd

Objective	Comment	Complies
4W Waste Management		
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity or residents	Waste storage and presentation facilities are located within Building A on Level 00, directly adjacent to the loading dock which is accessed via Felton Road. The loading dock and waste rooms are fully concealed from street view. The design provides bin rooms on each of the residential levels with a waste chute for general waste into the services core of Building A. The design allows for bins to be easily moved between storage rooms and collection points without interfering with resident amenity and the public domain.	✓
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	Source separation and recycling systems are provided to minimise domestic waste. The proposed development is capable of incorporating alternative waste disposal such as compost bins.	✓
4X Building Maintenance		
Objective 4X-1 Building design detail provides protection from weathering	The proposed building material selection, building design details and roof design will provide appropriate protection from weathering. Painted and applied finishes are minimised.	✓
Objective 4X-2 Systems and access enable ease of maintenance	The buildings have been designed to minimise the need for external maintenance of the façade. Direct access to all maintenance areas is provided, notably basement & roof level services. Convenient access is also ensured to all communal open spaces.	✓
Objective 4X-3 Material selection reduces ongoing maintenance costs	The design of the project utilises a limited but durable palette of exterior materials, being primarily off form concrete, glass and bronze powder coated metal. All materials have been selected for the long-term durability and low maintenance offsetting the embodied energy of their production.	✓

