

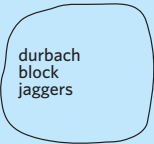
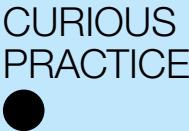
SEPP65 Design Statement

East End Stage 3 & 4
Hunter, Morgan, Laing, King and Newcomen Streets,
Newcastle

Country: Awabakal

Prepared for
IRIS

Issued
20 March 2024



SJB - PRECINCT / BUILDING 3W/ BUILDING 4S
DURBACH BLOCK JAGGERS - BUILDING 3E
CURIOUS PRACTICE - BUILDING 4N

From a moment to a metropolis, design and planning for the built environment.

SJB, Durbach Block Jaggers and Curious Practice acknowledge the Traditional Custodians of the land upon which we live, practice, and visit, and pay our respects to Elders past, present, and emerging. We recognise the continuous engagement and caring of the lands, waters, and skies by First Nations peoples for time immemorial.

We support the Uluru Statement from the Heart and accept its invitation to walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people toward a better future.

ARCHITECTS IN COLLABORATION

SJB - PRECINCT / BUILDING 3W/ BUILDING 4S

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DURBACH BLOCK JAGGERS- BUILDING 3E

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CURIOUS PRACTICE - BUILDING 4N

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Prepared by: SJB/CP/DBJ
Checked by: WG/RV



Certified Management Systems

ISO 9001:2015	Quality Management System
ISO 45001:2018	Occupational Health & Safety Management System
ISO 14001:2015	Environmental Management System

Contents

Precinct Summary	1
Building 3E (DBJ)	2
Introduction	3
SEPP65 Design Quality Principles	4
ADG Response Table	5
Building 3W (SJB)	6
Introduction	7
SEPP65 Design Quality Principles	8
ADG Response Table	9
Building 4N (CP)	10
Introduction	11
SEPP65 Design Quality Principles	12
ADG Response Table	14
Building 4S (SJB)	14
Introduction	15
SEPP65 Design Quality Principles	16
ADG Response Table	17

Design Statement

We are incredibly proud to present our vision for the remaining stages of Newcastle East End. Our vision for the project is rooted in a fine grain response that is specific and unique. To this end our submission is a joint effort, by SJB Architects, Durbach Block Jagers and Curious Practice. We believe that the multiplicity of hands and minds can deliver a remarkable built form outcome, deserved by the location and community.

For more than 10 years we have been thinking about the redevelopment of this parcel of Newcastle, and of the need to balance 'newness' with context. The scale of redevelopment has the potential of simply delivering 'big' architecture - robbing the place of its sense of specialness and unique character. However, the built outcome of Stage 1 resists this urge, instead dividing the site into smaller, more scaled development parcels, enabling multiple architectural offices to actively engage in the delivery of buildings. As a result, the built outcome has diversity that responds to specific site considerations to deliver a diversity of housing typologies and opportunities. This is not the usual one size fits all outcome of large-scale urban renewal projects. Instead nuance and difference have been allowed to thrive.

For Stages 3 and 4 we propose to extend this thinking, through a collaboration across SJB, DBJ and Curious Practice. We have divided the site based on experience, expertise, and scale, while concurrently forming a joint urban design strategy enabling realisation of Councils Stairway to heaven ambitions. Through a series of minor modifications, we have shifted the approved built form massing to accommodate the view corridor along Market Street to Christ Church Cathedral but to also 'twist' the city's geometry - acknowledging and accommodating the slightly misaligned city grid. These subtle changes allow the built form to embrace the geography of place while delivering more residential dwellings with views to the harbour.

While we congratulate the City on its ambitions for the stairway to heaven. Big strategic moves like this are important to realise opportunistically. It is our belief that the visual corridor connecting the harbour edge to the Cathedral, with a landscape foreground (already able to be understood now that the carpark has been removed) is infinitely more important than a single straight line pedestrian connection via a set of stairs. We believe that the potential for public benefit is in revealing the Cathedral to the water's edge, and in the opportunity to realise a significant landscape intervention, allowing vertical pedestrian connection to the Cathedral in a more nuanced manner - to accommodate lift access to achieve equitable access and physical connections in locations across King Street that align with the heritage openings.

We can imagine an outcome where Country is allowed to resurface, indigenous plantings accommodated and thriving along the north facing slope of East End. It is an idea to accommodate public parking and facilities below a landscaped bowl, designed for sitting and viewing across the majestic harbour and river mouth.

It is our ambition to deliver a truly remarkable city outcome. This project has the potential to change the way renewal projects are imagined and delivered in Australia, while concurrently delivering housing diversity, public benefit, and commercial profit. Yes, we can have it all. We welcome the opportunity to realise this ambition.



Buildings 4N & 3E viewed from corner of Hunter & Morgan Streets

Design Principles

Fabric of time and place

There are layers of architectural periods represented throughout existing buildings in Newcastle. In addition to the representation of a period, the existing buildings contribute strongly to the character of Newcastle - a coastal town with a rich history. There are strong precedents for the use of durable materials, particularly masonry, as well as many examples for the use of colour on building facades, providing a point of difference and reinforcing Newcastle's character and coastal location.

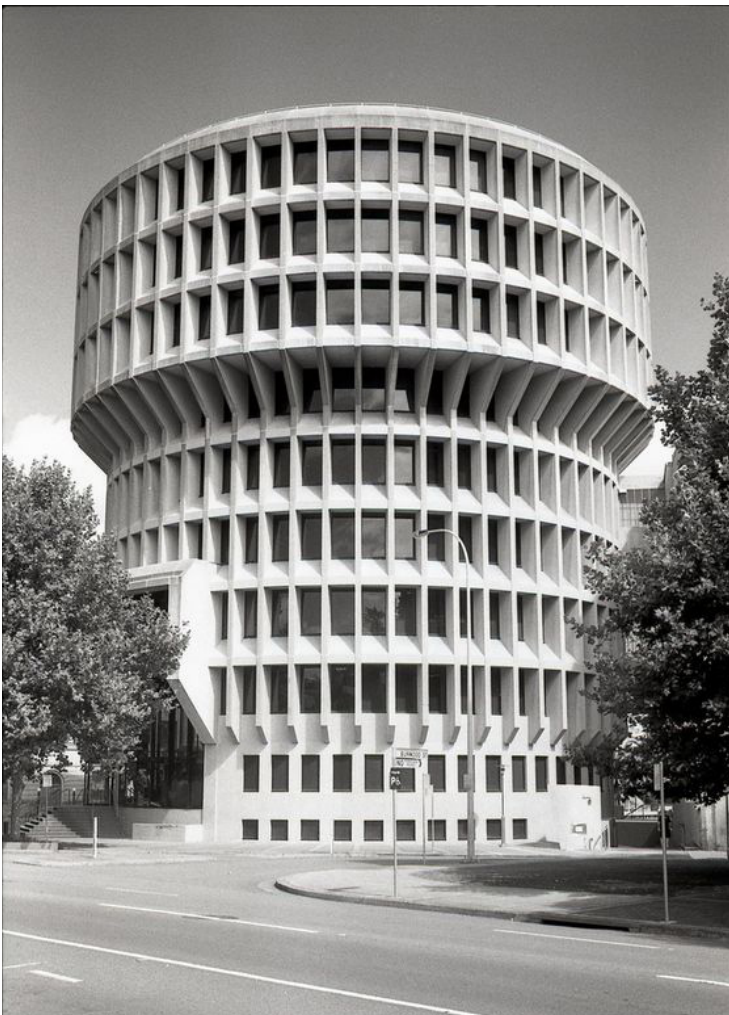
New buildings should reinforce the town centre's unique character rather than contrast against it. Materials should be durable, colouring integral, and detailing referencing existing built fabric whilst speaking of their own time; adding to the layers of architectural style.

Grain at ground

New development aims to maximise ground plane activation along Hunter, Morgan and Laing Streets. To Newcomen and King Streets, where the geography is steep, we aim to reflect the typography of the stone escarpment, with solid base buildings incorporating deep reveals.

The lower levels of heritage buildings will reinstate traditional shopfronts and be complimented by considered awnings, signage and lighting that contribute to a unique, vibrant shopping precinct.

The new buildings will incorporate a fine grain of shopfronts that continues the rhythmic nature of traditional retail spaces.



Design Priniciples

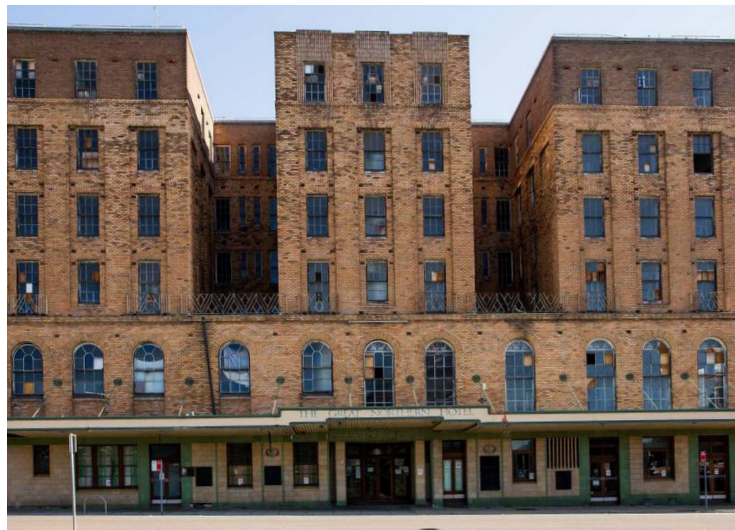
Quietness and difference

We see the city as a piece of woven fabric rather than a collection of broaches. Each building should play its part - collaborating to make the whole richer rather than standing out for the sake of prominence. This is not to say buildings should be bland or boring, rather they should be nuanced and unique, but acknowledge and contribute to the broader urban form of the city.



Holding the street

Newcastle is unique amongst Australian cities. In the East End buildings are built directly to the street with few setting back above a street wall. Whether tall or small, buildings are direct - they touch the ground and the sky. Our aim is to respect this condition, to mangle the street interface to deliver a high-quality pedestrian environment, while playing with the skyline.



Playful skyline

Newcastle East's skyline responds to the sloping topography of its streets and is characterised by the detailed parapets of the historical buildings. The varied skyline is highly visible from many vantage points around the city and is also experienced from within the immediate streets when moving through them.

The new precinct should contribute positively to the existing playful skyline both at a building form scale and through an interpretation of finely detailed parapets.



Colour

Newcastle is not a grey city. The buildings of the East End are colourful and playful. From the crisp white of the Colonial Mutual Life building, to the warmth of the T andG render, the sandstone of the Post Office or the Ship Inn and the fine brick detailing of the Municipal Building there is joy in both colour and detailing. We aim for this new collection of buildings to contribute equally.



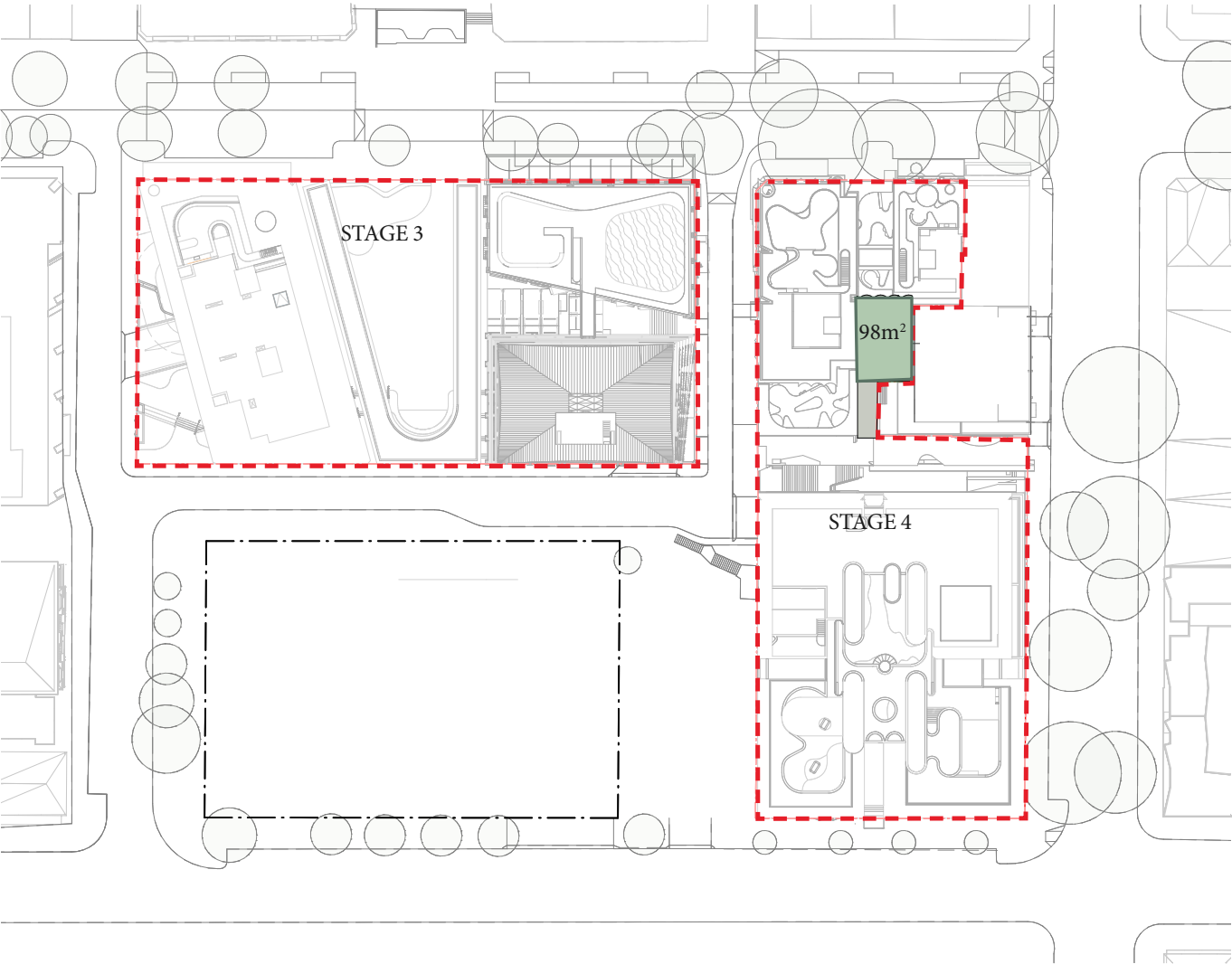
Precinct

Deep Soil

The minimum deep soil requirements are not achieved, however as outlined in the checklist achieving the design criteria may not be possible on some sites including where:

- The location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres)
- There is 100% site coverage or non-residential uses at ground floor level
- Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure

The site is located in the city which is a dense urban environment. The project proposes extensive urban landscape, tree canopy, rooftop landscape and public space. Deep soil is associated with 4N to provide a buffer between developments.

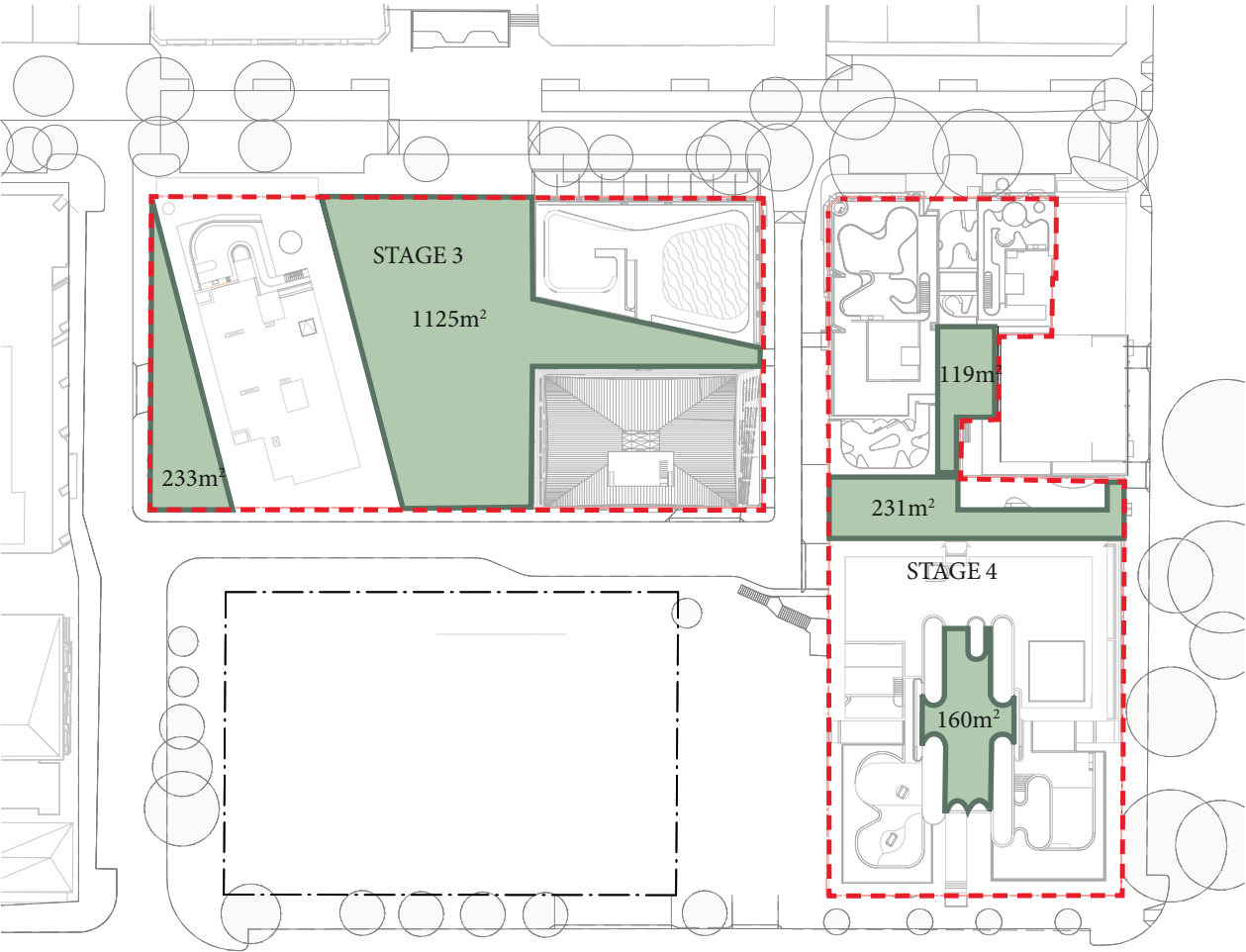


DEEP SOIL					
STAGE 3 SITE AREA:	3393m²	STAGE 4 SITE AREA:	3141m²	STAGE 3+4 SITE AREA:	6534m²
STAGE 3 DEEP SOIL (min 6m)	0m²	STAGE 4 DEEP SOIL (min 6m)	98m²	STAGE 3+4 DEEP SOIL (min 6m)	98m²
STAGE 3 DEEP SOIL %	0%	STAGE 4 DEEP SOIL %	3.1%	STAGE 3+4 DEEP SOIL %	1.5%

Precinct

Open Space

The two stages have been designed to provide generous open space, a large proportion of this is allocated to public space, a benefit to both the public and residents. Both 4S and 4N have secondary (private) pockets of open space associated with courtyards to improve the amenity of the apartments, and common areas.



OPEN SPACE

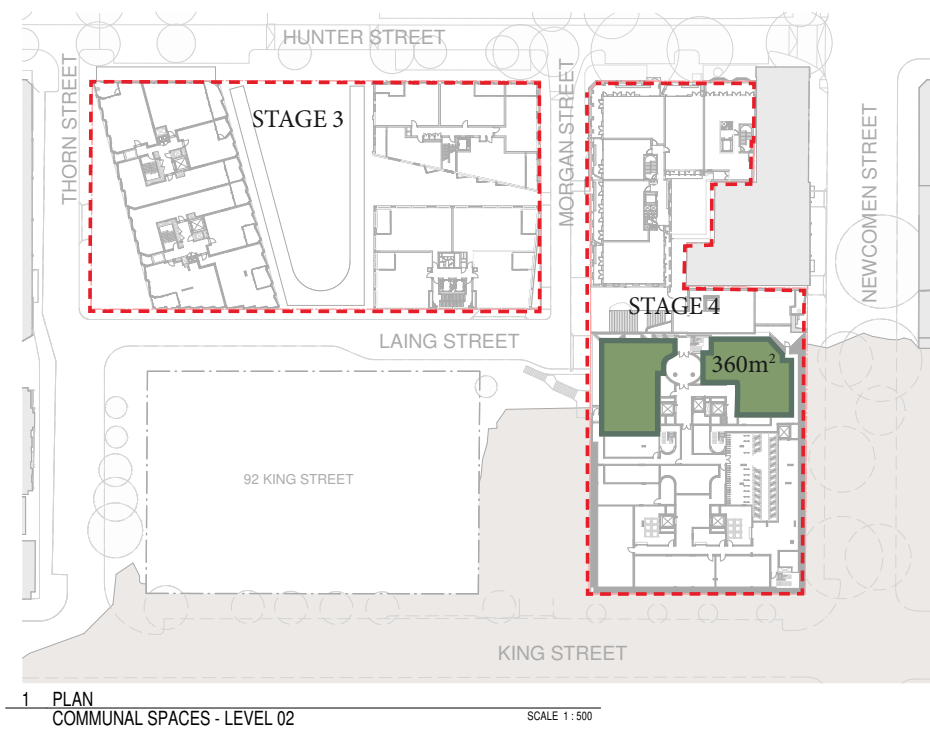
STAGE 3 SITE AREA:	3393m²	STAGE 4 SITE AREA:	3141m²	STAGE 3+4 SITE AREA:	6534m²
STAGE 3 OPEN SPACE	1358m²	STAGE 4 OPEN SPACE	510m²	STAGE 3+4 OPEN SPACE	1868m²
STAGE 3 OPEN SPACE %	40%	STAGE 4 OPEN SPACE %	16%	STAGE 3+4 OPEN SPACE %	28.6%

Precinct

Communal Open Space

The two stages have been designed to provide occupants with excellent amenity through a diverse collection of communal and open space. As the site is located in the city, a large proportion is allocated to public space, a benefit to both the public and residents. The residents communal spaces are located in, and on the rooftops of the buildings providing space that is a retreat from the city.

Communal Space



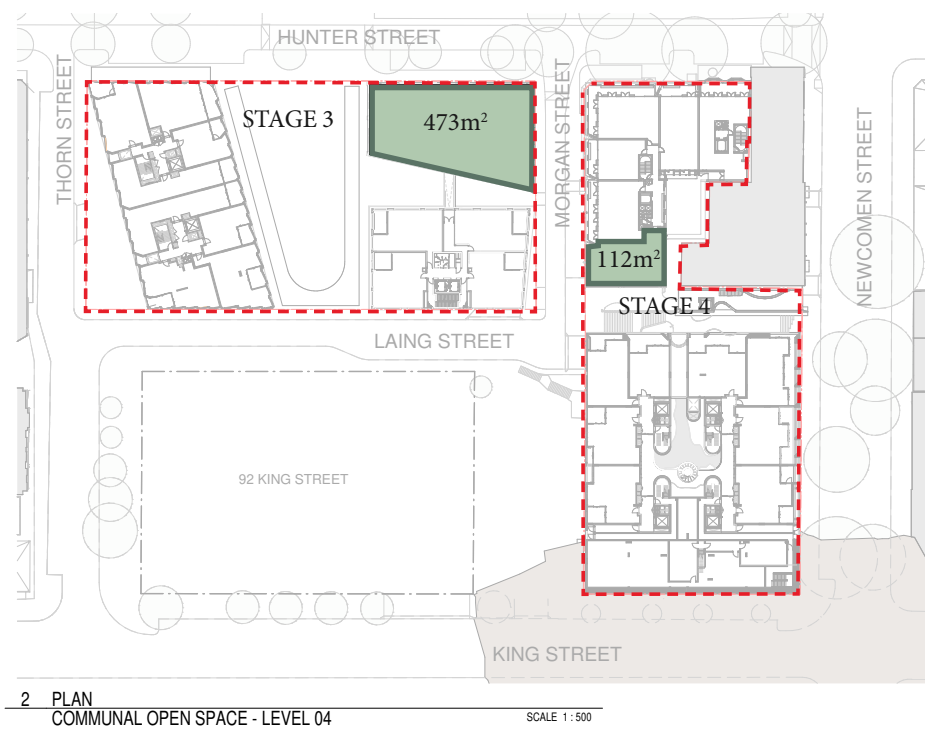
COMMUNAL OPEN SPACE

COMMUNAL SPACE

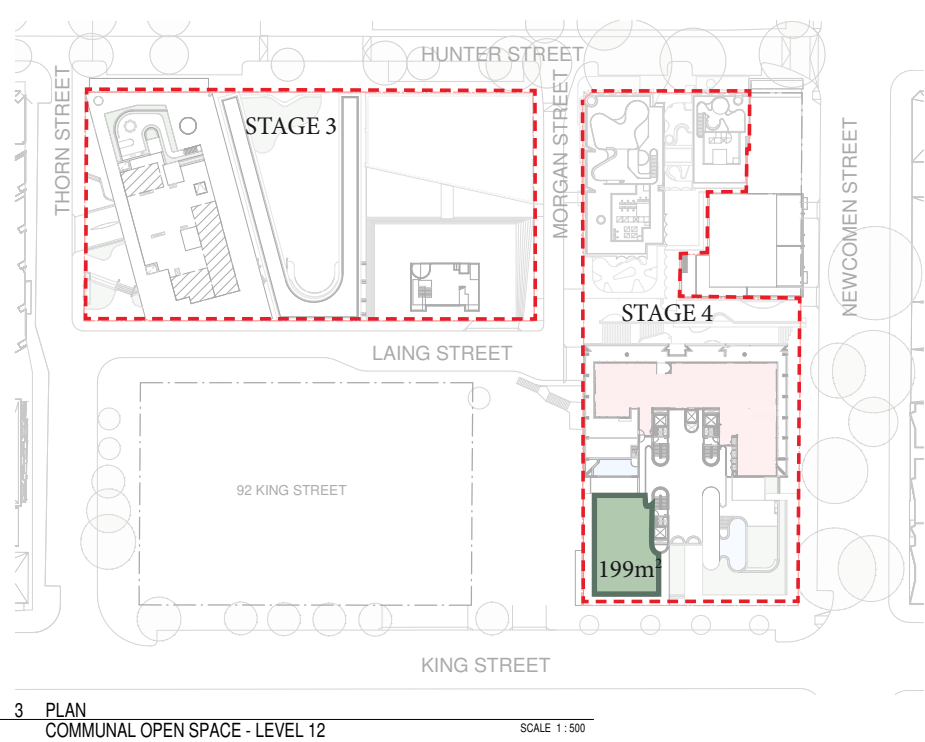
STAGE 3 SITE AREA:	3393m²	STAGE 4 SITE AREA:	3141m²	STAGE 3+4 SITE AREA:	6534m²
STAGE 3 COMMUNAL OPEN SPACE	473m²	STAGE 4 COMMUNAL OPEN SPACE	311m²	STAGE 3+4 COMMUNAL OPEN SPACE	784m²
STAGE 3 COMMUNAL OPEN SPACE %	13.9%	STAGE 4 COMMUNAL OPEN SPACE %	10%	STAGE 3+4 COMMUNAL OPEN SPACE %	12%
STAGE 3 COMMUNAL SPACE	-	STAGE 4 COMMUNAL SPACE	360m²	STAGE 3+4 COMMUNAL SPACE	360m²
STAGE 3 COMMUNAL SPACE %	-	STAGE 4 COMMUNAL SPACE %	11.5%	STAGE 3+4 COMMUNAL SPACE %	5.5%
STAGE 3 TOTAL CS + COS	473m²	STAGE 4 TOTAL CS + COS	671m²	STAGE 3+4 TOTAL CS + COS	1144m²
STAGE 3 TOTAL CS + COS %	13.9%	STAGE 4 TOTAL CS + COS %	21.4%	STAGE 3+4 TOTAL CS + COS %	17.5%

Precinct

Communal Open Space



Communal Open Space

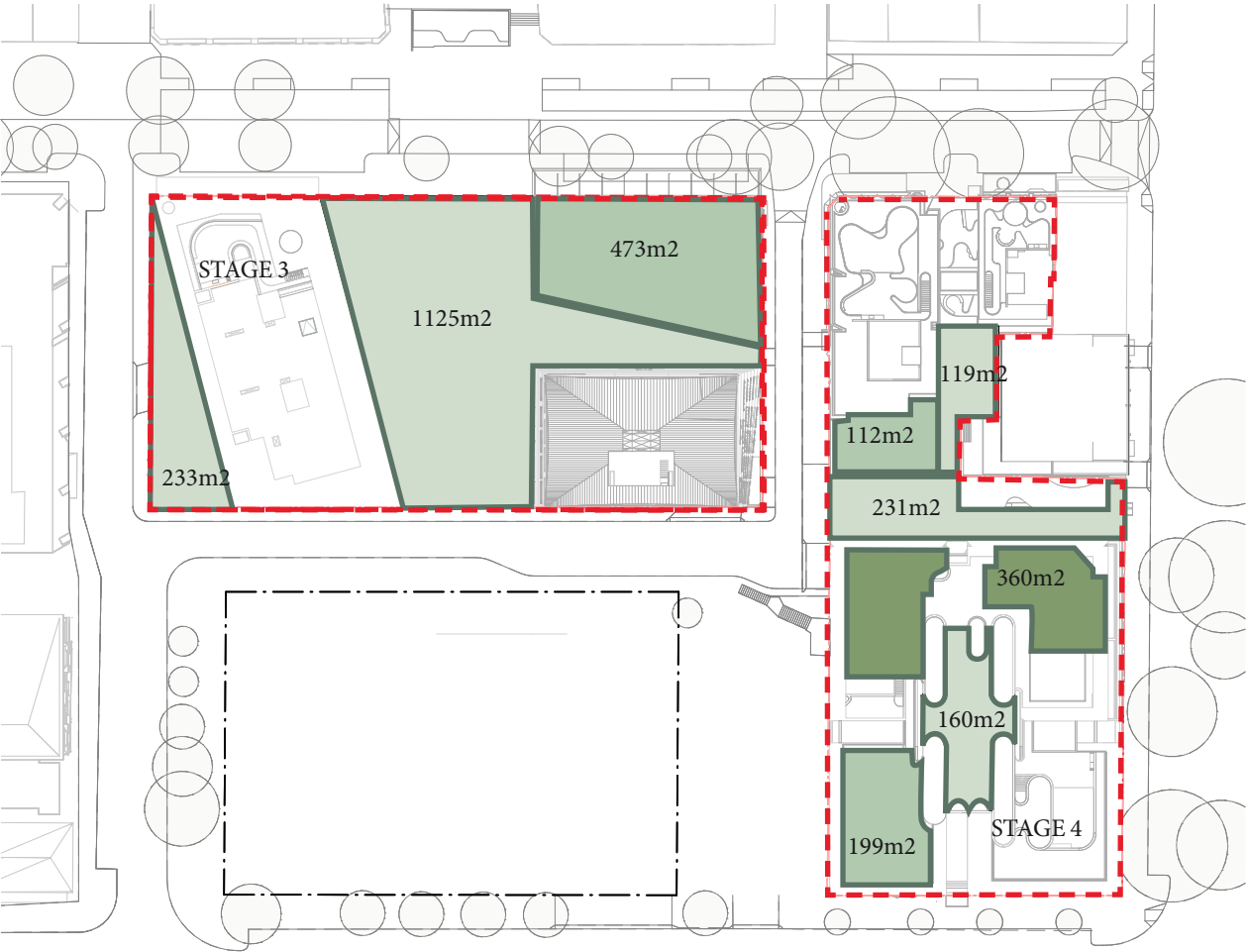


Precinct

Communal and Open Space

The two stages have been designed to provide occupants with excellent amenity through a diverse collection of communal and open space. As the site is located in the city, a large proportion is allocated to public space, a benefit to both the public and residents. The residents communal spaces are located in, and on the rooftops of the buildings providing space that is a retreat from the city.

When considered as an orchestrated set, the space provided to residents as a consequence of Stage 3 and Stage 4 is over 3000sqm of usable open and communal area - this represents 46% of the site.



COMMUNAL + OPEN SPACE OVERLAY

TOTAL - 3012m² (46% of the site)

STAGE 3 SITE AREA:	3393m ²	STAGE 4 SITE AREA:	3141m ²	STAGE 3+4 SITE AREA:	6534m ²
STAGE 3 COMMUNAL OPEN SPACE	473m ²	STAGE 4 COMMUNAL OPEN SPACE	311m ²	STAGE 3+4 COMMUNAL OPEN SPACE	784m ²
STAGE 3 COMMUNAL OPEN SPACE %	13.9%	STAGE 4 COMMUNAL OPEN SPACE %	10%	STAGE 3+4 COMMUNAL OPEN SPACE %	12%
STAGE 3 COMMUNAL SPACE	-	STAGE 4 COMMUNAL SPACE	360m ²	STAGE 3+4 COMMUNAL SPACE	360m ²
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STAGE 3 OPEN SPACE %	40%	STAGE 4 OPEN SPACE %	16%	STAGE 3+4 OPEN SPACE %	28.6%

The stepped tower, the block and the heritage. All connected by a landscaped Market Plaza.



Market Square - Newcastle East End

Prepared to accompany the Development Application submitted to Council

20 March 2024

Project Address

East End Stage 3 & 4 - Hunter, Morgan, Laing, King and Newcomen Streets, Newcastle

Prepared on behalf:

IRIS

Prepared by:

Durbach Block Jaggers Architects NSW

Verification of Qualifications

Neil Durbach & David Jaggers are registered as Architects in New South Wales and are enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.

Their registration Numbers are NSW Reg No. 5850, NSW Reg No. 9999

Statement of Design

Durbach Block Jaggers have been responsible for the design of the project since its inception and have worked with related professionals and experts in respect of the matter. The project has been designed to provide a development that is respectful of local planning and design controls and responds to the nine design quality principles of SEPP No. 65.

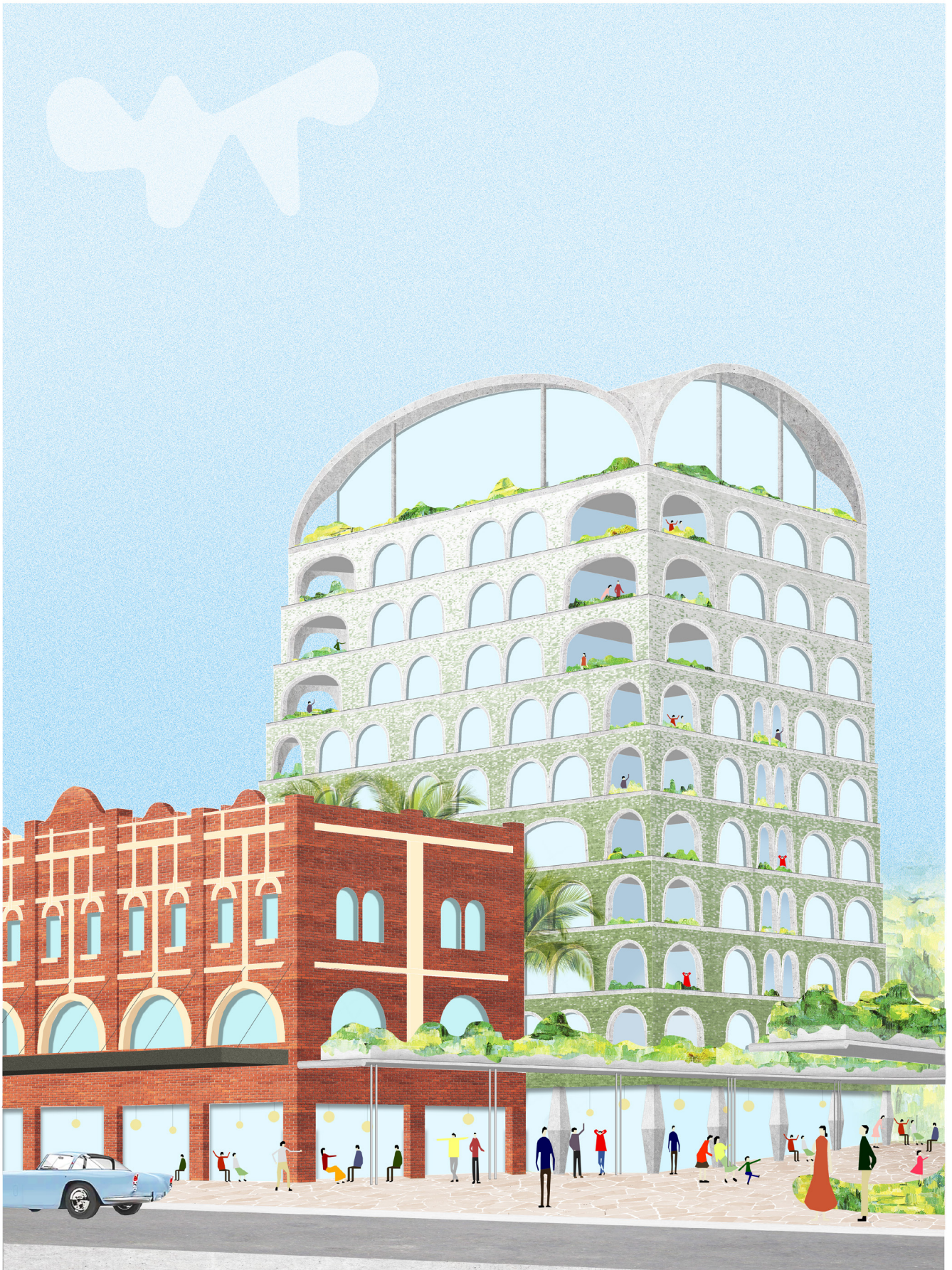
Durbach Block Jaggers verify that as required by the Clause 50 (1AB) of the Environmental Planning and Assessment Regulation 2000 the design quality principles set out in Schedule 1, design quality principles of the State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development and the objectives in Part 3 and Part 4 of the Apartment Design Guide have been achieved for the proposed development as described in the following document.



David Jaggers

Director

Registered Architect NSW, No. 9999



3 East - Durbach Block Jagers

The following content outlines the architectural scheme against the nine Principles of Design.

4.1 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, street-scape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

The proposal is located in the heart of Newcastle East End, with 4 distinct buildings proposed for this development - 2 of which Durbach Block Jaggers have designed nominated as 3 East.

The building to the North is an adaptive reuse of the existing heritage Municipal building, which fronts Hunter Street Mall. It is proposed that retail is reinstated on ground floor, with 2 floors of residential located above behind the existing heritage facade. This ties in with the surrounding Hunter St network of small, boutique buildings, iconic in their own right.

The roof is proposed to be replaced by a resort like communal open space with pool, decks, garden and trees.

A new 10 Storey tower to the South is proposed, twisting and tapering up towards the sky. The design takes its cues from horizontal nature of the municipal building.

Punched arch windows, both glazed and open to balconies, provide a sense of urban weight to the tower form, while the gently shimmering glazed bricks and tapering form connect to the hill, gardens and cathedral beyond.

The proposal is responsive to the scale of buildings in the area, bookending the final stage of the Newcastle East End Redevelopment.

4.2 Principle 2: Built form and scale

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

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.

As a response to the design competition brief, the proposal makes key master-planning moves which enhance the cities public domain:

- 1. The connection from harbour to the hill, and beyond to the cathedral is key and siting and composition of buildings on site 3 should both make and reinforce this connection.
- 2. The municipal building should remain freestanding and unencumbered of additional floors.
- 3. The three buildings on site 3 should combine to form a recognisable civic composition in which the cathedral & hill behind, remote to the square, plays a critical role in the urban arrangement. The relationship between the 3 distinct buildings on site 3 combine to create a formed public space - the ‘Market Square’ and contribute to the success of the public space.

A redistribution of GFA is used to enhance the characteristic Newcastle city silhouette not describe a ‘flat top’ planning envelope.

The result is three distinct buildings which define the public space, allowing for additional unexpected views and vistas, new public spaces and pedestrians links not yet evident in this part of the city.

Two of the three buildings making up this composition form the proposed 3 East (the Municipal building - 3N & the stepped Tower - 3S) have been designed by Durbach Block Jagers Architects, forming the basis of this report.

4.3 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.

3E provides a diverse range of apartments with different conditions, views and interactions with the city.

The proposal is very connected to public transport, with Newcastle Light Rail located within 500m of the subject site, which connects with the Intercity heavy rail train-line, Stockton Ferry service and Newcastle Bus Services.

The proposal is also within walking distance to various city amenities and are provided with a car space.

Apartment mix:

- Studio Apartments 0%
- 1 Bedroom Apartments 8% 50-60sqm
- 2 Bedroom Apartments 71% 79-107sqm
- 3 Bedroom Apartments 18% 157 - 177sqm
- 4 Bedroom Apartments 3% - 330sqm

4.4 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.

- The proposal incorporates a number of principles of sustainability:
- Extensive landscaping to roofs and over structure, minimising storm water run-off
 - On-site rainwater detention and re-use
 - Natural ventilation to the majority of apartments (95% of apartments are cross-ventilated)
 - Maximising direct sun to apartments while utilising overhangs to control summer heat gain (74% of apartments receive a minimum of 2 hours direct sunlight in mid-winter)
 - Materials demolished to be reused or recycled where possible
 - Predominantly constructed from locally produced, sustainable materials chosen favouring longevity and minimising maintenance.
 - Energy-efficient lighting and appliances
 - Water-efficient fixtures
 - Proximity to public transport and local shops

4.5 Principle 5: Landscape

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.

Landscaping is a key component of this proposal, with an abundance of communal open space on both the ground plane & roof-scape of majority of the buildings.

The 3N rooftop pool area allows for 1m+ soil depth, allowing for large trees and shaded amenity for all residents.

At ground floor, the Market square presents a water feature, a landscaped awning & other feature trees throughout. Landscape is also used as a privacy buffer between buildings. The Market square landscaping has been collaboratively designed with COLA Landscape Architects, and allows for flexibility in the ground plane - not predetermining the function of the space for the city and the future residents of the proposal.

The high proportion of soft landscaping to roof areas effectively minimises storm water runoff. Excess storm water is captured and used to water the ground level landscaping. Plant species have been selected to suit the location and climate, maximising the use of native species.

4.6 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.

It was imperative in the design of this proposal that an abundance of amenity is provided to the future residents, and further - the city.

Some examples are listed below:

- A large amount of communal open landscaped area, surrounded by native endemic species to the area.
- Maximising access to natural daylight in all apartments, minimising the depth of the apartment and orientating where possible to the North.
- The core principle of this development is around the ground plane and providing general public amenity - a space for the city, activation of frontages via lobby spaces, access into the building and flexibility of spaces.
- Views from both private apartments and communal terraces
- 95% of apartments are cross ventilated, while also providing views across the city.

4.7 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.

Design initiatives which have been incorporated into the design are:

- Passive surveillance is provided to lobbies from balconies above.
- Building entrances have secure access points with video intercom
- Car park layouts are designed to minimise opportunities for alcoves. Columns or walls do not obstruct sight lines and the car parks are generally open. Security access in the form of swipe cards and remote controllers will be provided;
- Entries are well lit;
- Communal open areas are observed from the balconies above.
- Increased pedestrian traffic will be a result of this development.
- Roof top pool area is access via swipe card type system.

4.8 Principle 8: Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

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

The proposal provides a diverse mix of apartment types, with access to unique facilities throughout the wider Newcastle East End redevelopment community.

Continuing this provision that has been established so successfully in East End Stage 1, 3E proposes flexible public spaces at ground level, with landscape allowing for varying uses in the proposed lane ways & plazas.

Communal spaces provide multiple interaction opportunities between residents, while careful zoning allows for separation in public locations.

In a broader context, this project offers an excellent opportunity to provide activity in an area currently undergoing a rapid transformation that has great access to public transport.

4.9 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.

The project has come through the process of Design Excellence competition, which ensures high quality outcome unique for the city.

The two buildings respond to each other, the Tower building respectfully taking cues from the Heritage building to the North.

The tower adds to the memorable silhouette of Newcastle, although always subservient to the profile of the Cathedral and the hill beyond.

Picking up on the skilled horizontal and vertical play of the municipal buildings façade, the ‘tower’ gently steps, tapers and twists, using horizontal banding on the facade to accentuate its verticality and slenderness.

Punched arch windows, both glazed and open to balconies, provide a sense of urban weight to the tower form, while the gently shimmering glazed bricks and tapering form connect to the hill, gardens and cathedral beyond.

	<p>The following content outlines the architectural scheme’s response to Part 3 & Part 4 of the Apartment Design Guide.</p>

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
3		Siting the development			
3A		Site Analysis			
	3A-1	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	•		
		Each element in the Site Analysis Checklist should be addressed (see ADG Appendix 1)			
3B		Orientation			
	3B - 1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	•		
		Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	•		
		Where the street frontage is to the east or west, rear buildings should be orientated to the north	•		
		Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	•		Street running along the southern boundary.
	3B-2	Overshadowing of neighbouring properties is minimised during midwinter	•		No development on site to the south. Building height on the 3N is kept as existing to reduce overshadowing. Tall building to the south.
		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	•		No significant impact on solar access to adjacent properties.
		Solar access to living rooms, balconies and private open spaces of neighbours should be considered	•		
		Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%			N/A
		If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy			N/A
		Overshadowing should be minimised to the south or downhill by increased upper level setbacks			N/A

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development	•		Street frontages on North, East & South boundaries. West facing apartments face public plaza with 11m+ to 3W building.
		A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	•		
3C	Public Domain Interface				
	3C-1	Transition between private and public domain is achieved without compromising safety and security	•		
		Terraces, balconies and courtyard apartments should have direct street entry, where appropriate			N/A
		Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)			N/A
		Upper level balconies and windows should overlook the public domain	•		
		Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m			N/A
		Length of solid walls should be limited along street frontages	•		Where extended walls are presented, architectural articulation is provided to break up mass.
		Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	•		There is a strong focus on casual interaction in the lift lobbies and corridors with areas to sit and generous spaces within the central ground floor plaza & alcove area. Entries to both the North & south building are opposite each other in the alcove to promote additional opportunity for interactions.
		In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: — Architectural detailing — changes in materials — Plant species — Colours	•		Noted
		Opportunities for people to be concealed should be minimised	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	3C-2	Amenity of public domain is retained and enhanced			
		Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	•		
		Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	•		
		The visual prominence of underground car park vents should be minimised and located at a low level where possible	•		
		Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	•		
		Ramping for accessibility should be minimised by building entry locations and setting ground floor levels in relation to footpath levels	•		
		Durable, graffiti resistant and easily cleanable materials should be used	•		
		Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: <ul style="list-style-type: none"> Street access, pedestrian paths and building entries which are clearly defined Paths, low fences and plating that clearly delineate between communal/private open space and the adjoining public open space Minimal use of blank walls, fences and ground level parking 	•		The apartments positively address the Market Plaza, while a urban laneway is proposed allowing for separate entries to the ground floor public domain. Where blank walls are presented (due to loading dock behind), architectural articulation and careful planting is used to break up the scale and mass.
		On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking			N/A car parking entry for the precinct is handled in building 3W. Refer to Traffic Eng Report
3D		Communal and public open space			
	3D-1	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.			
		Communal open space has a minimum area equal to 25% of the site	•		
		Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)	•		
		Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Communal open space should be co-located with deep soil areas	•		
		Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	•		All communal open space can be access from the main circulation areas at ground floor.
		Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	•		
		Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should: <ul style="list-style-type: none"> — Provide communal spaces elsewhere such as a landscaped roof top terrace or a common room — Provide larger balconies or increased private open space for apartments — Demonstrate good proximity to public open space and facilities and/or provide contributions to public open space 			N/A
	3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting			
		Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: <ul style="list-style-type: none"> — Seating for individuals or groups — barbecue areas — play equipment or play areas — swimming pools, gyms, tennis courts or common rooms 	•		
		The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	•		
		Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	•		
	3C-3	Communal open space is designed to maximise safety	•		
		Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: <ul style="list-style-type: none"> — bay windows — corner windows — balconies 	•		Balconies from the South building overlook the principle outdoor communal open space on the rooftop of the North Building. Apartments on the West overlook the Public Market Plaza.

ADG Response Table

		Objective	Complies														
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes												
		Communal open space should be well lit	•														
		Where communal open space/facilities are provided for children and young people they are safe and contained	•														
	3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	•														
		The public open space should be well connected with public streets along at least one edge	•														
		The public open space should be connected with nearby parks and other landscape elements	•		Strong focus on landscaped elements within the precinct.												
		Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	•														
		Solar access should be provided year round along with protection from strong winds	•														
		Opportunities for a range of recreational activities should be provided for people of all ages	•		There is an abundance of activities provided within the precinct which will be accessible to all residents, including gyms & wellness, pools, landscaped roof gardens etc.												
		A positive address and active frontages should be provided adjacent to public open space	•														
		Boundaries should be clearly defined between public open space and private areas	•		Private open space is located on level 4 and requires resident ‘swipe’ type access.												
3E	Deep soil zones																
	3E-1	Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality															
		Deep soil zones are to meet the following minimum requirements.	•		Refer to Precinct drawings - site wide strategy												
		<table><tr><th>Site area</th><th>Minimum dimensions</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 - 1,500m²</td><td>3m</td></tr><tr><td>Greater than 1,500m²</td><td>6m</td></tr><tr><td>Greater than 1,500m² with significant existing cover</td><td>6m</td></tr></table>	Site area	Minimum dimensions	Deep soil zone (% of site area)	Less than 650m²	-	7%	650m² - 1,500m²	3m	Greater than 1,500m²	6m	Greater than 1,500m² with significant existing cover	6m			
Site area	Minimum dimensions	Deep soil zone (% of site area)															
Less than 650m²	-	7%															
650m² - 1,500m²	3m																
Greater than 1,500m²	6m																
Greater than 1,500m² with significant existing cover	6m																

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: 10% of the site as deep soil on sites with an area of 650m ² – 1,500m ² 15% of the site as deep soil on sites greater than 1,500m ²	•		Refer to Precinct drawings & refer to Landscape Report
		Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include: — basement and sub-basement car park design that is consolidated beneath building footprints — use of increased front and side setbacks — adequate clearance around trees to ensure long term health — co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil	•		Refer to Precinct drawings. Refer to Landscape Report
		Achieving the design criteria may not be possible on some sites including where: — The location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) — There is 100% site coverage or non-residential uses at ground floor level — Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure			N/A
	3F-1	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy			

ADG Response Table

Objective		Complies		Notes												
Part No.	Objective No	Design Criteria Design Guidance	YesNo													
		<p>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:</p> <table><tr><th>Building Height</th><th>Habitable Room and Balconies</th><th>Non Habitable</th></tr><tr><td>Up to 12 (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> <p>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties</p>	Building Height	Habitable Room and Balconies	Non Habitable	Up to 12 (4 storeys)	6m	3m	Up to 25m (5-8 storeys)	9m	4.5m	Over 25m (9+ storeys)	12m	6m	<ul style="list-style-type: none">	Alternate measures are put in place to allow for privacy between windows when separation is not met. This is only in the urban laneway between 3N & 3S. Ear type windows are used to redirect views and ensure privacy between apartments.
Building Height	Habitable Room and Balconies	Non Habitable														
Up to 12 (4 storeys)	6m	3m														
Up to 25m (5-8 storeys)	9m	4.5m														
Over 25m (9+ storeys)	12m	6m														
		Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a ‘ziggurat’ appearance	<ul style="list-style-type: none">	N/A. The architectural concept for the building is a stepped tower. This form’s a major part in the building being awarded design excellence.												
		For residential buildings next to commercial buildings, separation distances should be measured as follows: <ul style="list-style-type: none">for retail, office spaces and commercial balconies use the habitable room distancesfor service and plant areas use the non-habitable room distances		N/A												
		New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: <ul style="list-style-type: none">site layout and building orientation to minimise privacy impacts (see also section 3B Orientation)on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)	<ul style="list-style-type: none">													
		Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)		N/A												
		Direct lines of sight should be avoided for windows and balconies across corners	<ul style="list-style-type: none">													
		No separation is required between blank walls		Noted												

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space			
		Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: <ul style="list-style-type: none"> — setbacks — solid or partially solid balustrades to balconies at lower levels — fencing and/or trees and vegetation to separate spaces — screening devices — bay windows or pop out windows to provide privacy in one direction and outlook in another — raising apartments/private open space above the public domain or communal open space — planter boxes incorporated into walls and balustrades to increase visual separation — pergolas or shading devices to limit overlooking of lower apartments or private open space — on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies 	•		Landscape is provided as a buffer between private open space and communal open space and access paths.
		Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	•		
		Balconies and private terraces should be located in front of living rooms to increase internal privacy	•		
		Windows should be offset from the windows of adjacent buildings	•		'Ear' type windows are utilised in 3N, where adjacent building (3S) proximity is too close. These provide privacy and orientate views towards public open space.
		Recessed balconies and/or vertical fins should be used between adjacent balconies	•		
3G	Pedestrian Access and Entries				
	3G-1	Building entries and pedestrian access connects to and address the public domain			
		Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge	•		Access to both buildings is located off the public plaza 'alcove' between the buildings further activating the through site link.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Entry locations relate to the street and subdivision pattern and the existing pedestrian network	•		
		Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries	•		
		Where street frontage is limited and multiple buildings are located on the site, a primary street address is provided with clear sight lines and pathways to secondary building entries	•		
	3G-2	Access, entries and pathways are equitable and easy to identify			
		Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces	•		
		The design of ground floors and underground car parks minimise level changes along pathways and entries	•		
		Steps and ramps are integrated into the overall building and landscape design	•		
		For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)			As required, subject to future design development
		For large developments electronic access and audio/video intercom should be provided to manage access			As required, subject to future design development
	3G-3	Pedestrian links through developments provide access to streets and connect destinations			
		Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	•		The proposal extends the connection of the already established pedestrian link from East End Stage 1 & 2. While the new urban laneway between the buildings further allows for pedestrian connection through the site the doesn't existing in the current condition.
		Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate	•		The pedestrian site through link is over looked by the habitable rooms of the South building apartments habitable rooms & private open spaces.
3H	Vehicle Access				
	3H-1	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Car park access is integrated with the building's overall facade, design solutions may include: <ul style="list-style-type: none"> the materials and colour palette minimise visibility from the street security doors or gates at entries that minimise voids in the facade where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed 	•		Basement car park access is provided through the 3W building. Refer to precinct drawings & Traffic Engineer's Report
		Car park entries are located behind the building line	•		As above
		Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout		•	Loading dock sits to the south of the site and is located at the highest point of the site. This is due to a tight road network. No additional excavation is required as access is provided at grade. Refer to traffic engineer's report
		Car park entry and access is located on secondary streets or lanes where available	•		Basement car park access is provided through the 3W building off Thorn St (secondary to Hunter St) Refer to Precinct Drawings
		Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided			N/A
		Access point locations avoid headlight glare to habitable rooms			N/A
		Adequate separation distances are provided between vehicular entries and street intersections	•		
		The width and number of vehicle access points is limited to the minimum	•		One car park entry and one loading dock for the whole Stage 3 Precinct, servicing 3 buildings. Refer to traffic engineer's report
		Visual impact of long driveways is minimised through changing alignments and screen planting			N/A
		The requirement for large vehicles to enter or turnaround within the site is avoided		•	NCC requires a HRV loading dock to collect waste on site, not on the street. This has been provided in the South Building off Liang St. Refer to traffic engineer's report
		Garbage collection, loading and servicing areas are screened	•		Garbage collection and loading/unloading happens within the loading dock of the south building.
		Clear sight lines should be provided at pedestrian and vehicle crossings	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Traffic calming devices such as changes in paving material or textures should be used where appropriate	•		
		Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: changes in surface materials level changes the use of landscaping for separation	•		Pedestrian entries and vehicle entries occur at different levels.
3J	Bicycle and Car Parking				
	3J-1	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas			
		For development in the following locations: — on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or — on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less The car parking needs for a development must be provided off street			N/A
		Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site			N/A - Precinct strategy - Refer to Traffic Engineers Report
		Where less car parking is provided in a development, council should not provide on street resident parking permits			Noted
	3J-2	Parking and facilities are provided for other modes of transport			
		Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	•		
		Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	•		Secure undercover bicycle parking has been provided.
		Conveniently located charging stations are provided for electric vehicles, where desirable	•		A charging station has been provided in the basement.
	3J-3	Car park design and access is safe and secure	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	•		Precinct strategy - Refer to Traffic Engineers Report
		Direct, clearly visible and well lit access should be provided into common circulation areas	•		
		A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	•		
		For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards			Noted.
	3J-4	Visual and environmental impacts of underground car parking are minimised			
		Excavation should be minimised through efficient car park layouts and ramp design	•		
		Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	•		
		Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	•		
		Natural ventilation should be provided to basement and sub-basement car parking areas			
		Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	•		N/A
	3J-5	Visual and environmental impacts of on-grade car parking are minimised			N/A
		On-grade car parking should be avoided	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Where on-grade car parking is unavoidable, the following design solutions are used: <ul style="list-style-type: none"> — parking is located on the side or rear of the lot away from the primary street frontage — cars are screened from view of streets, buildings, communal and private open space areas — safe and direct access to building entry points is provided — parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space — stormwater run-off is managed appropriately from car parking surfaces — bio-swales, rain gardens or on site detention tanks are provided, where appropriate — light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving 			N/A
	3J-6	Visual and environmental impacts of above ground enclosed car parking are minimised			
		Exposed parking should not be located along primary street frontages			N/A
		Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: <ul style="list-style-type: none"> — car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) — car parking that is ‘wrapped’ with other uses, such as retail, commercial or two storey Small Office/ Home Office (SOHO) units along the street frontage (see figure 3J.9) 			N/A
		Positive street address and active frontages should be provided at ground level	•		
4	Designing the Building				
4A	Solar and daylight access				
	4A-1	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		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 and in the Newcastle and Wollongong local government areas	•		74% of apartments achieve direct sunlight to living rooms and private open space for 2hrs + 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			N/A
		3. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter	•		Only 4 out of the 38 (11%) of apartments receive no direct sunlight. Therefore compliant.
		The design maximises north aspect and the number of single aspect south facing apartments is minimised	•		Only 2 x apartments in 3E are single aspect units. All other units have a minimum of two aspects with the upper floor 3 & 4 bedroom apartments have 3 & 4 aspects respectively. Where south facing units are proposed in 3N, windows are orientated to the west through 'ear' type bay windows for privacy, views and sunlight.
		Single aspect, single storey apartments should have a northerly or easterly aspect		•	As above.
		Living areas are best located to the north and service areas to the south and west of apartment	•		
		To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: — dual aspect apartments — shallow apartment layouts — two storey and mezzanine level apartments — bay windows	•		Dual aspect apartments are the majority of apartments in this proposal.
		To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m ² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	•		This is achieved across the majority of apartments.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>Achieving the design criteria may not be possible on some sites. This includes:</p> <ul style="list-style-type: none"> — where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source — on south facing sloping sites — where significant views are oriented away from the desired aspect for direct sunlight — Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective 			N/A
	4A-2	Daylight access is maximised where sunlight is limited	•		3N-1.04 windows & openings have been amended following requests from CN, including an additional opening in the eastern facade of the heritage building to allow for maximised access to sunlight.
		Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms			N/A
		<p>Where courtyards are used:</p> <ul style="list-style-type: none"> — use is restricted to kitchens, bathrooms and service areas — building services are concealed with appropriate detailing and materials to visible walls — courtyards are fully open to the sky — access is provided to the light well from a communal area for cleaning and maintenance — acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved 			N/A
		<p>Opportunities for reflected light into apartments are optimised through:</p> <ul style="list-style-type: none"> — reflective exterior surfaces on buildings opposite south facing windows — positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light — integrating light shelves into the design — light coloured internal finishes 	•		Internal finishes on balconies are a lighter colouring
	4A-3	Design incorporates shading and glare control, particularly for warmer months			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>A number of the following design features are used:</p> <ul style="list-style-type: none"> — balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas — shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting — horizontal shading to north facing windows — vertical shading to east and particularly west facing windows — operable shading to allow adjustment and choice — high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided) 	•		Deep reveal windows & punched openings in the balconies provide shading in the Summer Months.
4B		Natural Ventilation			
	4B-1	All habitable rooms are naturally ventilated			
		The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	•		<p>All Apartments except 2 are dual aspect apartments and benefit from Natural cross ventilation.</p> <p>Apartment 3N-1.04 proposes an additional opening in the southern façade of the winter garden to increase the opportunity for natural cross ventilation through the apartment. The ear type windows are proposed to be operable to allow for maximum cross ventilation while mitigating privacy issues.</p> <p>At the Request of CN, an additional opening has been provided in the Eastern Heritage Facade of apartment 3N-1.04 to allow for maximum cross ventiation & access to natural daylight.</p>
		Depths of habitable rooms support natural ventilation	•		
		The area of unobstructed window openings should be equal to at least 5% of the floor area served	•		
		Light wells are not the primary air source for habitable rooms	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: <ul style="list-style-type: none"> adjustable windows with large effective openable areas a variety of window types that provide safety and flexibility such as awnings and louvres windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors 	•		
	4B-2	The layout and design of single aspect apartments maximises natural ventilation	•		
		Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	•		
		Natural ventilation to single aspect apartments is achieved with the following design solutions: <ul style="list-style-type: none"> primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells 		•	
	4B-3	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents			
		1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. 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	•		95% of apartments achieve cross ventilation
		2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	•		
		The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	•		
		In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)			N/A

		Objective	Complies		Notes											
Part No.	Objective No	Design Criteria Design Guidance	Yes	No												
		Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	•													
		Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	•													
4C	Ceiling heights															
	4C-1	Ceiling height achieves sufficient natural ventilation and daylight access														
		<div>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:<table><tr><th colspan="2">Minimum ceiling height for apartment and mixed use buildings</th></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable 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 apartment 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 people 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><div>These minimums do not preclude higher ceilings if desired</div></div>	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 apartment area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope	If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use	•	<div>Habitable rooms are a minimum of 2.7m ceiling height and non-habitable are 2.4m.</div> <div>The North Building has 3.5m+ ceiling heights in Habitable rooms (except for apartment 2.05, where ceiling heights are ADG Compliant).</div> <div>Regarding mixed use ceiling heights, a 3.3m ceiling height has not been achieved, as the level 01 slab has been set by two factors; the awning height, aligning the edge of the awning with the western apartments openings to look out over the roof top garden and beyond to the plaza. Level 01 is also set to allow for clearance over the loading level below, without introducing further complexities of a split slab level 01 slab over ground floor.</div> <div>The proposed height added to 3S as a part of the original endorsed design excellence competition approach to the site was to allow for a larger public amenity that is the market plaza. It is noted however if we did have to raise the floor to ceiling level of level 01 this would result in an additional exceedance of the height control.</div> <div>Further justification has been provided in a seperate RFI response to CN.</div>
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 apartment area does not exceed 50% of the apartment area															
Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope															
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use															
		Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	•													

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes										
		Design Criteria Design Guidance	Yes	No											
	4C-2	Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms													
		A number of the following design solutions can be used: <ul style="list-style-type: none">— The hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces— Well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings— Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	•		There is sufficient space between the ceiling and the structural slab to allow for services to be concealed.										
	4C-3	Ceiling heights contribute to the flexibility of building use over the life of the building	•												
		Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)			N/A										
4D	Apartment size and layout														
	4D-1	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity													
		1. Apartments are required to have the following minimum internal areas: <table><tr><th>Apartment Type</th><th>Minimum Internal Area</th></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table> The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m ² each	Apartment Type	Minimum Internal Area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	•		The apartments have been designed with generous minimum internal areas: 1 Bed = 50m ² 2 Bed = 75m ² 3 Bed = 134m ² 4 Bed = 331m ²
Apartment Type	Minimum Internal Area														
Studio	35m ²														
1 bedroom	50m ²														
2 bedroom	70m ²														
3 bedroom	90m ²														
		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	•												

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	•		
		A window should be visible from any point in a habitable room	•		
		Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits	•		All minimum dimensions have been included on the revised DA package.
	4D-2	Environmental performance of the apartment is maximised			An additional 0.9 x 1.8m balcony opening provided in 3N-1.04 to allow for maximum possible connection to outside.
		1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	•		Higher ceilings are proposed throughout
		2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	•		
		Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	•		
		All living areas and bedrooms should be located on the external face of the building	•		
		Where possible: — bathrooms and laundries should have an external openable window — main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	•		Achieved where possible
	4D-3	Apartment layouts are designed to accommodate a variety of household activities and needs			
		1. Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space)	•		All minimum dimensions have been included on the revised DA package.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	2.	Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	•		<p>All minimum dimensions have been included on the revised DA package.</p> <p>3N-1.04 & 3N-2.04 hatched areas are shown. There is a very minor deviation from the minimum size requirements due to the raking wall to the south.</p> <p>The area of non-compliance occurs in the ear type window area, which is in fact a part of the room at a higher sill height. The room is much larger than the minimum size requirements and therefore does not impact on the amenity of the resident.</p> <p>With the amalgamation of the unit 3N-1.01, there is a minor deviation from the minimum 3 x 3m box in bedroom 3. Again, this room is much larger than the minimum size requirements and therefore does not impact on the amenity of the apartment.</p> <p>All other bedrooms are compliant.</p>
	3.	Living rooms or combined living/dining rooms have a minimum width of: <ul style="list-style-type: none"> — 3.6m for studio and 1 bedroom apartments — 4m for 2 and 3 bedroom apartments 	•		All minimum dimensions have been included on the revised DA package.
	4.	The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	•		All minimum dimensions have been included on the revised DA package.
		Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	•		
		All bedrooms allow a minimum length of 1.5m for robes	•		
		The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	•		

ADG Response Table

		Objective	Complies		Notes
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	
		Apartment layouts allow flexibility over time, design solutions may include: <ul style="list-style-type: none">— dimensions that facilitate a variety of furniture arrangements and removal— spaces for a range of activities and privacy levels between different spaces within the apartment— dual master apartments— dual key apartments— Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments— room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))— efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	•		
4E	Private Open Space and Balconies				
	4E-1	Apartments provide appropriately sized private open space and balconies to enhance residential amenity	•		

ADG Response Table

Objective			Complies		Notes															
Part No.	Objective No	Design Criteria Design Guidance	Yes	No																
		<p>All apartments are required to have primary balconies as follows:</p> <table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio Apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr></table> <p>The minimum balcony depth to be counted as contributing to the balcony area is 1m</p>	Dwelling Type	Minimum Area	Minimum Depth	Studio Apartments	4m ²	-	1 bedroom apartments	8m ²	2m	2 bedroom apartments	10m ²	2m	3+ bedroom apartments	12m ²	2.4m	●		<p>All minimum dimensions have been included on the revised DA package.</p> <p>Apartment 3S-10.01 is located on level 10. This apartment is therefore susceptible to high winds and has been designed in response to this.</p> <p>The ADG states in situations where the balcony is located 10 storeys or above, a Juliet type balcony, operable walls etc may be used.</p> <p>This apartment employs these principles by blurring the line between internal and external space. The whole living area can act as a balcony when the operable walls are in their open position.</p> <p>What is balcony and what isn't can therefore be deemed irrelevant. 124m2 of external space is provided and can be utilised by sliding back the operable walls of the apartment.</p> <p>When there are high winds, the external glazed operable walls can be partially or completely closed as required by the resident.</p> <p>There is no impact to the amenity of the apartment with this deviation to the Guide.</p>
Dwelling Type	Minimum Area	Minimum Depth																		
Studio Apartments	4m ²	-																		
1 bedroom apartments	8m ²	2m																		
2 bedroom apartments	10m ²	2m																		
3+ bedroom apartments	12m ²	2.4m																		
		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 15m ² and a minimum depth of 3m		N/A																
		Increased communal open space should be provided where the number or size of balconies are reduced		N/A																
		Storage areas on balconies is additional to the minimum balcony size	●																	

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Balcony use may be limited in some proposals by: <ul style="list-style-type: none"> — consistently high wind speeds at 10 storeys and above — close proximity to road, rail or other noise sources — exposure to significant levels of aircraft noise — heritage and adaptive reuse of existing buildings — In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated 			N/A
	4E-2	Primary private open space and balconies are appropriately located to enhance liveability for residents	•		
		Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	•		
		Private open spaces and balconies predominantly face north, east or west	•		
		Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	•		
	4E-3	Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	•		
		Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	•		
		Full width full height glass balustrades alone are generally not desirable	•		No glass balustrades have been included
		Projecting balconies should be integrated into the building design and the design of soffits considered	•		The balconies are completely integrated and form part of the façade design
		Operable screens, shutters, hoods and pergolas are used to control sunlight and wind			N/A. All forms part of the facade design.
		Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	•		
		Downpipes and balcony drainage are integrated with the overall facade and building design	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	•		Plant room on roof is sunken into arch roof to minimise view from the surrounding context.
		Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	•		
		Ceilings of apartments below terraces should be insulated to avoid heat loss	•		
		Water and gas outlets should be provided for primary balconies and private open space	•		
	4E-4	Private open space and balcony design maximises safety			
		Changes in ground levels or landscaping are minimised	•		
		Design and detailing of balconies avoids opportunities for climbing and falls	•		
4F	Common Circulation and Spaces				
	4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments			
		1. The maximum number of apartments off a circulation core on a single level is eight	•		
		2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	•		2 lifts are provided for 29 apartments in 3S. 1 x lift in 3N serving 10 apartments.
		Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors	•		
		Daylight and natural ventilation should be provided to all common circulation spaces that are above ground		•	Due to the efficient apartment design, circulation spaces have been minimised and the ventilation is dealt with through mechanical measures.
		Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors		•	Natural light is provided through windows into the fire stair. The fire doors are glazed into the corridor.
		Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: a series of foyer areas with windows and spaces for seating wider areas at apartment entry doors and varied ceiling heights			N/A

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	•		Efficient core design allows for all corner apartments in 3S.
		Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including: <ul style="list-style-type: none"> — sunlight and natural cross ventilation in apartments — access to ample daylight and natural ventilation in common circulation spaces — common areas for seating and gathering — generous corridors with greater than minimum ceiling heights — other innovative design solutions that provide high levels of amenity 	•		<ul style="list-style-type: none"> — In 3S, there is a maximum of 4 units utilising 2 x lifts on one floor. — In 3N, there is a maximum of 10 units utilising 1 x lift core. — There is a bridge between the 3N & 3S located on level 04 off the main corridor that provides an abundant level of amenity for all residents.
		Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level			N/A
		Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled	•		
4F-2		Common circulation spaces promote safety and provide for social interaction between residents			
		Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	•		
		Tight corners and spaces are avoided	•		
		Circulation spaces should be well lit at night			Noted
		Legible signage should be provided for apartment numbers, common areas and general wayfinding			Noted
		Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	•		
		In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space	•		Refer to Precinct drawings
		Where external galleries are provided, they are more open than closed above the balustrade along their length			N/A

ADG Response Table

		Objective	Complies												
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes										
4G	Storage														
	4G-1	Adequate, well designed storage is provided in each apartment													
		In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: <table><tr><th>Dwelling type</th><th>Storage size</th></tr><tr><td>Studio apartments</td><td>4m3</td></tr><tr><td>1 bedroom apart-ments</td><td>6m3</td></tr><tr><td>2 bedroom apart-ments</td><td>8m3</td></tr><tr><td>3 bedroom apart-ments</td><td>10m3</td></tr></table> At least 50% of the required storage is to be located within the apartment	Dwelling type	Storage size	Studio apartments	4m3	1 bedroom apart-ments	6m3	2 bedroom apart-ments	8m3	3 bedroom apart-ments	10m3	•		Storage notes have been added to the revised DA package. A revised layout has been provided for Apartments 3N-1.04 & 3N-2.04 to allow for greater storage amenity.
Dwelling type	Storage size														
Studio apartments	4m3														
1 bedroom apart-ments	6m3														
2 bedroom apart-ments	8m3														
3 bedroom apart-ments	10m3														
		Storage is accessible from either circulation or living areas	•												
		Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street	•												
		Left over space such as under stairs is used for storage			N/A										
	4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments	•												
		Storage not located in apartments is secure and clearly allocated	•												
		Storage is provided for larger and less frequently accessed items, where practical	•		Storage rooms are located in the basement for larger storage items										
		Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible	•		Storage will not be designed to impede the car parking spaces.										
		If communal storage rooms are provided they should be accessible from common circulation areas of the building			N/A										
		Storage not located in an apartment is integrated into the overall building design and not visible from the public domain	•		Additional storage is located in the basement										
4H	Acoustic Privacy														
	4H-1	Noise transfer is minimised through the siting of buildings and building layout													

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Adequate building separation is provided within the development and from neighbouring buildings / adjacent uses (also see section 2F Building separation and section 3F Visual Privacy)	•		
		Window and door openings are generally orientated away from noise sources	•		
		Noisy areas within buildings including building entries and corridors are located next to or above each other and quieter areas next to or above quieter areas	•		
		Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources			N/A
		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	•		
		Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas are located at least 3m away from bedrooms		•	1 x 2 bedroom apartment is located within 3m of the loading dock. There is a 1m thick concrete slab separating the spaces, as well as double glazed windows to the south.
	4H-2	Noise impacts are mitigated through internal apartment layout and acoustic treatments			
		Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: rooms with similar noise requirements are grouped together doors separate different use zones wardrobes in bedrooms are co-located to act as sound buffers	•		
		Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: double or acoustic glazing acoustic seals use of materials with low noise penetration properties continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	•		Double glazed windows are proposed throughout the development to help mitigate sound pollution from loading dock and other potential noise sources.
4J	Noise and Pollution				
	4J-1	In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>To minimise impacts the following design solutions may be used:</p> <ul style="list-style-type: none"> — physical separation between buildings and the noise or pollution source — residential uses are located perpendicular to the noise source and where possible buffered by other uses — non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces — Non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources — Buildings should respond to both solar access and noise. Where solar access is away from the noise source, nonhabitable rooms can provide a buffer — Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) — Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry 	•		
		<p>Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas:</p> <ul style="list-style-type: none"> — solar and daylight access — private open space and balconies — natural cross ventilation 	•		Noted
	4J-2	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission			
		<p>Design solutions to mitigate noise include:</p> <ul style="list-style-type: none"> — limiting the number and size of openings facing noise sources — providing seals to prevent noise transfer through gaps — using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) — using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits 	•		
4K	Apartment Mix				

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4K-1	A range of apartment types and sizes is provided to cater for different household types now and into the future			
		A variety of apartment types is provided	•		1Bed, 2 Bed, 3 Bed + 4 Bed
		The apartment mix is appropriate, taking into consideration: — the distance to public transport, employment and education centres — the current market demands and projected future demographic trends — the demand for social and affordable housing — different cultural and socioeconomic group	•		1Bed = 3 2 Bed = 27 3 Bed = 7 4 Bed = 1 38 units in total
		Flexible apartment configurations, such as dual key apartments, are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households		•	Apartments could be amalgamated by a future user with some modification
	4K-2	The apartment mix is distributed to suitable locations within the building			
		Different apartment types are located to achieve successful facade composition and to optimise solar access. See figure 4A.3			
		Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available	•		3 & 4 bedroom units are located in the top floors of the building in 3S to allow for additional open space.
4L	Ground Floor Apartments				
	4L-1	Street frontage activity is maximised where ground floor apartments are located			
		Direct street access should be provided to ground floor apartments			N/A
		Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: both street and foyer entrances to ground floor apartments private open space is next to the street doors and windows face the street	•		
		Retail or home office spaces are located along street frontages	•		3N maintains the pre-existing retail frontages to Hunter St. 3S provides views down into retail areas through glazing.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for con-version into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor ameni-ties for easy conversion			N/A
	4L-2	Design of ground floor apartments delivers amenity and safety for residents			
		Privacy and safety is provided without obstructing causal surveillance. Design solutions may include: <ul style="list-style-type: none"> — elevation of private gardens and terraces above the street level by 1m - 1.5m (see Figure 4L.4) — landscaping and private courtyards — window sill heights that minimise sight lines into apartments — integrating balustrades, safety bars or screens with the exterior design 			N/A
		Solar access is maximised through: <ul style="list-style-type: none"> — high ceilings and tall windows — trees and shrubs that allow solar access in winter and shade in summer 			N/A
4M	Facades				
	4M-1	Building facades provide visual interest along the street respecting the character of the local area			
		Design solutions for front building facades may include: <ul style="list-style-type: none"> — A composition of varied building elements — A defined base, middle and top of the buildings — Revealing and concealing certain elements — Changes in texture, material, detail and colour to modify the prominence of elements 	•		
		Building services should be integrated within the overall façade	•		Downpipes will not be visible along with condensers that are to be hidden on the roof.
		Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: <ul style="list-style-type: none"> — Well composed horizontal and vertical elements — Variation in floor heights to enhance the human scale — Elements that are proportional and arranged in patterns — Public artwork or treatments to exterior blank walls — Grouping of floors or elements such as balconies and windows on taller buildings 	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	•		The proposed 3S building takes design cues from the horizontal nature of the existing heritage building, as well as the arch typologies seen throughout Newcastle's art deco style architecture.
		Shadow is created on the façade throughout the day with building articulation, balconies and deeper window re-veals	•		Balconies are provided through 'punched' openings, maintaining the framed reveal, similar to the windows.
	4M-2	Building functions are expressed by the façade			
		Building entries should be clearly defined	•		An arched, vaulted entry is proposed and is visible in the elevation of the building.
		Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	•		
		The apartment layout should be expressed externally through façade features as party walls and floor slabs	•		
4N	Roof Design				
	4N-1	Roof treatments are integrated into the building design and positively respond to the street			
		Roof design relates to the street. Design solutions may include: <ul style="list-style-type: none"> — Special roof features and strong corners — Use of skillion or very low pitch hipped roofs — Breaking down the massing of the roof by using smaller elements to avoid bulk — Using materials or a pitched form complementary to adjacent buildings 	•		The vaulted structure is one of the main architectural elements of the proposal.
		Roof treatments should be integrated with the building design. Design solutions may include: Roof design proportionate to the overall building size, scale and form Roof materials complement the building Service elements are integrated	•		
	4N-2	Opportunities to use roof space for residential accommodation and open space are maximised			
		Habitable roof space should be provided with good levels of amenity. Design solutions may include: <ul style="list-style-type: none"> — Penthouse apartments — Dormer or clerestory windows — Openable skylights 	•		The roof space of 3N is a pool terrace. Level 10 of 3S proposes a penthouse apartment with mezzanine level, maximising the use of the additional space under the vaulted roof.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	•		
	4N-3	Roof design incorporates sustainability features			
		Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: <ul style="list-style-type: none"> — The roof lifts to the north — Eaves and overhangs shade walls and windows from summer sun 	•		Deep window reveals allow for an eave on all windows throughout 3N & 3S.
		Skylights and ventilation systems should be integrated into the roof design		•	
4O	Landscape Design				
	4O-1	Landscape design is viable and sustainable			
		Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: <ul style="list-style-type: none"> — Diverse and appropriate planting — Bio-filtration gardens — Appropriately planted shading trees — Areas for residents to plant vegetables and herbs — Composting — Green roofs or walls 	•		Refer to Landscape Architects Report
		Ongoing maintenance plans should be prepared			
		Microclimate in enhanced by: <ul style="list-style-type: none"> — Appropriately scaled trees near the eastern and western elevations for shade — A balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter — Shade structures such as pergolas for balconies and courtyards 	•		
		Tree and shrub selection considers size at maturity and the potential for roots to complete (see table 4)	•		
	4O-2	Landscape design contributes to the streetscape and amenity	•		
		Landscape design responds to the existing site conditions including: <ul style="list-style-type: none"> Changes of levels — Views — Significant landscape features including trees and rock outcrops 	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Significant landscape features should be protected by: <ul style="list-style-type: none"> — Tree protection zones (see figure 40.5) — Appropriate signage and fencing during construction 	•		
		Plants selected should be endemic to the region and reflect the local ecology	•		All species selected are endemic to the region.
4P	Planting on Structures				
	4P-1	Appropriate soil profiles are provided	•		
		Structures are reinforced for additional saturated soil weight	•		
		Soil volume is appropriate for plant growth, considerations include: <ul style="list-style-type: none"> — Modifying depths and widths according to the planting mix and irrigation frequency — Free draining and long soil life span — Tree anchorage 	•		
		Minimum soil standards for plant sizes should be provided in accordance with Table 5	•		
	4P-2	Plant growth is optimised with appropriate selection and maintenance	•		
		Plants are suited to site conditions, considerations include: <ul style="list-style-type: none"> — Drought and wind tolerance — Seasonal changes in solar access — Modified substrate depths for diverse range of plants — Plant longevity 	•		
		A landscape maintenance plan is prepared	•		Refer to Landscape report
		Irrigation and drainage systems respond to: <ul style="list-style-type: none"> — Changing site conditions — Soil profile and the planting regime — Whether rainwater, stormwater or recycled grey water is used 	•		
	4P-3	Planting on structure contributes to the quality and amenity of communal and public open spaces	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>Building design incorporates opportunities for planting on structures. Design solutions may include:</p> <ul style="list-style-type: none"> — Green walls with specialised lighting for indoor green walls — All design that incorporates planting — Green roofs, particularly where roofs are visible from public domain — Planter boxes — Note: structures designed to accommodate green walls should be integrated into the building façade and consider the ability of the façade to change over time 	•		
4Q	Universal Design				
	4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members			
		Developments achieve a benchmark of 20% of the total apartment incorporating the Liveable Housing Guideline's silver level universal design features	•		All apartments incorporate the Liveable Housing Guideline's silver level universal design features
	4Q-2	A variety of apartments with adaptable designs are provided			
		Adaptable housing should be provided in accordance with the relevant council policy	•		7 of the 38 units in 3E are adaptable apartments. Precinct wide strategy - refer to Precinct drawings
		<p>Design solutions for adaptable apartments include:</p> <ul style="list-style-type: none"> — Convenient access to communal and public areas — High level of solar access — Minimal structural change and residential amenity loss when adapted — Larger car parking spaces for accessibility — Parking titled separately from apartments or shared car parking arrangements 	•		
	4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs			
		<p>Apartments design incorporates flexible design solutions which may include:</p> <ul style="list-style-type: none"> — Rooms with multiple functions — Dual master bedroom apartments with separate bathrooms — Larger apartments with various living space options — Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom 	•		The area of the apartments are generally larger than the minimums suggested in the ADG
4R	Adaptive Reuse				

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4R-1	New additional to existing buildings are contemporary and complementary and enhance an area's identity and sense of place			
		Design solutions may include: <ul style="list-style-type: none"> — New elements to align with the existing building — Additions that complement the existing character, siting, scale, proportion, pattern form and detailing — Use of contemporary and complementary materials, finishes, textures and colours 	•		3N will be completely adaptively re-used and transformed into residential units from commercial space. 3S responds sympathetically to this building scale - refer to design report.
	4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse			
		Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: <ul style="list-style-type: none"> — Generously sized voids in deeper buildings — Alternative apartment types when orientation is poor — Using additions to expand the existing building envelope 	•		Other creative measures have been employed to create better amenity for the poor orientated apartments in the adaptive re-use of 3N. A laneway is introduced between the two buildings allowing for 'breathing space' between for both privacy and amenity.
		Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: <ul style="list-style-type: none"> — Where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) — Alternatives to providing deep soil where less than the minimum requirement is currently available on the site — Building and visual separation - subject to demonstrating alternative design approaches to achieving privacy — Common circulation — Car parking — Alternative approaches to private open space and balconies 	•		All listed are integrated.
4S	Mixed Use				
	4S-1	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Mixed use development should be concentrated around public transport and centres	•		
	4S-2	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents			
		Residential circulation areas should be clearly defined. Design solutions may include: <ul style="list-style-type: none"> Residential entries are separated from commercial entries and directly accessible from the street Commercial service areas are separated from residential components Residential car parking and communal facilities are separated or secured Concealment opportunities are avoided 	•		N/A
		Landscape communal open space should be provided at podium or roof levels	•		
4T	Awnings and Signage				
	4T-1	Awnings are well located and complement and integrate with the building design			
		Awnings should be located along streets with high pedestrian activity and active frontages	•		Where awnings are not proposed, deep reveals are proposed on the ground plane to allow for cover.
		A number of the following design solutions are used: <ul style="list-style-type: none"> Continuous awnings are maintained and provided in areas with existing pattern Height, depth, material and form complements the existing street character Protection from the sun and rain is provided Awnings are wrapped around the secondary frontages of corner sites Awnings are retractable in areas without an established pattern 	•		
		Awnings should be located over building entries for building address and public domain amenity		•	Instead of projections for a sense of address, the building offers a deeper reveal into the form where the lobby entries are located
		Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	•		A contemporary version of a pre-existing heritage awning is proposed to be reinstated on 3N. The Non-sympathetic awning in place on Hunter St will be removed.
		Gutters and down pipes should be integrated and concealed	•		
		Lighting under awnings should be provided for pedestrian safety			Noted

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4T-2	Signage responds to the context and desired streetscape character			
		Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	•		Noted
		Legible and discrete way finding should be provided for larger developments	•		Noted
		Signage is limited to being on and below awnings and in single façade sign on the primary street frontage	•		Noted
4U	Energy Efficiency				
	4U-1	Development incorporates passive environmental design			
		Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	•		
		Well located, screened outdoor areas should be provided for clothes drying	•		
	4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer			
		A number of the following design solutions are used: <ul style="list-style-type: none"> — The use of smart glass or other technologies on north and west elevations — Thermal mass in the floors and walls of north facing rooms is maximised — Polished concrete floor, tiles, or timber rather than carpet — Insulated roofs, walls and floors and seals on window and door openings — Overhangs and shading devices such as awnings, blinds and screens 	•		
		Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	•		Where possible, a stage wide strategy is undertaken for services.
	4U-3	Adequate natural ventilation minimises the need for mechanical ventilation			
		A number of the following design solution are used: <ul style="list-style-type: none"> — Rooms with similar usage are grouped together — Natural cross ventilation for apartments is optimised — Natural ventilation is provided to all inhabitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible 	•		
4V	Water Management and Conservation				

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4V-1	Potable water use is minimised	•		
		Water efficient fittings, appliances and wastewater reuse should be incorporated	•		Refer BASIX certificate
		Apartments should be individually metered	•		
		Rainwater should be collected, stored and reused on site	•		Refer BASIX certificate
		Drought tolerant, low water use plants should be used within landscaped areas	•		Refer landscape design
	4V-2	Urban stormwater is treated on site before being discharged to receiving waters			Refer to Civil Engineers Report
		Water sensitive urban design systems are designed by a suitably qualified professional	•		Refer to Civil Engineers Report
		A number of the following design solutions are used: — Runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation — Porous and open paving materials is maximised — On site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	•		Refer to Civil Engineers Report
	4V-3	Flood management systems are integrated into site design			N/A
		Detention tanks should be located under paved areas, driveways or in basement car parks	•		Refer to Civil Engineers Report
		On large sites parks or open spaces are designed to provide temporary on site detention basins	•		
4W	Waste Management				
	4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents			
		Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	•		Storage of rubbish bins is within the basement levels of the 2 apartment buildings, with collection being up in the loading dock of 3S. Refer to Waste Engineers report & precinct Drawings.
		Waste and recycling storage areas should be well ventilated	•		
		Circulation design allows bins to be easily manoeuvred between storage and collection points	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Temporary storage should be provided for large bulk items such as mattresses	•		A bulky items storage room, that is separate from the waste rooms, has been provided in each basement.
		A waste management plan should be prepared	•		
	4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling			
		All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling	•		Kitchens will incorporate waste storage in the layout which will then be taken to the waste chutes in the shared lobbies.
		Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	•		There are two chutes per lift core; one for garbage and one for recycling.
		For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses	•		
		Alternative waste disposal methods such as composting should be provided	•		Noted. The proposal allows for an abundance of outdoor space, allowing for future composting stations as per the residents needs.
4X		Building Maintenance			
	4X-1	Building design detail provides protection from weathering			
		A number of the following design solutions are used: — Roof overhangs to protect walls — Hoods over windows and doors to protect openings — Detailing horizontal edges with drip lines to avoid staining of surfaces — Methods to eliminate or reduce planter box leaching — Appropriate design and material selection for hostile locations	•		
	4X-2	Systems and access enable ease of maintenance			
		Window design enables cleaning from the inside of the building		•	This will be noted and become a part of ongoing building maintenance.
		Building maintenance systems should be incorporated and integrated into the design of the building form, roof and façade	•		A roof service stair has been allowed for in order to gain access to the roof where services are located.
		Design solutions do not require external scaffolding for maintenance access	•		
		Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Centralised maintenance, services and storage should be provided for communal open space areas within the building	•		
	4X-3	Material selection reduces ongoing maintenance costs			
		A number of the following design solutions are used: <ul style="list-style-type: none">— Sensors to control artificial lighting in common circulation and spaces— Natural materials that weather well and improve with time such as face brickwork— Easily cleaned surfaces that are graffiti resistant— Robust and durable materials and finished are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors	•		



3W from Hunter and Thorn Streets

Prepared to accompany the Development Application submitted to Council

20 March 2024

Project Address
East End Stage 3 & 4 - Hunter, Morgan, Laing, King and Newcomen Streets, Newcastle

Prepared on behalf:
IRIS

Prepared by:
SJB Architects NSW

Verification of Qualifications

Adam Haddow and John Pradel are registered as Architects in New South Wales and are enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.

Their registration Numbers are 7188 and 7004.

Statement of Design

SJB Architects NSW have been responsible for the design of the project since its inception and have worked with related professionals and experts in respect of the matter. The project has been designed to provide a development that is respectful of local planning and design controls and responds to the nine design quality principles of SEPP No. 65.

SJB Architects NSW verify that as required by the Clause 50 (1AB) of the Environmental Planning and Assessment Regulation 2000 the design quality principles set out in Schedule 1, design quality principles of the State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development and the objectives in Part 3 and Part 4 of the Apartment Design Guide have been achieved for the proposed development as described in the following document.



Adam Haddow
Director
Registered Architect NSW, No. 7188



3W, 3E and the view corridor

The following content outlines the architectural scheme against the nine Principles of Design.

8.1 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.

The proposal is a direct response to the site, context and character of Newcastle City.

The urban design strategy for Stages 3 and 4 create a cohesive precinct that accommodates residential, commercial and retail space that will activate and enliven the East End of Newcastle.

It includes a new view corridor along Market Street to Christ Church Cathedral and delivers new public space for the people of Newcastle. There is a series of fine grain connections and spaces that link the public domain of the city.

The proposal resists ‘bigness’ and ‘newness’, instead the site is dived into smaller more scaled parcels. This has enabled multiple architectural offices to actively engage in the delivery of buildings, allowing nuance and difference to thrive.

3W is one piece of this bigger puzzle, it responds to it’s place in the city and precinct in order to enhance the context and character of Newcastle.

8.2 Principle 2: Built form and scale

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

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.

The proposal responds to its natural, built and historical context. The orchestration of the built form within the precinct has numerous benefits.

In stage 3, buildings 3W and 3E create a new view corridor from the harbour to the cathedral. This also creates a new space -Market Square - which can be used by the public and is a space to express the connecting to country narratives that have been work shopped with community.

3W responds to the development along Hunter Street, with a commensurate 8 storey height. The building holds the corner of Hunter and Thorn Street to continue the established pattern of the city. To the South, near Laing Street the building skews to the East. This allows for view corridors to the Cathedral, both through Market Square and along Thorn Street.

8.3 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.

The proposal has a floor space that is responsive to the council controls, the approved concept DA and that is consistent with the density of the city centre.

The density proposed allows all apartments to achieve high levels of amenity.

Broadly, the mixed use development is located in a city centre with excellent access to transport, provision of public space, and proximity to retail and commercial uses. It is an ideal location for the density proposed.

The apartment mix proposed is:

- 1 Bedroom Apartments 21%
- 2 Bedroom Apartments 73%
- 3 Bedroom Apartments 6%

8.4 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.

The building has been designed to achieve high levels of amenity resulting in a sustainable outcome.

Broadly, the mixed use development is located in a city centre with good access to transport, provision of public space, and proximity to retail and commercial uses.

The precinct design has numerous socially sustainable benefits and initiatives with new public space, view corridors and improved public domain interfaces.

The design incorporates designing with county principles that have been developed with the community and are fully integrated into the scheme. This has been achieved with the input of Dhiira.

The building has a high proportion of apartments with access to cross ventilation (79%) and solar access (71%)

The apartment layouts have the following;

- 71% access to minimum ADG solar requirements.
- 79% access to cross ventilation requirements.
- Access to significant communal space - both open and enclosed.
- Generous apartment layouts and private open space
- Potential for views to the harbour

8.5 Principle 5: Landscape

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.

The orchestration of the buildings within the precinct has created a series of new landscape areas and public spaces.

In collaboration with the design team - SJB, DBJ, CP and COLA - an integrated architectural and landscape design has been achieved.

The design incorporates designing with county principles that have been developed with the community and are fully integrated into the scheme. This has been achieved with the input of Dhiira.

The siting of 3W allows for landscaping along Thorn Street, between the street and principle building alignment. It defines the residential entries and improves the public domain and streetscape.

The roof of 3W includes POS which has integrated landscape elements that provide generous amenity.

8.6 Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

The apartments in 3W have been designed to achieve very high levels of amenity.

Broadly, they are in a high quality mixed use development with good access to transport, provision of public space, retail uses, and extensive communal open space.

The development contributes to the general public amenity at ground floor through the activation of frontages via retail and residential lobbies.

The building has a high proportion of apartments with access to cross ventilation (79%) and solar access (71%).

The apartment layouts respond to both the context and precinct design, they include the following;

- 71% access to minimum ADG solar requirements.
- 79% access to cross ventilation requirements.
- Access to significant communal space - both open and enclosed.
- Generous apartment layouts and private open space
- Potential for views to the harbour

8.7 Principle 7: Safety

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

The orchestration of the buildings within the precinct have numerous benefits for safety and security.

In stage 3, buildings 3W and 3E create a new view corridor from the harbour to the cathedral. They also create a new public space which includes a primary connection from Hunter Street to Laing Street, and a secondary connection to Morgan Street.

This new public space - Market Square - includes water play, seating, landscape and a flexible space for both residents and the community.

Interstitial spaces, such as the public links from the Stage 3 market square to Morgan Street create permeability through the city.

Design initiatives which have been incorporated into the building design are:

- Retail activation at ground floor to Hunter Street, Market Square, Laing Street and Thorn Street.
- Residential entrances are clearly identifiable and allow for passive surveillance from the public domain.
- The building entrances have a secure access point.
- Passive surveillance is improved throughout the precinct.

8.8 Principle 8: Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

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

There are a broad range of apartment types within the building (and Stage 3 and Stage 4 precincts) providing housing diversity. This ranges from efficient 1 Bedroom apartments, through to generous 3 bedroom and penthouse apartments.

There is a mix of communal and open space created across both stages (3&4) allowing for a broad range of opportunities to socially interact. They include;

- Communal open space on the rooftop of 3E. This includes a pool, landscape and seating.
- Communal space in 4S. This includes gym, pool, spa and sauna for general wellness.
- A new public space - Market Square - which includes water play, seating, landscape and a flexible space for both residents and the community. This great public benefit has been achieved through the careful orchestration of buildings within Stage 3.
- Interstitial spaces, such as the public links from the Stage 3 market square to Morgan Street, and the Laing Street Walkway.
- Generous residential lobby spaces that allow for social interaction.

8.9 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.

The proposal is carefully considered, with architectural expression and material choice specific and responsive to the precinct and context.

The building presents as refined and ordered. This allows it to be a setting for the new view corridor to the Cathedral and the new public space in Stage 3.

The following principles have been observed in the design process:

- There is no colour on the North, East or South facades (facades that are associated with the view corridor and coloured facade of 3E).
- The West facade, which relates to stage 2, has coloured retractable blinds to create play and movement.
- The primary facade is concrete, a neutral and durable material.
- The primary facade is concrete, a material with a 'natural' finish, rather than primary colour, ensuring that the building sits comfortably within the urban domain.
- Secondary fenestration is recessive, within the primary concrete expression.

	<p>The following content outlines the architectural scheme’s response to Part 3 & Part 4 of the Apartment Design Guide.</p>

ADG Response Table

Objective			Complies		Notes
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	
3	Siting the development				
3A	Site Analysis				
	3A-1	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context			
		Each element in the Site Analysis Checklist should be addressed (see ADG Appendix 1)			Noted
3B	Orientation				
	3B - 1	Building types and layouts respond to the streetscape and site while optimising solar access within the development			
		Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	•		<p>The building defines the edge of Hunter Street and Laing Street.</p> <p>The Eastern side of the building defines the public space and creates a view corridor to the cathedral.</p> <p>The Western side addresses Thorn street - it's geometry allows a view corridor to the cathedral from Hunter Street.</p> <p>Access to the 2 residential lobbies is from Thorn Street.</p>
		Where the street frontage is to the east or west, rear buildings should be orientated to the north	•		The building has 4 public frontages.
		Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	•		The building has 4 public frontages.
	3B-2	Overshadowing of neighbouring properties is minimised during midwinter			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		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	•		<p>There is no overshadowing to communal open space of the neighbouring property as a result of 3W.</p> <p>There is some overshadowing to POS and living areas across Thorn Street - this is anticipated in the approved concept DA. The separation across the street is compliant with the ADG as it is not a side or rear boundary.</p> <p>3W holds the corner of Hunter Street and Thorn Street consistent with the built form pattern of the city.</p> <p>3W skews to the East (at the South) allowing the public benefit of views to the Cathedral</p> <p>This skew also creates a larger separation distance to the Southern apartments of stage 2 - separation of 22m. This provides additional amenity to Stage 2 - in excess of the approved concept DA.</p>
		Solar access to living rooms, balconies and private open spaces of neighbours should be considered	•		Refer above Amenity to neighbours has been considered - see above.
		Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%	•		Refer above. There is no reduction in solar after 10am and overall reduction in solar access to stage 2 would be less than 20%
		If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy			N/A
		Overshadowing should be minimised to the south or downhill by increased upper level setbacks			N/A The southern boundary is to a public road (Laing Street).

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development			N/A The building boundaries are with Laing Street, Thorn Street, Hunter Street and a public space.
		A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	•		
3C	Public Domain Interface				
	3C-1	Transition between private and public domain is achieved without compromising safety and security			
		Terraces, balconies and courtyard apartments should have direct street entry, where appropriate			N/A Ground floor is used for retail and residential lobbies.
		Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)			N/A Ground floor is used for retail and residential lobbies.
		Upper level balconies and windows should overlook the public domain	•		All apartments and balconies overlook the streets and public domain.
		Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m	•		There are no front fences or walls along the street boundaries. Apartments address the street.
		Length of solid walls should be limited along street frontages	•		Noted. The ground floor retail space is typically glazed to address the street frontages.
		Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	•		The lobbies and public space provide an opportunity for casual interaction.
		In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: — architectural detailing — changes in materials — plant species — colours	•		The building has 2 entries, residential lobbies can provide developed with different interior palettes.
		Opportunities for people to be concealed should be minimised	•		
	3C-2	Amenity of public domain is retained and enhanced			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	•		The public domain interfaces are landscaped.
		Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	•		The mailbox is provided in the residential lobby.
		The visual prominence of underground car park vents should be minimised and located at a low level where possible	•		Services coordinated to conceal carpark exhaust.
		Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	•		Services, and garbage rooms are concealed. The substation is concealed at ground level.
		Ramping for accessibility should be minimised by building entry locations and setting ground floor levels in relation to footpath levels	•		Ramping is minimised.
		Durable, graffiti resistant and easily cleanable materials should be used	•		Noted. The material palette is durable.
		Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: <ul style="list-style-type: none"> — Street access, pedestrian paths and building entries which are clearly defined — Paths, low fences and plating that clearly delineate between communal/private open space and the adjoining public open space — Minimal use of blank walls, fences and ground level parking 	•		The retail addresses the public space on the East.
		On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	•		The carpark is concealed underground.
3D	Communal and public open space				
	3D-1	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Communal open space has a minimum area equal to 25% of the site			<p>Refer to precinct drawings (DA-PR-8032) for communal open space calculations and compliance.</p> <p>Communal open space is provided on the roof of 3E, with additional communal space provided in 4S on lower ground floor including pool, gym and wellness area.</p> <p>The communal open space and communal space of stage 3 and stage 4 is supplemented with new public open space, which when combined together is greater than 25% of the site areas.</p>
		Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)			<p>Refer to precinct drawings for communal open space calculations and compliance</p> <p>The communal open space provided on the roof of 3E achieves the minimum requirement.</p>
		Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions			Refer to precinct drawings for communal open space calculations and compliance
		Communal open space should be co-located with deep soil areas		<ul style="list-style-type: none"> 	<p>The site is located in a town centre / dense urban area, so deep soil is not co-located with the communal open space. As per the ADG design criteria (outlined below), the communal space is located on the roof.</p>
		Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	<ul style="list-style-type: none"> 		Refer to precinct drawings for communal open space calculations and compliance.
		Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	<ul style="list-style-type: none"> 		Refer to precinct drawings for communal open space calculations and compliance

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should: <ul style="list-style-type: none"> — provide communal spaces elsewhere such as a landscaped roof top terrace or a common room — provide larger balconies or increased private open space for apartments — demonstrate good proximity to public open space and facilities and/or provide contributions to public open space 	•		Communal open space is provided on the roof of 3E, with additional communal space provided in 4S on lower ground floor including pool, gym and wellness area.
	3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting			
		Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: <ul style="list-style-type: none"> — seating for individuals or groups — barbecue areas — play equipment or play areas — swimming pools, gyms, tennis courts or common rooms 	•		Refer to precinct drawings (DA-PR-8032) for communal open space calculations and compliance. The communal space on 3E includes seating, landscape, and swimming pool.
		The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	•		
		Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	•		Services are integrated.
	3C-3	Communal open space is designed to maximise safety			
		Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: <ul style="list-style-type: none"> — bay windows — corner windows — balconies 	•		
		Communal open space should be well lit	•		
		Where communal open space/facilities are provided for children and young people they are safe and contained	•		
	3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood			

ADG Response Table

		Objective	Complies													
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes											
		The public open space should be well connected with public streets along at least one edge	•		A new public space is provided. It creates a view corridor to the cathedral, links Hunter Street to Laing Street, and allows a connection to the Harbour.											
		The public open space should be connected with nearby parks and other landscape elements	•		A new public space is provided. It creates a view corridor to the cathedral, links Hunter Street to Laing Street, and allows a connection to the Harbour.											
		Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	•		A new public space creates a view corridor from the harbour to the cathedral and links Hunter Street to Laing Street.											
		Solar access should be provided year round along with protection from strong winds	•		The public space is North facing.											
		Opportunities for a range of recreational activities should be provided for people of all ages	•		The public space allow flexible uses, including water play, seating, markets and events.											
		A positive address and active frontages should be provided adjacent to public open space	•		3W provides an active retail edge to the public space.											
		Boundaries should be clearly defined between public open space and private areas	•		3W defines the edge of the public space.											
3E	Deep soil zones															
	3E-1	Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality														
		Deep soil zones are to meet the following minimum requirements. <table><tr><th>Site area</th><th>Minimum dimensions</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 – 1,500m²</td><td>3m</td></tr><tr><td>Greater than 1,500m²</td><td>6m</td></tr><tr><td>Greater than 1,500m² with significant existing cover</td><td>6m</td></tr></table>	Site area	Minimum dimensions	Deep soil zone (% of site area)	Less than 650m ²	-	7%	650m ² – 1,500m ²	3m	Greater than 1,500m ²	6m	Greater than 1,500m ² with significant existing cover	6m	•	Refer to precinct drawings (DA-PR-8031) for deep soil calculations and compliance. As noted in the ADG achieving the design criteria may not be possible where the location and building typology have limited or no space for deep soil at ground level including high density areas and in centres. The proposal provides alternative forms of planting including on structure as noted in the ADG.
Site area	Minimum dimensions	Deep soil zone (% of site area)														
Less than 650m ²	-	7%														
650m ² – 1,500m ²	3m															
Greater than 1,500m ²	6m															
Greater than 1,500m ² with significant existing cover	6m															

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: 10% of the site as deep soil on sites with an area of 650m ² – 1,500m ² 15% of the site as deep soil on sites greater than 1,500m ²			N/A - not possible as it is a dense urban area.
		Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include: — basement and sub-basement car park design that is consolidated beneath building footprints — use of increased front and side setbacks — adequate clearance around trees to ensure long term health — co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil		•	Refer to precinct drawings (DA-PR-8031) for deep soil calculations and compliance.
		Achieving the design criteria may not be possible on some sites including where: — The location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) — There is 100% site coverage or non-residential uses at ground floor level — Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure		•	Refer to precinct drawings (DA-PR-8031) for deep soil calculations and compliance. As noted, achieving the design criteria is not possible due to the location and building typology (high density area / town centre). The proposal provides alternative forms of planting including on structure as noted in the ADG.
3F-1		Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy			

ADG Response Table

Objective		Complies		Notes													
Part No.	Objective No	Design Criteria Design Guidance	Yes		No												
		<p>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:</p> <table><tr><th>Building Height</th><th>Habitable Room and Balconies</th><th>Non Habitable</th></tr><tr><td>Up to 12 (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> <p>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties</p>	Building Height	Habitable Room and Balconies	Non Habitable	Up to 12 (4 storeys)	6m	3m	Up to 25m (5-8 storeys)	9m	4.5m	Over 25m (9+ storeys)	12m	6m	•		<p>The building does not have side and rear boundaries to the following; -Thorn Street to the West -Laing Street to the South -Hunter Street to the North It complies with the above.</p> <p>The separation between 3W (8 storeys) and 3E complies. At the Southern end, at it's narrowest the separation between habitable rooms is approx. 18m - further North it increases.</p>
Building Height	Habitable Room and Balconies	Non Habitable															
Up to 12 (4 storeys)	6m	3m															
Up to 25m (5-8 storeys)	9m	4.5m															
Over 25m (9+ storeys)	12m	6m															
		Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance	•		The building has no steps												
		For residential buildings next to commercial buildings, separation distances should be measured as follows: — for retail, office spaces and commercial balconies use the habitable room distances — for service and plant areas use the non-habitable room distances	•		Noted												
		New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: — site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) — on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)	•		Privacy impacts are minimised through site layout.												
		Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)			N/A												
		Direct lines of sight should be avoided for windows and balconies across corners	•		No internal corners between apartments.												
		No separation is required between blank walls	•		Noted												

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space			
		Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: <ul style="list-style-type: none"> — setbacks — solid or partially solid balustrades to balconies at lower levels — fencing and/or trees and vegetation to separate spaces — screening devices — bay windows or pop out windows to provide privacy in one direction and outlook in another — raising apartments/private open space above the public domain or communal open space — planter boxes incorporated into walls and balustrades to increase visual separation — pergolas or shading devices to limit overlooking of lower apartments or private open space — on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies 	•		Communal open space is provided in 3E - no privacy impacts due to the separation distances
		Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	•		No gallery access.
		Balconies and private terraces should be located in front of living rooms to increase internal privacy	•		Refer plans.
		Windows should be offset from the windows of adjacent buildings	•		Refer plans.
		Recessed balconies and/or vertical fins should be used between adjacent balconies	•		Refer plans.
3G	Pedestrian Access and Entries				
	3G-1	Building entries and pedestrian access connects to and address the public domain			
		Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge	•		There are 2 residential entries to Thorn Street, activating the street.
		Entry locations relate to the street and subdivision pattern and the existing pedestrian network	•		There are 2 residential entries to Thorn Street, activating the street.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries	•		The primary residential entries are identified with a different material to the body of the building.
		Where street frontage is limited and multiple buildings are located on the site, a primary street address is provided with clear sight lines and pathways to secondary building entries	•		N/A
	3G-2	Access, entries and pathways are equitable and easy to identify	•		Equitable access is provided from all entries.
		Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces	•		The entry and lobbies are clearly legible.
		The design of ground floors and underground car parks minimise level changes along pathways and entries	•		Level changes are integrated into the public domain/ landscape design.
		Steps and ramps are integrated into the overall building and landscape design	•		Level changes are integrated into the public domain/ landscape design.
		For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	•		To future design development.
		For large developments electronic access and audio/ video intercom should be provided to manage access	•		To future design development.
	3G-3	Pedestrian links through developments provide access to streets and connect destinations			
		Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	•		A series of pedestrian links are created including; -Hunter Street to Laing Street, through the public space. -To Morgan Street, from the public space.
		Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate	•		There are clear sight lines for new public links.
3H	Vehicle Access				
	3H-1	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Car park access is integrated with the building's overall facade, design solutions may include: <ul style="list-style-type: none"> the materials and colour palette minimise visibility from the street security doors or gates at entries that minimise voids in the facade where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed 	•		Integrated door provided.
		Car park entries are located behind the building line	•		Integrated into the building facade.
		Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	•		From Thorn Street, which allows an active retail frontage to Hunter Street,
		Car park entry and access is located on secondary streets or lanes where available	•		Not on the primary frontage of Hunter Street.
		Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	•		Driveway is designed to the Australian Standards.
		Access point locations avoid headlight glare to habitable rooms	•		No conflict with apartments.
		Adequate separation distances are provided between vehicular entries and street intersections	•		
		The width and number of vehicle access points is limited to the minimum	•		One vehicle entry provided.
		Visual impact of long driveways is minimised through changing alignments and screen planting	•		Driveway minimised.
		The requirement for large vehicles to enter or turnaround within the site is avoided	•		HRV access is provided in 3E - refer 3E report.
		Garbage collection, loading and servicing areas are screened	•		To occur within the loading dock of 3E.
		Clear sight lines should be provided at pedestrian and vehicle crossings	•		
		Traffic calming devices such as changes in paving material or textures should be used where appropriate			N/A
		Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: <ul style="list-style-type: none"> changes in surface materials level changes the use of landscaping for separation 	•		Pedestrian and vehicle entries separated.
3J	Bicycle and Car Parking				
	3J-1	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>For development in the following locations:</p> <ul style="list-style-type: none"> on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre <p>The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less</p> <p>The car parking needs for a development must be provided off street</p>			Refer to Traffic Report.
		Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site			Refer to Traffic report.
		Where less car parking is provided in a development, council should not provide on street resident parking permits			Refer to Traffic report.
	3J-2	Parking and facilities are provided for other modes of transport			
		Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	•		<p>All apartments are provided with carspaces which can be used for motorcycle parking.</p> <p>The development is provided with secure storage cages in the basement which can be used for bike storage.</p>
		Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	•		The development is provided with secure storage cages in the basement which can be used for bike storage.
		Conveniently located charging stations are provided for electric vehicles, where desirable	•		Charging spaces are provided.
	3J-3	Car park design and access is safe and secure			
		Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	•		The carpark layout is clear and legible.
		Direct, clearly visible and well lit access should be provided into common circulation areas	•		The carpark layout is clear and legible.
		A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	•		The lobby area is clearly defined.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards	•		The carpark layout is clear and legible.
	3J-4	Visual and environmental impacts of underground car parking are minimised			
		Excavation should be minimised through efficient car park layouts and ramp design	•		An efficient car parking layout is provided to minimise unnecessary excavation.
		Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	•		An efficient car parking layout is provided.
		Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	•		The carpark is concealed below ground.
		Natural ventilation should be provided to basement and sub-basement car parking areas		•	The basement is below ground and not naturally ventilated.
		Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	•		Integrated.
	3J-5	Visual and environmental impacts of on-grade car parking are minimised			
		On-grade car parking should be avoided	•		On-grade parking not proposed.
		Where on-grade car parking is unavoidable, the following design solutions are used: <ul style="list-style-type: none"> — parking is located on the side or rear of the lot away from the primary street frontage — cars are screened from view of streets, buildings, communal and private open space areas — safe and direct access to building entry points is provided — parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space — stormwater run-off is managed appropriately from car parking surfaces — bio-swales, rain gardens or on site detention tanks are provided, where appropriate — light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving 			N/A - on-grade parking not proposed.
	3J-6	Visual and environmental impacts of above ground enclosed car parking are minimised			
		Exposed parking should not be located along primary street frontages			N/A - on-grade parking not proposed.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: <ul style="list-style-type: none"> car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/ Home Office (SOHO) units along the street frontage (see figure 3J.9) 			N/A - on-grade parking not proposed.
		Positive street address and active frontages should be provided at ground level			N/A - on-grade parking not proposed.
4		Designing the Building			
4A		Solar and daylight access			
	4A-1	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space			
		3. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	•		71% of apartments receive 2 hours of direct sunlight in mid-winter. Refer compliance drawings.
		4. 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			N/A
		5. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter	•		
		The design maximises north aspect and the number of single aspect south facing apartments is minimised	•		There are no single orientation south facing apartments proposed.
		Single aspect, single storey apartments should have a northerly or easterly aspect	•		Single aspect apartments face East.
		Living areas are best located to the north and service areas to the south and west of apartment	•		Layouts respond to the site. Living rooms to the East and North typically. Refer apartment layouts.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: <ul style="list-style-type: none"> — dual aspect apartments — shallow apartment layouts — two storey and mezzanine level apartments — bay windows 	•		The majority of apartments are dual aspect apartments.
		To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m ² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	•		This is achieved to the majority of apartments.
		Achieving the design criteria may not be possible on some sites. This includes: <ul style="list-style-type: none"> — where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source — on south facing sloping sites — where significant views are oriented away from the desired aspect for direct sunlight — Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective 			N/A
4A-2		Daylight access is maximised where sunlight is limited			
		Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms	•		None proposed
		Where courtyards are used: <ul style="list-style-type: none"> — use is restricted to kitchens, bathrooms and service areas — building services are concealed with appropriate detailing and materials to visible walls — courtyards are fully open to the sky — access is provided to the light well from a communal area for cleaning and maintenance — acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved 	•		None proposed.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>Opportunities for reflected light into apartments are optimised through:</p> <ul style="list-style-type: none"> — reflective exterior surfaces on buildings opposite south facing windows — positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light — integrating light shelves into the design — light coloured internal finishes 	•		Light coloured finishes are proposed.
	4A-3	Design incorporates shading and glare control, particularly for warmer months			
		<p>A number of the following design features are used:</p> <ul style="list-style-type: none"> — balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas — shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting — horizontal shading to north facing windows — vertical shading to east and particularly west facing windows — operable shading to allow adjustment and choice — high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided) 	•		<p>Balconies are recessed providing shade in summer.</p> <p>Retractable screens are proposed on the Western facade,</p>
	4B	Natural Ventilation			
	4B-1	All habitable rooms are naturally ventilated			
		The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	•		The building has access to all orientations.
		Depths of habitable rooms support natural ventilation	•		
		The area of unobstructed window openings should be equal to at least 5% of the floor area served	•		
		Light wells are not the primary air source for habitable rooms	•		None proposed.
		<p>Doors and openable windows maximise natural ventilation opportunities by using the following design solutions:</p> <ul style="list-style-type: none"> — adjustable windows with large effective openable areas — a variety of window types that provide safety and flexibility such as awnings and louvres — windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors 	•		A variety of window types are proposed that provide natural ventilation.

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4B-2	The layout and design of single aspect apartments maximises natural ventilation			
		Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	•		Two apartments per floor are cross through apartments so depths are limited as a result.
		Natural ventilation to single aspect apartments is achieved with the following design solutions: <ul style="list-style-type: none"> — primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) — stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries — courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells 	•		On a typical floor plate 75% of apartments (6 of 8) are naturally cross ventilated.
	4B-3	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents			
		1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. 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	•		79% of apartments achieve cross ventilation. Refer compliance drawing (DA-3W-8002).
		2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	•		<p>Building 3W includes cross through apartments in the centre of the building to provide cross ventilation and an efficient building plan (a dual core solution which improves building amenity).</p> <p>Cross through apartments are 01.04/ 01.05/ 02.04/ 02.05/ 03.04/ 03.05/ 04.04/ 04.05/ 05.04/ 05.05/ 06.04/ 06.05/ 07.04/ 07.05.</p> <p>The cross through apartments are approx. 18.7m deep, from glass line to glass line - refer to drawings . This is a minor departure, not adversely affecting amenity. Cross ventilation will be achieved due to;</p> <p>1-The extent of glazing on both facades.</p> <p>2-The apartment layout - the openings are opposite down a corridor (without any obstructions).</p>

ADG Response Table

		Objective	Complies		Notes
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	
		The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	•		On a typical floor plate 75% of apartments (6 of 8) are corner apartments and cross through apartments.
		In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)	•		The width of windows on both facades is consistent.
		Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	•		Refer apartment plans.
		Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	•		
4C	Ceiling heights				
	4C-1	Ceiling height achieves sufficient natural ventilation and daylight access			

		Objective	Complies														
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes												
		<p>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <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 apartment 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 people 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> <p>These minimums do not preclude higher ceilings if desired</p>	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 apartment area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope	If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use		<ul style="list-style-type: none">••••	<p>Habitable ceiling heights will be minimum 2.7m.</p> <p>Non-habitable ceiling heights will be minimum 2.4m</p> <p>Ground - ceiling heights for retail and lobbies are sufficient.</p> <p>On Level 1 there are a number of restrictions in determining ceiling heights. The topographical nature of the Market Plaza, combined with the existing floor levels of Building 3N established a key datum for the awning which ties the Stage 3 buildings together. This was the key driver in establishing the floor height of Level 1.</p> <p>To avoid increasing the overall building height, the only way an increased floor to ceiling height could be achieved at Level 1 would be to lower this floor level. This was discounted as it would result in poor amenity for apartments with reduced window openings above the awning datum. It would also affect some of the ground floor retail heights below, which navigate level changes across the Market Plaza. The ground floor retail was prioritised as part of the overall activation strategy for the plaza.</p>
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 apartment area does not exceed 50% of the apartment area																
Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope																
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use																
		Ceiling height can accommodate use of ceiling fans for cooling and heat distribution		<ul style="list-style-type: none">•													
4C-2		Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms															

		Objective	Complies		Notes										
Part No.	Objective No	Design Criteria Design Guidance	Yes	No											
		A number of the following design solutions can be used: <ul style="list-style-type: none">— The hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces— Well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings— Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	•												
	4C-3	Ceiling heights contribute to the flexibility of building use over the life of the building													
		Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)			N/A - Ground floor is retail space.										
4D	Apartment size and layout														
	4D-1	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity													
		1. Apartments are required to have the following minimum internal areas: <table><tr><th>Apartment Type</th><th>Minimum Internal Area</th></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table> The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m ² each	Apartment Type	Minimum Internal Area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	•		The apartments have been designed with generous internal areas and will all meet the minimum requirements of 4D-1 1 Bedroom apartments meet the minimum requirement of 50sqm 2 Bedroom apartments meet the minimum requirement of 70/75sqm 3 Bedroom apartments meet the minimum requirement of 90/95sqm
Apartment Type	Minimum Internal Area														
Studio	35m ²														
1 bedroom	50m ²														
2 bedroom	70m ²														
3 bedroom	90m ²														
		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	•												

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	•		
		A window should be visible from any point in a habitable room	•		
		Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits			N/A
	4D-2	Environmental performance of the apartment is maximised			
		1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	•		
		2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	•		Refer plans.
		Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths			Noted
		All living areas and bedrooms should be located on the external face of the building	•		Refer plans.
		Where possible: — bathrooms and laundries should have an external openable window — main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	•		Main living spaces address the street. 50% of apartments have bathrooms with windows.
	4D-3	Apartment layouts are designed to accommodate a variety of household activities and needs			
		1. Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space)	•		Refer plans.
		2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	•		Refer plans.
		3. Living rooms or combined living/dining rooms have a minimum width of: — 3.6m for studio and 1 bedroom apartments — 4m for 2 and 3 bedroom apartments	•		Refer plans.
		4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	•		Refer plans.

		Objective	Complies																	
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes															
		Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	•		Refer plans.															
		All bedrooms allow a minimum length of 1.5m for robes	•		Refer plans.															
		The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	•		Refer plans.															
		Apartment layouts allow flexibility over time, design solutions may include: <ul style="list-style-type: none">— dimensions that facilitate a variety of furniture arrangements and removal— spaces for a range of activities and privacy levels between different spaces within the apartment— dual master apartments— dual key apartments— Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments— room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))— efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	•		Apartments are oversized which allows for greater flexibility than the ADG minimum.															
4E	Private Open Space and Balconies																			
	4E-1	Apartments provide appropriately sized private open space and balconies to enhance residential amenity																		
		All apartments are required to have primary balconies as follows: <table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio Apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr></table> The minimum balcony depth to be counted as contributing to the balcony area is 1m	Dwelling Type	Minimum Area	Minimum Depth	Studio Apartments	4m ²	-	1 bedroom apartments	8m ²	2m	2 bedroom apartments	10m ²	2m	3+ bedroom apartments	12m ²	2.4m	•		The balconies all meet the minimum areas of 4E-1 1 Bedroom apartments meet the minimum requirement of 8sqm 2 Bedroom apartments meet the minimum requirement of 10sqm 3 Bedroom apartments meet the minimum requirement of 12sqm
Dwelling Type	Minimum Area	Minimum Depth																		
Studio Apartments	4m ²	-																		
1 bedroom apartments	8m ²	2m																		
2 bedroom apartments	10m ²	2m																		
3+ bedroom apartments	12m ²	2.4m																		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		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 15m ² and a minimum depth of 3m			N/A - retail at ground
		Increased communal open space should be provided where the number or size of balconies are reduced			N/A - Balconies are typically oversized.
		Storage areas on balconies is additional to the minimum balcony size			N/A - not proposed
		Balcony use may be limited in some proposals by: <ul style="list-style-type: none"> — consistently high wind speeds at 10 storeys and above — close proximity to road, rail or other noise sources — exposure to significant levels of aircraft noise — heritage and adaptive reuse of existing buildings — In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated 			N/A
	4E-2	Primary private open space and balconies are appropriately located to enhance liveability for residents			
		Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	•		Refer apartment plans.
		Private open spaces and balconies predominantly face north, east or west	•		ALL POS has face North, East or West. Refer apartment plans.
		Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	•		Refer apartment plans.
	4E-3	Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building			
		Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	•		Balustrade design responds to the location. Level 01 has a solid balustrade, upper levels are open.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Full width full height glass balustrades alone are generally not desirable	•		Glass balustrades are proposed at the corners of the building for architectural expression and amenity. The balustrades allow; -views to the North East -additional light. -the corner of the building to be expressed. -the architectural grid to be clearly articulated.
		Projecting balconies should be integrated into the building design and the design of soffits considered	•		The balconies are completely integrated and form part of the facade design
		Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	•		The Western facade has operable blinds.
		Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	•		Balconies are located along public streets so balustrades are not required to be set back.
		Downpipes and balcony drainage are integrated with the overall facade and building design	•		Services integrated.
		Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	•		A/C units will be integrated - located on the roof.
		Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	•		No A/C units are proposed on the balconies.
		Ceilings of apartments below terraces should be insulated to avoid heat loss	•		In accordance with BASIX.
		Water and gas outlets should be provided for primary balconies and private open space			TBC during design development.
	4E-4	Private open space and balcony design maximises safety			
		Changes in ground levels or landscaping are minimised	•		
		Design and detailing of balconies avoids opportunities for climbing and falls	•		
4F	Common Circulation and Spaces				
	4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments			
		1. The maximum number of apartments off a circulation core on a single level is eight	•		Typical core has 4 apartments from a core maximum.
		2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors	•		The lobbies are typically 2m or more and allow for comfortable entry.
		Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	•		Natural daylight is provided to all common lobbies.
		Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	•		The end of the lobbies are glazed.
		Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: a series of foyer areas with windows and spaces for seating wider areas at apartment entry doors and varied ceiling heights			N/A
		Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	•		Multiple cores proposed to allow additional cross ventilation. There are only maximum four apartments accessing each core per floor.
		Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including: — sunlight and natural cross ventilation in apartments — access to ample daylight and natural ventilation in common circulation spaces — common areas for seating and gathering — generous corridors with greater than minimum ceiling heights — other innovative design solutions that provide high levels of amenity	•		The design criteria is achieved.
		Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	•		The design criteria is achieved.
		Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled	•		
4F-2		Common circulation spaces promote safety and provide for social interaction between residents			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes										
		Design Criteria Design Guidance	Yes	No											
		Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	•												
		Tight corners and spaces are avoided	•												
		Circulation spaces should be well lit at night	•		Noted										
		Legible signage should be provided for apartment numbers, common areas and general wayfinding	•		Noted										
		Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	•		The residential lobbies provide a location for incidental spaces.										
		In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space	•		The residential lobbies provide a location .										
		Where external galleries are provided, they are more open than closed above the balustrade along their length	•		No external galleries proposed.										
4G	Storage														
	4G-1	Adequate, well designed storage is provided in each apartment													
		<div>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:<table><tr><th>Dwelling type</th><th>Storage size</th></tr><tr><td>Studio apartments</td><td>4m3</td></tr><tr><td>1 bedroom apart-ments</td><td>6m3</td></tr><tr><td>2 bedroom apart-ments</td><td>8m3</td></tr><tr><td>3 bedroom apart-ments</td><td>10m3</td></tr></table>At least 50% of the required storage is to be located within the apartment</div>	Dwelling type	Storage size	Studio apartments	4m3	1 bedroom apart-ments	6m3	2 bedroom apart-ments	8m3	3 bedroom apart-ments	10m3	•		<div>The minimum storage requirements are meet. A minimum 50% is provided within the apartments. Where there is not 100% in the apartments, a storage room is located in the basement, which provides additional storage outside the apartment to meet the storage minimum requirements. Refer to storage schedule.</div>
Dwelling type	Storage size														
Studio apartments	4m3														
1 bedroom apart-ments	6m3														
2 bedroom apart-ments	8m3														
3 bedroom apart-ments	10m3														
		Storage is accessible from either circulation or living areas	•												
		Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street			N/A - no balcony storage										
		Left over space such as under stairs is used for storage			N/A										
	4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments													
		Storage not located in apartments is secure and clearly allocated	•		Storage cages are located in the basement which is secure.										

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Storage is provided for larger and less frequently accessed items, where practical	•		Storage cages are located in the basement which is secure.
		Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible	•		Storage cages are located to the side/rear.
		If communal storage rooms are provided they should be accessible from common circulation areas of the building	•		
		Storage not located in an apartment is integrated into the overall building design and not visible from the public domain	•		The storage room is located within the basement.
4H	Acoustic Privacy				
	4H-1	Noise transfer is minimised through the siting of buildings and building layout			
		Adequate building separation is provided within the development and from neighbouring buildings / adjacent uses (also see section 2F Building separation and section 3F Visual Privacy)	•		Refer previous.
		Window and door openings are generally orientated away from noise sources	•		Primary openings are orientated to the public domain (Hunter Street, Thorn Street, Laing Street and the public domain.
		Noisy areas within buildings including building entries and corridors are located next to or above each other and quieter areas next to or above quieter areas	•		The floor plans are typically replicated. All lobbies are stacked vertically.
		Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources	•		Living rooms and bedrooms are on the outside of the apartments and non-habitable spaces are adjacent lobbies.
		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	•		Typically only 1-2 shared walls.
		Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas are located at least 3m away from bedrooms	•		Plant rooms have been designed in the basement. The basement entry is on basement 1 which is below the apartments. Mechanical equipment has been placed on the roof. There is no conflict with active communal spaces .
	4H-2	Noise impacts are mitigated through internal apartment layout and acoustic treatments			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: rooms with similar noise requirements are grouped together doors separate different use zones wardrobes in bedrooms are co-located to act as sound buffers	•		Refer apartment plans.
		Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: double or acoustic glazing acoustic seals use of materials with low noise penetration properties continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	•		
4J	Noise and Pollution				
	4J-1	In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings			
		To minimise impacts the following design solutions may be used: — physical separation between buildings and the noise or pollution source — residential uses are located perpendicular to the noise source and where possible buffered by other uses — non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces — Non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources — Buildings should respond to both solar access and noise. Where solar access is away from the noise source, nonhabitable rooms can provide a buffer — Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) — Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	•		The building is not located in a noisy or hostile environment.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: <ul style="list-style-type: none"> — solar and daylight access — private open space and balconies — natural cross ventilation 	•		The building is not located in a noisy or hostile environment.
	4J-2	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	•		Noted
		Design solutions to mitigate noise include: <ul style="list-style-type: none"> — limiting the number and size of openings facing noise sources — providing seals to prevent noise transfer through gaps — using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) — using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits 	•		At level 01 a solid balustrades is used.
4K	Apartment Mix				
	4K-1	A range of apartment types and sizes is provided to cater for different household types now and into the future			
		A variety of apartment types is provided	•		The building includes -1 Bed apartments -2 Bed apartments -3 Bed apartments -Penthouse and sub-penthouses A number of the apartments incorporate a study for further variety.
		The apartment mix is appropriate, taking into consideration: <ul style="list-style-type: none"> — the distance to public transport, employment and education centres — the current market demands and projected future demographic trends — the demand for social and affordable housing — different cultural and socioeconomic group 	•		The building includes -1 Bed apartments -2 Bed apartments -3 Bed apartments -Penthouse and sub-penthouses

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Flexible apartment configurations, such as dual key apartments, are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	•		The apartments are typically larger than ADG requirements. Larger apartments provide flexibility, supporting diverse household types.
	4K-2	The apartment mix is distributed to suitable locations within the building			
		Different apartment types are located to achieve successful facade composition and to optimise solar access. See figure 4A.3			
		Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available	•		Larger 3 Bedroom apartments are provided on the upper floors (level 06 + level 07).
4L	Ground Floor Apartments				
	4L-1	Street frontage activity is maximised where ground floor apartments are located			
		Direct street access should be provided to ground floor apartments			N/A - no ground floor apartments.
		Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: both street and foyer entrances to ground floor apartments private open space is next to the street doors and windows face the street			N/A - no ground floor apartments.
		Retail or home office spaces are located along street frontages	•		Retail proposed at ground floor.
		Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for con-version into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor ameni-ties for easy conversion			N/A - no ground floor apartments.
	4L-2	Design of ground floor apartments delivers amenity and safety for residents			
		Privacy and safety is provided without obstructing causal surveillance. Design solutions may include: — elevation of private gardens and terraces above the street level by 1m – 1.5m (see Figure 4L.4) — landscaping and private courtyards — window sill heights that minimise sight lines into apartments — integrating balustrades, safety bars or screens with the exterior design			N/A - no ground floor apartments.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Solar access is maximised through: <ul style="list-style-type: none"> — high ceilings and tall windows — trees and shrubs that allow solar access in winter and shade in summer 			N/A - no ground floor apartments..
4M	Facades				
	4M-1	Building facades provide visual interest along the street respecting the character of the local area			
		Design solutions for front building facades may include: <ul style="list-style-type: none"> — A composition of varied building elements — A defined base, middle and top of the buildings — Revealing and concealing certain elements — Changes in texture, material, detail and colour to modify the prominence of elements 	•		<p>The facade responds to the context both in form and material choice.</p> <p>The building form responds to the city and view lines. The facade and materials choice is simple and elegant - it acts as a backdrop to the public space, views to cathedral and views to the harbour.</p> <p>It is designed with Connection to Country principles. Refer design report for diagrams and supporting material.</p>
		Building services should be integrated within the overall façade	•		Services are integrated into the facade so as to be concealed.
		Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: <ul style="list-style-type: none"> — Well composed horizontal and vertical elements — Variation in floor heights to enhance the human scale — Elements that are proportional and arranged in patterns — Public artwork or treatments to exterior blank walls — Grouping of floors or elements such as balconies and windows on taller buildings 	•		<p>The primary facade is a simple and elegant concrete frame.</p> <p>Secondary elements sit within this primary frame.</p> <p>At ground, a connecting to country narrative is expressed through detail in the concrete frame.</p> <p>The residential entries are marked with a refined metal cladding.</p>
		Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	•		<p>The building facade responds to adjacent development on Hunter and the stage 3 scheme.</p> <p>Refer design report for diagrams and supporting material.</p>
		Shadow is created on the façade throughout the day with building articulation, balconies and deeper window re-veals	•		The facade allows a play of shadows using a concrete frame with deep reveals.
	4M-2	Building functions are expressed by the façade			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Building entries should be clearly defined	•		The building entry is clearly defined with a refined metal cladding that contrasts the primary concrete frame.
		Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	•		<p>The building holds the corner of Hunter Street and Thorn Street.</p> <p>The prominent corners on Hunter Street are further expressed architectural articulation, this includes the circular opening in the roof above 07.01.</p> <p>Refer design report for diagrams and supporting material.</p>
		The apartment layout should be expressed externally through façade features as party walls and floor slabs	•		<p>The building presents as a refined and repetitive frame.</p> <p>Subtle adjustments are made on the facade to express the apartments such as;</p> <ul style="list-style-type: none"> -removal of blinds on the West to mark the residential lobbies -balustrade details on the North.
4N	Roof Design				
	4N-1	Roof treatments are integrated into the building design and positively respond to the street			
		<p>Roof design relates to the street. Design solutions may include:</p> <ul style="list-style-type: none"> — Special roof features and strong corners — Use of skillion or very low pitch hipped roofs — Breaking down the massing of the roof by using smaller elements to avoid bulk — Using materials or a pitched form complementary to adjacent buildings 	•		There is a larger order at the top storey to define the roof parapet.
		<p>Roof treatments should be integrated with the building design. Design solutions may include:</p> <p>Roof design proportionate to the overall building size, scale and form</p> <p>Roof materials complement the building</p> <p>Service elements are integrated</p>	•		The roof is integrated into the parapet.
	4N-2	Opportunities to use roof space for residential accommodation and open space are maximised			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Habitable roof space should be provided with good levels of amenity. Design solutions may include: <ul style="list-style-type: none"> — Penthouse apartments — Dormer or clerestory windows — Openable skylights 	•		The roof is proposed as private open space.
		Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	•		The roof is proposed as private open space.
	4N-3	Roof design incorporates sustainability features			
		Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: <ul style="list-style-type: none"> — The roof lifts to the north — Eaves and overhangs shade walls and windows from summer sun 	•		Overhangs and deep balconies shade the walls in the summer.
		Skylights and ventilation systems should be integrated into the roof design	•		
4O	Landscape Design				
	4O-1	Landscape design is viable and sustainable			
		Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: <ul style="list-style-type: none"> — Diverse and appropriate planting — Bio-filtration gardens — Appropriately planted shading trees — Areas for residents to plant vegetables and herbs — Composting — Green roofs or walls 	•		The landscape and architecture is an integrated design, this includes; <ul style="list-style-type: none"> -The building interfaces along Thorn Street. -The interface to the public space (market square). -Planted awning in market square. Refer to COLA design report for landscape design intent.
		Ongoing maintenance plans should be prepared	•		Refer to COLA design report for landscape design intent.
		Microclimate in enhanced by: <ul style="list-style-type: none"> — Appropriately scaled trees near the eastern and western elevations for shade — A balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter — Shade structures such as pergolas for balconies and courtyards 	•		Refer to COLA design report for landscape design intent.
		Tree and shrub selection considers size at maturity and the potential for roots to complete (see table 4)	•		Refer to COLA design report for landscape design intent.
	4O-2	Landscape design contributes to the streetscape and amenity			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Landscape design responds to the existing site conditions including: Changes of levels — Views — Significant landscape features including trees and rock outcrops	•		Refer to COLA design report for landscape design intent.
		Significant landscape features should be protected by: — Tree protection zones (see figure 40.5) — Appropriate signage and fencing during construction	•		Refer to COLA design report for landscape design intent.
		Plants selected should be endemic to the region and reflect the local ecology	•		Refer to COLA design report for landscape design intent.
4P	Planting on Structures				
	4P-1	Appropriate soil profiles are provided			
		Structures are reinforced for additional saturated soil weight	•		Noted
		Soil volume is appropriate for plant growth, considerations include: — Modifying depths and widths according to the planting mix and irrigation frequency — Free draining and long soil life span — Tree anchorage	•		Refer to COLA design report for landscape design intent.
		Minimum soil standards for plant sizes should be provided in accordance with Table 5	•		Refer to COLA design report for landscape design intent.
	4P-2	Plant growth is optimised with appropriate selection and maintenance			
		Plants are suited to site conditions, considerations include: — Drought and wind tolerance — Seasonal changes in solar access — Modified substrate depths for diverse range of plants — Plant longevity	•		Refer to COLA design report for landscape design intent.
		A landscape maintenance plan is prepared	•		Refer to COLA design report for landscape design intent.
		Irrigation and drainage systems respond to: — Changing site conditions — Soil profile and the planting regime — Whether rainwater, stormwater or recycled grey water is used	•		Refer to COLA design report for landscape design intent.
	4P-3	Planting on structure contributes to the quality and amenity of communal and public open spaces			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>Building design incorporates opportunities for planting on structures. Design solutions may include:</p> <ul style="list-style-type: none"> — Green walls with specialised lighting for indoor green walls — All design that incorporates planting — Green roofs, particularly where roofs are visible from public domain — Planter boxes — Note: structures designed to accommodate green walls should be integrated into the building façade and consider the ability of the façade to change over time 	•		<p>The landscape is proposed at ground floor and on the L1 canopy.</p> <p>Refer to COLA design report for landscape design intent.</p>
4Q	Universal Design				
	4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members			
		Developments achieve a benchmark of 20% of the total apartment incorporating the Liveable Housing Guideline's silver level universal design features	•		A minimum of 20% of apartments incorporate the liveable Housing Guideline's silver level universal design features.
	4Q-2	A variety of apartments with adaptable designs are provided			
		Adaptable housing should be provided in accordance with the relevant council policy	•		The development (Stage 3) includes 10% adaptable apartments in accordance with the requirement.
		<p>Design solutions for adaptable apartments include:</p> <ul style="list-style-type: none"> — Convenient access to communal and public areas — High level of solar access — Minimal structural change and residential amenity loss when adapted — Larger car parking spaces for accessibility — Parking titled separately from apartments or shared car parking arrangements 			Noted - Refer apartment plans.
	4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs			
		<p>Apartments design incorporates flexible design solutions which may include:</p> <ul style="list-style-type: none"> — Rooms with multiple functions — Dual master bedroom apartments with separate bathrooms — Larger apartments with various living space options — Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom 	•		The area of the apartments are generally larger than the minimums suggested in the ADG to allow flexibility.
4R	Adaptive Reuse				

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4R-1	New additional to existing buildings are contemporary and complementary and enhance an area's identity and sense of place			
		Design solutions may include: <ul style="list-style-type: none"> — New elements to align with the existing building — Additions that complement the existing character, siting, scale, proportion, pattern form and detailing — Use of contemporary and complementary materials, finishes, textures and colours 			N/A
	4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse			
		Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: <ul style="list-style-type: none"> — Generously sized voids in deeper buildings — Alternative apartment types when orientation is poor — Using additions to expand the existing building envelope 			N/A
		Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: <ul style="list-style-type: none"> — Where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) — Alternatives to providing deep soil where less than the minimum requirement is currently available on the site — Building and visual separation - subject to demonstrating alternative design approaches to achieving privacy — Common circulation — Car parking — Alternative approaches to private open space and balconies 			N/A
4S	Mixed Use				
	4S-1	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement			
		Mixed use development should be concentrated around public transport and centres	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4S-2	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents			
		Residential circulation areas should be clearly defined. Design solutions may include: <ul style="list-style-type: none"> Residential entries are separated from commercial entries and directly accessible from the street Commercial service areas are separated from residential components Residential car parking and communal facilities are separated or secured Concealment opportunities are avoided 	•		Residential lobbies are separate from retail tenancies and are accessed from Thorn Street.
		Landscape communal open space should be provided at podium or roof levels			N/A - Refer 4N and Stage 3
4T	Awnings and Signage				
	4T-1	Awnings are well located and complement and integrate with the building design			
		Awnings should be located along streets with high pedestrian activity and active frontages	•		An awning is provided on Hunter Street and within the public space between 3E and 3W.
		A number of the following design solutions are used: <ul style="list-style-type: none"> Continuous awnings are maintained and provided in areas with existing pattern Height, depth, material and form complements the existing street character Protection from the sun and rain is provided Awnings are wrapped around the secondary frontages of corner sites Awnings are retractable in areas without an established pattern 	•		An awning is provided on Hunter Street and within the public space between 3E and 3W.
		Awnings should be located over building entries for building address and public domain amenity	•		An awning is proposed along Hunter Street and the public space. The residential entries are recessed to provide cover, likewise the retail corner at Hunter and Thorn Street.
		Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	•		Noted
		Gutters and down pipes should be integrated and concealed	•		Noted
		Lighting under awnings should be provided for pedestrian safety	•		Noted
	4T-2	Signage responds to the context and desired streetscape character			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	•		Noted
		Legible and discrete way finding should be provided for larger developments	•		Noted
		Signage is limited to being on and below awnings and in single façade sign on the primary street frontage	•		Noted
4U	Energy Efficiency				
	4U-1	Development incorporates passive environmental design			
		Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	•		
		Well located, screened outdoor areas should be provided for clothes drying	•		The primary frame of the facade provides deep reveals and screening to the balconies.
	4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer			
		A number of the following design solutions are used: — The use of smart glass or other technologies on north and west elevations — Thermal mass in the floors and walls of north facing rooms is maximised — Polished concrete floor, tiles, or timber rather than carpet — Insulated roofs, walls and floors and seals on window and door openings — Overhangs and shading devices such as awnings, blinds and screens	•		Deep balconies maximise shading to sliding doors.
		Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	•		Service rooms are consolidated in the basement levels.
	4U-3	Adequate natural ventilation minimises the need for mechanical ventilation			
		A number of the following design solution are used: — Rooms with similar usage are grouped together — Natural cross ventilation for apartments is optimised — Natural ventilation is provided to all inhabitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	•		
4V	Water Management and Conservation				
	4V-1	Potable water use is minimised			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Water efficient fittings, appliances and wastewater reuse should be incorporated	•		Refer BASIX certificate
		Apartments should be individually metered	•		
		Rainwater should be collected, stored and reused on site	•		Refer BASIX certificate
		Drought tolerant, low water use plants should be used within landscaped areas	•		Refer to COLA design report for landscape design.
	4V-2	Urban stormwater is treated on site before being discharged to receiving waters			
		Water sensitive urban design systems are designed by a suitably qualified professional	•		Refer to civil/ stormwater documentation.
		A number of the following design solutions are used: — Runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation — Porous and open paving materials is maximised — On site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	•		Refer to civil/ stormwater documentation.
	4V-3	Flood management systems are integrated into site design			
		Detention tanks should be located under paved areas, driveways or in basement car parks	•		Refer to hydraulic/ stormwater documentation.
		On large sites parks or open spaces are designed to provide temporary on site detention basins			N/A
4W	Waste Management				
	4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents			
		Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	•		Waste storage and collection occurs within the loading dock of 3E.
		Waste and recycling storage areas should be well ventilated	•		
		Circulation design allows bins to be easily manoeuvred between storage and collection points	•		
		Temporary storage should be provided for large bulk items such as mattresses	•		A bulky items storage room, that is separate from the waste rooms, has been provided in each basement.
		A waste management plan should be prepared	•		
	4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling	•		
		Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	•		There are two chutes per lift core; one for garbage and one for recycling.
		For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses			N/A
		Alternative waste disposal methods such as composting should be provided			Noted - body corporate to review.
4X	Building Maintenance				
	4X-1	Building design detail provides protection from weathering			
		A number of the following design solutions are used: — Roof overhangs to protect walls — Hoods over windows and doors to protect openings — Detailing horizontal edges with drip lines to avoid staining of surfaces — Methods to eliminate or reduce planter box leaching — Appropriate design and material selection for hostile locations	•		
	4X-2	Systems and access enable ease of maintenance			
		Window design enables cleaning from the inside of the building	•		Windows and glazing is typically associated with balconies which allows simple cleaning. Other windows will be cleaned by the building management,
		Building maintenance systems should be incorporated and integrated into the design of the building form, roof and façade	•		Noted - to be developed at design development stage.
		Design solutions do not require external scaffolding for maintenance access	•		Noted - to be developed at design development stage.
		Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems			N/A
		Centralised maintenance, services and storage should be provided for communal open space areas within the building	•		
	4X-3	Material selection reduces ongoing maintenance costs	•		



Hunter Street Elevation, Building 4N

Prepared to accompany the Development Application submitted to Council

20 March 2024

Project Address
East End Stage 3 & 4 - Hunter, Morgan, Laing, King and Newcomen Streets, Newcastle

Prepared on behalf:
IRIS

Prepared by:
Curious Practice, Newcastle NSW

Verification of Qualifications


Warren Haasnoot and Greg Lee are registered as Architects in New South Wales and are enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.

Their registration Numbers are 9852 and 10997

Statement of Design

Curious Pracitce have been responsible for the design of the project since its inception and have worked with related professionals and experts in respect of the matter. The project has been designed to provide a development that is respectful of local planning and design controls and responds to the nine design quality principles of SEPP No. 65.

Curious Practice verify that as required by the Clause 50 (1AB) of the Environmental Planning and Assessment Regulation 2000 the design quality principles set out in Schedule 1, design quality principles of the State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development and the objectives in Part 3 and Part 4 of the Apartment Design Guide have been achieved for the proposed development as described in the following document.



Greg Lee
Director
Registered Architect NSW, No. 10997

The following content outlines the architectural scheme against the nine Principles of Design.

12.1 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.

The proposal, located within the historical city centre and prominent corner of Hunter and Morgan Streets, responds to the diverse built forms and character of Newcastle.

Building 4 North (4N) forms part of a urban design and site based strategy where the precinct is divided into smaller building parcels delivered by multiple architectural practices in response to ‘bigness’ and the existing fine grain character of Hunter Street. The differing heights and rhythms of the proposed buildings, provide a interplay between them and the city that cohesively create a high amenity precinct of diverse character.

Building 4N engages directly with Newcastle’s heritage fabric. It reinforces Newcastles unique character and adds to the layers of architectural styles along Hunter Street through the retention of the heritage buildings and interplay with new within and above.

Newcastle is also not a grey city. The buildings of the East End are therefore colourful and playful and the materiality of the proposal is informed by the existing context on the site. Utilising materiality, scale and form, the proposal is responsive to the existing fine grain character of the area while providing a transition from the existing built form and scale to that of the new precinct.

12.2 Principle 2: Built form and scale

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

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.

The built form including the varied height planes of Building 4N is a direct response to ‘place’. The new residential building responds with a homogeneous form that expresses the predominant small lot vertical arrangements of the area through subtle colour variation and vertical fissures that separate the slab edges and visual mass maintaining the vertical proportion of buildings along Hunter Street.

The vertical expression is further emphasised with various roof heights along the Hunter and Morgan Street whilst also contributing to Newcastle’s playful skyline of historic ornamental parapets and stepped buildings reflecting the sloping topography of the city and providing greater amenity to its neighbours and street.

Building 4N pulls in from the south to provide separation and good amenity to its new southern neighbour (4S) and Laing Lane’s public room and carves out the middle creating a new urban courtyard that improves the amenity of the existing neighbouring residential building that is built to our shared boundary. The courtyard additionally provides opportunity for valuable quality deep soil zone; solar access to its neighbours and cross-ventilation to majority of units.

To the north and west at Morgan and Hunter Streets, the building holds the street and to the retained heritage facades. Building 4N touches the ground and sky providing a high quality pedestrian environment and contributing positively to the existing playful skyline through an interpretation of retained facades finely detailed parapets.

Lower sections of building along the north, west and southern edges provide relief to the street and to the south -west corner creates communal areas for the occupants to enjoy rooftop gardens, with shared facilities and views of the cathedral.

The gradation of the columns up the building helps moderate the opportunities of prospect and refuge within the apartments. Lower levels can use the exterior spaces without feeling exposed and the view is revealed as the floors rise upwards. Small adjustments in the column rhythm help celebrate the corners, focus views, separate dwellings and play with the composition of the homogeneous facade.

12.3 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.

The proposal has a floor space ratio responsive to the Council controls and consistent with the desired density of the city centre.

All apartments experience a high level of amenity, with both views and privacy and quality open space.

The proposal location in the city centre, with generous access to high quality public space, and proximity to diverse retail and commercial uses

The proposal is is well serviced by public transport, within walking distance to light rail and ferry services to the CBD and surrounds.

All apartments are provided with a carspace.

Apartment mix:

— Studio Apartments	0%
— 1 Bedroom + Apartments	12.5% 56-57sqm
— 2 Bedroom + Apartments	67% 81-96sqm
— 3 Bedroom + Apartments	20.5% 145-211sqm

12.4 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.

The building has been designed to achieve high levels of amenity which is a favourable and sustainable outcome.

Where possible the proposal has retained existing building elements and maximised potential for landscaping to reduce stormwater run-off, including areas of deep soil. Mutually, the diverse landscaped areas will promote cooling and shade and areas for native habitat and good occupant amenity.

Broadly, the mixed use development is located in a city centre with good access to transport, provision of public space, and proximity to retail and commercial uses.

The precinct design has numerous socially sustainable benefits and initiatives with new public space, view corridors and improved public domain interfaces.

The design incorporates designing with county principles that have been developed with the community and are fully integrated into the scheme. This has been achieved with the input of Dhiira.

The proposal incorporates a number of principles of sustainability:

- Maximising direct sun to apartments while utilising
- Verandahs to the building perimeter and shading devices to control summer heat gain (87.5% of apartments receive a minimum of 2 hours direct sunlight in mid-winter)
- Natural ventilation to corridors and the majority of apartments (78% of apartments are cross-ventilated)
- The retention of the heritage building facades will prolong the life of the building fabric reducing demolition waste and new building material.
- Extensive landscaping to roofs and over structure, minimising stormwater run-off
- On-site rainwater detention and re-use

12.5 Principle 5: Landscape

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.

The precinct is defined as a series of connected and intergrated new landscape areas and public spaces.

In collaboration with the design team - SJB, DBJ, CP and COLA - an integrated architectural and landscape design has been achieved. The design incorporates designing with county principles that have been developed with the community and are fully integrated into the scheme. This has been achieved with the input of Dhiira.

A detailed site wide explanation is outlined within the landscape and architectural design reports.

Specifically, Building 4N addresses the corner of Hunter and Morgan Streets providing a generous, mostly internal courtyard with qauality deep soil zone to improve amenity for new and existing buildings. The courtyard is conceived as a forest floor, providing a tranquil threshold between the city and dwellings and provides place for informal social interaction with occupants.

Landscaped roofs are integrated with the buildings architecture and provides additional amenity to the dwellings and overlooking neighbours, and enhances the streetscape.

The communal open space is provided on the roof within a landscaped setting and located to capture views of the cathedral.

12.6 Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

The apartments in 4N have been designed to achieve very high levels of amenity.

The building facade strategy for Building 4 North promotes the values of prospect and refuge. That is, for occupants to feel connected to the public domain, whilst feeling secure and private.

The buildings habitable fabric is recessed, with the outer vertical structure and slab edges expressed to create verandahs that allow usability and adaptability to diverse contextual conditions whilst passively controlling the sun and privacy to the interior.

Without compromising the connection to the streetscape and the city to lower apartments, the gradation of the columns provides greater privacy from immediate neighbours and opens up to the view on the upper floors where building separation increases.

Broadly, they units are in a high quality mixed use development with good access to transport, provision of public space, retail uses, and extensive communal open space.

The development contributes to the general public amenity at ground floor with an activated walkway between Laing Street and Newcomen Street.

The building has a high proportion of apartments with access to cross ventilation (79%) and solar access (87.5%).

The apartment layouts have the following;

- 87.5% access to minimum ADG solar requirements.
- 79% access to cross ventilation requirements.
- Access to significant communal space both with 4N, 4S and 3E.
- Communal open space located on the lower roof of 4N with views to the Cathedral.
- Good access to communal space within the lower ground floor of 4S including pool, gym and wellness area.
- Generous apartment layouts
- Generous private open space
- Views to the harbour

12.7 Principle 7: Safety

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

The conservation of the heritage buildings facades and their retail uses maintain their public use and delineate from the adjacent exaggerated private building entrances within the building facade where Building 4N touches the ground promoting positive relationships between public and private spaces.

Active edges of Building 4N over promote good passive surveillance to the public domain and the private courtyard.

Broadly, the layout of the buildings within Stage 4 have benefits for safety and security.

A new public link is created connecting Laing Street to Newcomen Street. It includes a public lift, shop frontages, cafe and the communal spaces along adjacent edges of buildings 4N and 4S.

In addition to this new link design initiatives which have been incorporated into the building are:

- Two residential entrances, one from the Laing Street walkway and the other from King Street
- Residential entrances are clearly identifiable and allow for passive surveillance from the public domain.
- The building entrances provide a secure point.
- Passive surveillance is improved to all public interfaces, including the Laing Street walkway, King Street, Morgan Street and Newcomen Street.

12.8 Principle 8: Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

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

There are a broad range of apartment types within 4N providing generous housing diversity. This ranges from efficient 1 Bedroom apartments, through to large 3 bedroom and penthouse apartments.

At the centre of 4N is a landscaped courtyard accessed from Hunter and Morgan streets and the car-parking within Building 4S. The courtyard provides a calm shared communal entry lobby and a place for informal social interaction.

Each lobby to the western building core is has a connection back to the courtyard. These lobbies are intimate and provide seating promoting casual interaction with immediate neighbours.

There is a mix of communal and open space across both stages (3&4) allowing for a broad range of opportunities to socially interact. They include;

- The communal open space on the lower rooftop of 4N.
- The communal space in on the lower ground of 4S, including gym, pool, spa and sauna for general wellness.
- A new public space in stage 3 - Market Square - which includes water play, seating, landscape and a flexible space for both residents and the community.
- Interstitial spaces, such as the public walkway from Laing Street to Newcomen Street along the Southern edge of 4N.

12.9 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.

The proposal is carefully considered, with architectural expression and material choice specific and responsive to the precinct and context.

There is a diverse collection of building types, scale and material that makeup the fine grain of Hunter Street. The homogeneous form of building 4N is carefully articulated using the vertical column expressions as a simple gesture to sympathetically reference the historical character of the surrounding buildings.

Building 4 North develops a new narrative for the site whilst preserving the existing buildings, maintaining their stories and continue their contribution to place. Built at different times, the preservation of the existing buildings maintain the fine grain and diversity which contributes to the overall experience of the city.

Subtle references of form and material are developed from the civic qualities of the buildings on the site and along Hunter Street. In particular Building 4N responds to the scale, proportion, vertical structural expression, celebrated corners and decorated parapet features. These elements are integrated so to comfortably fitw into the broader fine grain urban fabric of the city in preference to standing out.

The gradation of the columns up the building helps moderate the opportunities of prospect and refuge within the apartments. Lower levels can use the exterior spaces without feeling exposed and the view is revealed as the floors rise upwards. Small adjustments in the column rhythm help celebrate the corners, focus views, seperate dwellings and refine the composition of the homogeneous facade.

The lower levels of the heritage buildings will reinstate traditional shopfronts within their heritage facades and are complimented by considered awnings that contribute to a unique, vibrant shopping precinct. Where the new building touches the ground - it continues the rhythmic nature of the traditional smaller retail spaces to Hunter Street.

	<p>The following content outlines the architectural scheme’s response to Part 3 & Part 4 of the Apartment Design Guide.</p>

ADG Response Table

Objective			Complies		
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes
3	Siting the development				
3A	Site Analysis				
	3A-1	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context			
		Each element in the Site Analysis Checklist should be addressed (see ADG Appendix 1)	•		A full site analysis has been undertaken to determine the best contextual response for the whole development. Refer to precinct drawing.
3B	Orientation				
	3B - 1	Building types and layouts respond to the streetscape and site while optimising solar access within the development			
		Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	•		Building 4N addresses north and west street frontages where it provides direct access from the street to the main lobbies and circulation.
		Where the street frontage is to the east or west, rear buildings should be orientated to the north	•		The corner site is primarily orientated to north and west street frontages and to the southern Laing Lane. Where located behind the Western street frontage, apartments orientate to the North (to Hunter Street)
		Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	•		Where located behind the northern street frontage, apartments orientate to the west (to Morgan Street)
	3B-2	Overshadowing of neighbouring properties is minimised during midwinter			
		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	•		Massing of Building 4N has been undertaken to reduce any significant impact on solar access to adjacent properties.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Solar access to living rooms, balconies and private open spaces of neighbours should be considered	•		The variation in height to building 4N along Hunter Street enables solar access to rear balconies of 16-20 Newcomen St. The neighbouring apartments receive good solar access from north-east balconies.
		Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%			N/A
		If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy			N/A
		Overshadowing should be minimised to the south or downhill by increased upper level setbacks	•		Setbacks increased to upper levels to Laing Lane (south) providing good solar access to building 4S lower levels and Laing Lane.
		It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development	•		Apartments are typically orientated 90 degrees to boundaries
		A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	•		
3C	Public Domain Interface				
	3C-1	Transition between private and public domain is achieved without compromising safety and security			
		Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	•		Street entry for all apartments is through the courtyard, accessed via Hunter and Morgan Street walkway. This is appropriate for the site and building design.
		Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)	•		The apartments that address the boundaries are above street level.
		Upper level balconies and windows should overlook the public domain	•		Upper level balconies provide good passive surveillance to the public domain.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m	•		
		Length of solid walls should be limited along street frontages	•		
		Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	•		There is a strong focus on casual interaction in the lift lobbies and corridors with areas to sit and generous spaces within the courtyard on ground floor.
		In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: — architectural detailing — changes in materials — plant species — colours	•		The building has 2 entries, which are from different streets allowing for legibility. Public and private spaces are visually separated and secure. Entrances are clearly defined using architectural expression.
		Opportunities for people to be concealed should be minimised	•		
	3C-2	Amenity of public domain is retained and enhanced			
		Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	•		Planting is provided at select locations on raised terraces.
		Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	•		The mailbox is provided from the residential entry from either Morgan or Hunter Streets with easy accessibility from private car park.
		The visual prominence of underground car park vents should be minimised and located at a low level where possible	•		Services coordinated to conceal any basement services exhaust.
		Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	•		Services, substation and garbage rooms are concealed
		Ramping for accessibility should be minimised by building entry locations and setting ground floor levels in relation to footpath levels	•		Ramping is minimised. A walkway is provided from the Hunter Street entry to allow for a level difference between the public domain and apartments.
		Durable, graffiti resistant and easily cleanable materials should be used	•		Noted

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: <ul style="list-style-type: none"> Street access, pedestrian paths and building entries which are clearly defined Paths, low fences and plating that clearly delineate between communal/private open space and the adjoining public open space Minimal use of blank walls, fences and ground level parking 	•		Retail frontages address the public walkway proposed on the south of 4N - joining Laing Street with Newcomen Street.
		On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	•		Building 4N steps down Morgan Street minimising the minor protrusion of the basement. Where visible, the basement is integrated into the building and public domain interface.
3D	Communal and public open space				
	3D-1	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.			
		Communal open space has a minimum area equal to 25% of the site	•		<p>Site area (Building 4N): 942m²</p> <p>The communal open space for;</p> <ul style="list-style-type: none"> Building 4N has an area (187.5m²) equal to 19.9% of the site area An entry courtyard that allows for informal/passive open space is also provided in addition to above <p>In addition, communal space is located on lower ground floor of 4S including gym, wellness area and spa</p> <p>Refer to precinct drawings and design report for full communal open space calculations and compliance across precinct and lots.</p>
		Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)	•		The principle usable open space on the roof achieves in excess of 2 hours of direct sunlight.
		Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	•		3m minimum provided.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Communal open space should be co-located with deep soil areas		•	The development is in a dense urban area. As per the design criteria below, the principle communal space is located on the roof. However the courtyard of Building 4N is principle location of deep soil area and is co-located with the ground floor entry lobby which provides opportunities for social interaction.
		Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	•		All communal open space can be accessed from common circulation lobbies
		Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	•		Communal open space is provided on the lower roof terrace to south-west.
		Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should: — provide communal spaces elsewhere such as a landscaped roof top terrace or a common room — provide larger balconies or increased private open space for apartments — demonstrate good proximity to public open space and facilities and/or provide contributions to public open space	•		Communal open space is provided on the roof, with additional communal space provided on lower ground floor including pool, gym and wellness area of Buildings 4S and 3N. Refer to precinct drawings and design report for full communal open space
3D-2		Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting			
		Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: — seating for individuals or groups — barbecue areas — play equipment or play areas — swimming pools, gyms, tennis courts or common rooms	•		The communal space has opportunities for different sized groups and is facilitated with BBQ and areas of shade.
		The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	•		
		Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	•		Services are integrated

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
	3C-3	Communal open space is designed to maximise safety			
		Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: <ul style="list-style-type: none"> — bay windows — corner windows — balconies 	•		Communal open space is located to be visible and provide good passive surveillance to/from the public domain whilst maintaining visual privacy.
		Communal open space should be well lit	•		
		Where communal open space/facilities are provided for children and young people they are safe and contained	•		
	3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood			
		The public open space should be well connected with public streets along at least one edge	•		The public open space to Laing Lane connects to Morgan, Laing and Newcomen Streets
		The public open space should be connected with nearby parks and other landscape elements	•		Strong focus on landscaped elements are integrated within Laing Lane
		Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	•		Laing Lane forms part of the lane network through NEE as approved under the Masterplan and provides a clear view line from Newcomen Street through to Stage 3
		Solar access should be provided year round along with protection from strong winds	•		
		Opportunities for a range of recreational activities should be provided for people of all ages	•		
		A positive address and active frontages should be provided adjacent to public open space	•		4S, 4N and the cafe building address and activate stage 4.
		Boundaries should be clearly defined between public open space and private areas	•		Areas of private space are fenced and also, landscaped to provide clear definition of public and private
3E	Deep soil zones				
	3E-1	Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality			

ADG Response Table

Part No.	Objective No	Objective		Complies		
		Design Criteria	Design Guidance	Yes	No	Notes
		Deep soil zones are to meet the following minimum requirements.		•		Site area (Building 4N): 942m ²
		Site area	Minimum dimensions			Building 4N achieves 10.2% (96.0m ²) deep soil
		Less than 650m ²	-			3m minimum dimension is achieved
		650m ² - 1,500m ²	3m			Refer to precinct drawings and design report for full deep soil calculations and compliance.
		Greater than 1,500m ²	6m			
		Greater than 1,500m ² with significant existing cover	6m			
		On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: 10% of the site as deep soil on sites with an area of 650m ² - 1,500m ² 15% of the site as deep soil on sites greater than 1,500m ²		•		Larger deep soil zones have been provided exceeding 10%
		Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include: — basement and sub-basement car park design that is consolidated beneath building footprints — use of increased front and side setbacks — adequate clearance around trees to ensure long term health — co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil		•		Large deep soil zones have been provided by keeping the basement design to the building footprint as well as utilising courtyard / side setbacks. Refer to precinct drawings and design report for full deep soil calculations and compliance.
		Achieving the design criteria may not be possible on some sites including where: — The location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) — There is 100% site coverage or non-residential uses at ground floor level — Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure				Refer to precinct drawings and design report for full deep soil calculations and compliance.
	3F-1	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy				

		Objective	Complies														
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes												
		<p>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:</p> <table><tr><th>Building Height</th><th>Habitable Room and Balconies</th><th>Non Habitable</th></tr><tr><td>Up to 12 (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> <p>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties</p>	Building Height	Habitable Room and Balconies	Non Habitable	Up to 12 (4 storeys)	6m	3m	Up to 25m (5-8 storeys)	9m	4.5m	Over 25m (9+ storeys)	12m	6m			<ul style="list-style-type: none">The building addresses; -Morgan Street to the West, and -Hunter Street to the North <p>These are public streets and comply.</p> <p>Separation between 4N + 4S ranges from 9m (upper ground + L01) and 17m (L02 and above). 4N presents as a defensive facade to 4S to achieve visual privacy to apartments in 4S.</p> <p>The building separation to east and west towers is 7.3m. The eastern tower presents as a defensive facade to the western tower to achieve visual privacy to western units. Additional privacy screens and wider facade column placement have been integrated to achieve visual privacy.</p> <p>The existing apartment building at 16-20 Newcomen Street is primarily built to all boundaries - including balconies and windows to its north and west elevations, which does not allow equitable shared separation distances between neighbouring sites. The constraints of the site do not allow compliant building separation to Building 4N's non-complinat neighbour, refer below:</p> <p>The setback from 4N's lobby (within courtyard) to the neighbouring built to boundary balconies of 16-18 Newcomen Street is 8.3m. The glazing is setback a further 2m (effective 10.3m setback to glazing).</p> <p>Building 4N is setback 4.1m from the south-west built to boundary balconies of 16-18 Newcomen Street where building is <12m (10.5m to roof terrace). 4N presents a defensive facade to ths setback and locates glazing towards neighbours blank wall condition.</p>
Building Height	Habitable Room and Balconies	Non Habitable															
Up to 12 (4 storeys)	6m	3m															
Up to 25m (5-8 storeys)	9m	4.5m															
Over 25m (9+ storeys)	12m	6m															

ADG Response Table

Objective			Complies		
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes
					<p>The southern wall of 4N's east tower presents as a defensive wall to built to boundary windows of 16-18 Newcomen Street northern elevation. Theses units affected achieve minimum solar access to habitable areas through eastern and western glazing and additioanl northern glazing to 105 Hunter Street boundary.</p> <p>Separation of 4N to 105 Hunter Street is 0.0m as a extension of the party wall below and to allow future development of 105 Hunter Street.</p> <p>Where appropriate, methods of providing privacy and solar access have been intergrated into Building 4N's massing and facade treatment.</p> <p>Refer to precinct drawings and design report for diagrams and additional information. A key has been added to assist in determining non-trafficable slab edges</p>
		Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance	•		<p>The building form does not present as a ziggurat</p> <p>A single step of the built form to the south provides additional amenity to Building 4S and Wellness Centre.</p>
		For residential buildings next to commercial buildings, separation distances should be measured as follows: <ul style="list-style-type: none"> for retail, office spaces and commercial balconies use the habitable room distances for service and plant areas use the non-habitable room distances 			Noted
		New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: <ul style="list-style-type: none"> site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4) 	•		<p>Greater visual separation to upper levels towards the higher Building 4S, due to sloping site, has been provided. The lower roof terrace to 4N also provides greater amenity to rear balconies and living areas of 16-20 Newcomen St.</p> <p>Windows to units 4N-2.01/3.01/4.01 have been maximised to improve visual amenity to courtyard.</p>

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)			N/A
		Direct lines of sight should be avoided for windows and balconies across corners	•		
		No separation is required between blank walls	•		
	3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space			
		Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: <ul style="list-style-type: none"> — setbacks — solid or partially solid balustrades to balconies at lower levels — fencing and/or trees and vegetation to separate spaces — screening devices — bay windows or pop out windows to provide privacy in one direction and outlook in another — raising apartments/private open space above the public domain or communal open space — planter boxes incorporated into walls and balustrades to increase visual separation — pergolas or shading devices to limit overlooking of lower apartments or private open space — on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies 	•		Screening devices have been integrated into the building to provide a buffer between private open space and communal open space; access paths and to neighbours where building layout opportunities are limited due to constrained site.
		Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	•		Where adjacent bedrooms, screening devices have been added for privacy
		Balconies and private terraces should be located in front of living rooms to increase internal privacy	•		Refer plans.
		Windows should be offset from the windows of adjacent buildings	•		Refer plans.
		Recessed balconies and/or vertical fins should be used between adjacent balconies	•		Refer plans.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
3G		Pedestrian Access and Entries			
	3G-1	Building entries and pedestrian access connects to and address the public domain			
		Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge	•		There is an entry from Hunter and Morgan Streets.
		Entry locations relate to the street and subdivision pattern and the existing pedestrian network	•		Primary pedestrian entry is from Hunter Street and all entries are within new facade.
		Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries	•		Predestrian entries are clearly identified and seperated from retained heitage shopfronts within the new facade and highlighted with exaggerated height and depth.
		Where street frontage is limited and multiple buildings are located on the site, a primary street address is provided with clear sight lines and pathways to secondary building entries			N/A
	3G-2	Access, entries and pathways are equitable and easy to identify	•		Primary pedestrian lobby entry to Hunter Street is equitable and easy to locate.
		Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces	•		The entry and lobbies are clearly legible.
		The design of ground floors and underground car parks minimise level changes along pathways and entries	•		A split level along Morgan Street minimises level changes and is integrated into the entry design.
		Steps and ramps are integrated into the overall building and landscape design	•		
		For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)			As required, subject to future design development
		For large developments electronic access and audio/video intercom should be provided to manage access			As required, subject to future design development
	3G-3	Pedestrian links through developments provide access to streets and connect destinations			
		Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	•		Laing Lane forms part of the pedestrian lane network linking Perkins Street to Newcomen Street through NEE as approved under the Masterplan. Additionally, 4N provides multiple through links to adjacent street and lane network.

		Objective	Complies		
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes
		Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate	•		The pedestrian site through link (Laing Lane) is over looked by the habitable rooms of the apartments of Buildings 4N and 4S as well as ground level retail tenancies and will be well lit and have clear sight lines from both public and private links.
3H	Vehicle Access				
	3H-1	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes			
		Car park access is integrated with the building's overall facade, design solutions may include: <ul style="list-style-type: none"> the materials and colour palette minimise visibility from the street security doors or gates at entries that minimise voids in the facade where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed 			N/A The vehicular entry for Building 4N nominated car parks are via Building 4S. A pedestrian site through link at level B1 (Hunter Street Level) provides pedestrian access to Building 4N entry lobby Refer to Building 4S SEPP65 Design Statement.
		Car park entries are located behind the building line			N/A Refer to Building 4S SEPP65 Design Statement.
		Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout			N/A From Laing Street. Refer to Building 4S SEPP65 Design Statement.
		Car park entry and access is located on secondary streets or lanes where available			N/A From Laing Street. Refer to Building 4S SEPP65 Design Statement.
		Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided			N/A Refer to Building 4S SEPP65 Design Statement.
		Access point locations avoid headlight glare to habitable rooms	•		Designing the access point locations of Building 4S to the end of Laing Street keep the headlight glare of cars away from the habitable rooms of Building 4N.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Adequate separation distances are provided between vehicular entries and street intersections			N/A Refer to Building 4S SEPP65 Design Statement.
		The width and number of vehicle access points is limited to the minimum	•		One vehicle access point services Buildings 4N and 4S
		Visual impact of long driveways is minimised through changing alignments and screen planting			N/A Refer to Building 4S SEPP65 Design Statement.
		The requirement for large vehicles to enter or turnaround within the site is avoided			N/A Refer to Building 4S SEPP65 Design Statement.
		Garbage collection, loading and servicing areas are screened	•		Garbage collection is concealed from public and occurs within the sub-basement and Hunter Street ground floor lobbies where servicing the eastern residential tower.. Retail garage for C.01 is co-located but separated within residential garage store of eastern tower. Retail garbage for C.02; C.03, and; C.04 is located within allocated space beneath Laing Lane stairs and directly serviced from 4S loading Dock. The holding area at the street level is internal within loading bay of building 4S. Refer to Waste Management Plan
		Clear sight lines should be provided at pedestrian and vehicle crossings			N/A Refer to Building 4S SEPP65 Design Statement.
		Traffic calming devices such as changes in paving material or textures should be used where appropriate			N/A Refer to Building 4S SEPP65 Design Statement and Landscape Design Package

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: changes in surface materials level changes the use of landscaping for separation			N/A Refer to Building 4S SEPP65 Design Statement.
3J		Bicycle and Car Parking			
	3J-1	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas			
		For development in the following locations: — on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or — on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less The car parking needs for a development must be provided off street			Refer to Traffic Report.
		Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site			Car share schemes are not operating in the near vicinity.
		Where less car parking is provided in a development, council should not provide on street resident parking permits			Refer to Traffic Report.
	3J-2	Parking and facilities are provided for other modes of transport			
		Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	•		All apartments are provided with carspaces which can be used for motorcycle parking. The development is provided with secure storage cages on upper ground level which can be used for bike storage.
		Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	•		Secure undercover public and staff bicycle parking with EOT facilities has been provided. The development is provided with secure storage cages within sub-basement which can be used as bike storage for residents

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Conveniently located charging stations are provided for electric vehicles, where desirable	•		A charging station has been provided in the basement of Building 4S and for the use of vehicles of Building 4N.
	3J-3	Car park design and access is safe and secure			
		Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	•		The carpark layout is clear and legible.
		Direct, clearly visible and well lit access should be provided into common circulation areas	•		The carpark layout is clear and legible.
		A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	•		The lobby area for Building 4N access is clearly defined.
		For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards			N/A Refer to Building 4S SEPP65 Design Statement.
	3J-4	Visual and environmental impacts of underground car parking are minimised			
		Excavation should be minimised through efficient car park layouts and ramp design	•		
		Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	•		
		Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	•		The carpark is typically concealed below ground. Refer to Building 4S SEPP65 Design Statement.
		Natural ventilation should be provided to basement and sub-basement car parking areas	•		N/A. No car-parking is located within the footprint of Building 4N The small sub-basement area is temperature controlled (wine cellars) or mechanically ventilated for garbage / storage rooms
		Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	•		N/A Refer to Building 4S SEPP65 Design Statement.
	3J-5	Visual and environmental impacts of on-grade car parking are minimised			
		On-grade car parking should be avoided	•		N/A. On-grade parking not proposed.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		<p>Where on-grade car parking is unavoidable, the following design solutions are used:</p> <ul style="list-style-type: none"> — parking is located on the side or rear of the lot away from the primary street frontage — cars are screened from view of streets, buildings, communal and private open space areas — safe and direct access to building entry points is provided — parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space — stormwater run-off is managed appropriately from car parking surfaces — bio-swales, rain gardens or on site detention tanks are provided, where appropriate — light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving 	•		N/A. On-grade parking not proposed.
	3J-6	Visual and environmental impacts of above ground enclosed car parking are minimised			
		Exposed parking should not be located along primary street frontages			N/A
		<p>Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include:</p> <ul style="list-style-type: none"> — car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) — car parking that is ‘wrapped’ with other uses, such as retail, commercial or two storey Small Office/ Home Office (SOHO) units along the street frontage (see figure 3J.9) 			<p>N/A</p> <p>Refer to Building 4S SEPP65 Design Statement.</p>
		Positive street address and active frontages should be provided at ground level	•		
4	Designing the Building				
4A	Solar and daylight access				
	4A-1	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space			

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
	3.	Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	•		A minimum of 87.5% of units achieve direct sunlight to living rooms and private open space. Refer compliance drawings.
	4.	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			N/A
	5.	A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter	•		0% of apartments receive no direct sunlight in mid-winter.
		The design maximises north aspect and the number of single aspect south facing apartments is minimised	•		There are no single orientation south facing apartments proposed.
		Single aspect, single storey apartments should have a northerly or easterly aspect	•		The majority of apartments face North or West and are dual orientation.
		Living areas are best located to the north and service areas to the south and west of apartment	•		Where units address Morgan Street (west) - service areas are located towards east of apartment and act as visual buffer to existing neighbouring buildings and common circulation. Refer apartment layouts.
		To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: — dual aspect apartments — shallow apartment layouts — two storey and mezzanine level apartments — bay windows	•		The majority of apartments are dual aspect apartments.
		To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m ² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	•		This is achieved to the majority of apartments.

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		<p>Achieving the design criteria may not be possible on some sites. This includes:</p> <ul style="list-style-type: none"> — where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source — on south facing sloping sites — where significant views are oriented away from the desired aspect for direct sunlight — Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective 			N/A
	4A-2	Daylight access is maximised where sunlight is limited			
		Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms			N/A
		<p>Where courtyards are used:</p> <ul style="list-style-type: none"> — use is restricted to kitchens, bathrooms and service areas — building services are concealed with appropriate detailing and materials to visible walls — courtyards are fully open to the sky — access is provided to the light well from a communal area for cleaning and maintenance — acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved 			N/A
		<p>Opportunities for reflected light into apartments are optimised through:</p> <ul style="list-style-type: none"> — reflective exterior surfaces on buildings opposite south facing windows — positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light — integrating light shelves into the design — light coloured internal finishes 	•		Internal finishes on balconies are a lighter colouring and have shallow depths
	4A-3	Design incorporates shading and glare control, particularly for warmer months			

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		<p>A number of the following design features are used:</p> <ul style="list-style-type: none"> — balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas — shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting — horizontal shading to north facing windows — vertical shading to east and particularly west facing windows — operable shading to allow adjustment and choice — high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided) 	•		<p>Balconies have shallow depths to allow winter sun to penetrate living areas but shade summer sun.</p> <p>Operable external curtains are additionally used to shade western sun</p>
4B		Natural Ventilation			
	4B-1	All habitable rooms are naturally ventilated			
		The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	•		The building has access to all orientations.
		Depths of habitable rooms support natural ventilation	•		
		The area of unobstructed window openings should be equal to at least 5% of the floor area served	•		
		Light wells are not the primary air source for habitable rooms			N/A
		<p>Doors and openable windows maximise natural ventilation opportunities by using the following design solutions:</p> <ul style="list-style-type: none"> — adjustable windows with large effective openable areas — a variety of window types that provide safety and flexibility such as awnings and louvres — windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors 	•		A variety of window types are proposed that provide natural ventilation.
	4B-2	The layout and design of single aspect apartments maximises natural ventilation			
		Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	•		The majority of apartments are dual aspect - depths are limited as a result.

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		<p>Natural ventilation to single aspect apartments is achieved with the following design solutions:</p> <ul style="list-style-type: none"> — primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) — stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries — courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells 	•		Single aspect apartments have been designed with wide frontages and narrow depths to encourage greater natural ventilation. Multiple openings maximise natural ventilation opportunities
	4B-3	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents			
		1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. 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	•		78% of apartments achieve cross ventilation
		2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	•		Cross through apartments are shallow, maximum 13m which is much less than the 18m requirement.
		The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	•		The majority of apartments are corner apartments and cross through apartments.
		In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)	•		The windows respond to there function which is derived by there locations.
		Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	•		Apartments are designed to have minimal walls perpendicular to the exterior walls
		Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	•		The apartments are typically shallow.
4C	Ceiling heights				
	4C-1	Ceiling height achieves sufficient natural ventilation and daylight access			

Objective			Complies														
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes												
		<p>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <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 apartment 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 people 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> <p>These minimums do not preclude higher ceilings if desired</p>	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 apartment area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope	If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use			<ul style="list-style-type: none">Habitable rooms are minimum 2.7m ceiling height and non-habitable are 2.4m minimum. <p>The existing timber floor and ceilings of the heritage buildings (105, 109 and 111 Hunter Street), nominated in CMP to be retained, are not suitable for a safe and compliant new residential flat building. However, in a attempt to maintain the existing relationship of the facades; the existing interior volumes and the integrity and function of the existing openings - the floor and ceiling levels of Building 4 North within these facades have been retained. This minimises the appearance of facadism and promotes greater integrity of the existing streetscape.</p> <p>Building 4 North therefore maintains the existing varied floor plates across its footprint, being 3.2m floor to floor within and adjacent the existing 111 Hunter Street and; within the smaller existing 105 Hunter Street footprint - varying heights over levels 1-3 to match the existing floor levels ranging from 3.2m to 3.85m.</p> <p>The result of maintaining the existing floor levels and to reduce any further impact to the existing heritage fabric as possible, has limited the opportunity for increased ceiling heights for future commercial use to level 1 within Building 4 North.</p>
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 apartment area does not exceed 50% of the apartment area																
Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope																
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use																
		Ceiling height can accommodate use of ceiling fans for cooling and heat distribution			<ul style="list-style-type: none">												
4C-2		Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms															

		Objective	Complies												
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes										
		A number of the following design solutions can be used: <ul style="list-style-type: none">— The hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces— Well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings— Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	•		Bulkheads are limited to stacked wet areas and service hallways.										
	4C-3	Ceiling heights contribute to the flexibility of building use over the life of the building													
		Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)	•		Floor to floor heights are 3.2m										
4D	Apartment size and layout														
	4D-1	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity													
		1. Apartments are required to have the following minimum internal areas: <table><tr><th>Apartment Type</th><th>Minimum Internal Area</th></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table> The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m ² each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m ² each	Apartment Type	Minimum Internal Area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	•		The apartments have been designed with generous internal areas: 1 Bed = 56m ² 2 Bed + Study = 85 - 127m ² 3 Bed + Study = 144 - 211m ² 4 Bed = 246m ² The above includes the additton of wintergardens where applicable. Refer to drawings
Apartment Type	Minimum Internal Area														
Studio	35m ²														
1 bedroom	50m ²														
2 bedroom	70m ²														
3 bedroom	90m ²														
		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	•												
		Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)		•	Generally complies. Some pantry allowances to 1 Bed units are located within hallway / entry space.										

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		A window should be visible from any point in a habitable room	•		
		Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits			N/A
	4D-2	Environmental performance of the apartment is maximised			
		1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	•		
		2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	•		Refer apartment layouts.
		Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	•		Noted
		All living areas and bedrooms should be located on the external face of the building	•		Refer apartments layouts.
		Where possible: — bathrooms and laundries should have an external openable window — main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	•		Living spaces typically have a outlook to the street which additionally is orientated to the majority of apartments primary source of solar access.
	4D-3	Apartment layouts are designed to accommodate a variety of household activities and needs			
		1. Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space)	•		Refer apartment plans
		2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	•		Refer apartment plans
		3. Living rooms or combined living/dining rooms have a minimum width of: — 3.6m for studio and 1 bedroom apartments — 4m for 2 and 3 bedroom apartments	•		Refer apartment plans
		4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	•		Refer apartment plans
		Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	•		Refer apartment plans - bathrooms and laundries are typically not accessed from living rooms.

		Objective	Complies																	
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes															
		All bedrooms allow a minimum length of 1.5m for robes	•		Refer apartment plans															
		The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	•		Refer apartment plans															
		Apartment layouts allow flexibility over time, design solutions may include: <ul style="list-style-type: none">— dimensions that facilitate a variety of furniture arrangements and removal— spaces for a range of activities and privacy levels between different spaces within the apartment— dual master apartments— dual key apartments— Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments— room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))— efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	•		Apartments are oversized which allows for greater flexibility than the ADG minimum. Nominated units have additionally are compliant as adaptable units for accessibility.															
4E	Private Open Space and Balconies																			
	4E-1	Apartments provide appropriately sized private open space and balconies to enhance residential amenity																		
		All apartments are required to have primary balconies as follows: <table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio Apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr></table> The minimum balcony depth to be counted as contributing to the balcony area is 1m	Dwelling Type	Minimum Area	Minimum Depth	Studio Apartments	4m²	-	1 bedroom apartments	8m²	2m	2 bedroom apartments	10m²	2m	3+ bedroom apartments	12m²	2.4m	•		Minimum balcony dimensions are: 1 Bed = 1.5m min., 11.2m² area min. 2 Bed = 1.5m min., 12.1m² area min. 3 Bed = 2.4m min. depth to primary balcony (varied), 89.5m² area min.
Dwelling Type	Minimum Area	Minimum Depth																		
Studio Apartments	4m²	-																		
1 bedroom apartments	8m²	2m																		
2 bedroom apartments	10m²	2m																		
3+ bedroom apartments	12m²	2.4m																		
		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	•		Penthouse apartments with access to roof terraces achieve min. area and dimensions and landscaped edge.															

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Increased communal open space should be provided where the number or size of balconies are reduced	•		Where balconies do not meet the minimum required dimensions - communal open space within Building 4N provide diverse and multiple outdoor spaces for use by occupants. Additionally, the precinct offers further quality communal areas for use by residents. Refer to Precinct Drawings
		Storage areas on balconies is additional to the minimum balcony size			N/A
		Balcony use may be limited in some proposals by: <ul style="list-style-type: none"> — consistently high wind speeds at 10 storeys and above — close proximity to road, rail or other noise sources — exposure to significant levels of aircraft noise — heritage and adaptive reuse of existing buildings — In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated 	•		Balconies primarily address road frontages orientated north and west. Where this may limit some use of the balcony - it can be offset by the larger and diverse communal open spaces set back from the more active streets. Refer to Precinct Drawings
4E-2		Primary private open space and balconies are appropriately located to enhance liveability for residents			
		Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	•		Balconies are located immediately adjacent to living areas and bedrooms providing buffer to street and extension of living area for greater usability Refer apartment plans.
		Private open spaces and balconies predominantly face north, east or west	•		Refer apartment plans.
		Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	•		Refer apartment plans.
4E-3		Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building			

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are de-signed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	•		A mixture of solid blade columns with a fine mesh screen provide occupants opportunity for prospect and refuge as a response to the sites immediate built context. The balustrade treatment contributes to the overall architectural form. Balustrade design responds to the location. Lower levels are more solid with depth, upper levels are more open.
		Full width full height glass balustrades alone are generally not desirable			No glass balustrades have been proposed
		Projecting balconies should be integrated into the building design and the design of soffits considered	•		The balconies are completely integrated and form part of the façade design
		Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	•		Screens help to control privacy where required
		Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	•		Higher level balconies have their balustrades set back slightly of the face of the façade. Roof top terrace handrails are setback from building edge
		Downpipes and balcony drainage are integrated with the overall facade and building design	•		Services integrated.
		Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	•		A/C units will be integrated - located in plant area, on the roof and the basement.
		Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and inte-grated in the building design	•		No A/C units are proposed on the balconies.
		Ceilings of apartments below terraces should be insulated to avoid heat loss	•		In accordance with BASIX.
		Water and gas outlets should be provided for primary balconies and private open space			TBC during design development.
4E-4		Private open space and balcony design maximises safety			
		Changes in ground levels or landscaping are minimised	•		
		Design and detailing of balconies avoids opportunities for climbing and falls	•		

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
4F		Common Circulation and Spaces			
	4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments			
		1. The maximum number of apartments off a circulation core on a single level is eight	•		Maximum number of apartments off a single lift is 6 (western core). Eastern core has 1 x unit of the single lift.
		2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40			N/A
		Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors	•		The primary entry corridors from Hunter Street is 2.14m wide and allows for comfortable entry.. Secondary entry off Morgan Street is 1.9m wide
		Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	•		Natural ventilation and daylighting is provided to western lift lobby. Eastern lift lobby are primarily used by single resident and forms part of internal apartment layout.
		Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	•		Openings are provided to western common circulation. Openings are screened where required for privacy - severe weather.
		Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: a series of foyer areas with windows and spaces for seating wider areas at apartment entry doors and varied ceiling heights	•		Longest common corridor is 14.1m is articulated at apartment entries and includes opportunities for seating at openings.
		Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	•		Multiple cores within Building 4N maximise opportunities for dual aspect apartments

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		<p>Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:</p> <ul style="list-style-type: none"> — sunlight and natural cross ventilation in apartments — access to ample daylight and natural ventilation in common circulation spaces — common areas for seating and gathering — generous corridors with greater than minimum ceiling heights — other innovative design solutions that provide high levels of amenity 	•		<p>A high level of amenity had been designed for the apartments including:</p> <ul style="list-style-type: none"> — natural cross ventilation to 78% of apartments — Common circulation spaces are naturally ventilated — Common area have seating — All corridors are >2m in width
		Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level			N/A
		Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully con-trolled			N/A
	4F-2	Common circulation spaces promote safety and provide for social interaction between residents			
		Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	•		
		Tight corners and spaces are avoided	•		
		Circulation spaces should be well lit at night			Noted
		Legible signage should be provided for apartment numbers, common areas and general wayfinding			Noted
		Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	•		The lift lobbies and ground floor entry provides locations for incidental spaces and include fixed space bench seating
		In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space			N/A
		Where external galleries are provided, they are more open than closed above the balustrade along their length	•		The gallery, located between the lobbies, is typically open along the length.

ADG Response Table

Objective			Complies												
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes										
4G	Storage														
	4G-1	Adequate, well designed storage is provided in each apartment													
		<p>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <table><tr><th>Dwelling type</th><th>Storage size</th></tr><tr><td>Studio apartments</td><td>4m3</td></tr><tr><td>1 bedroom apart-ments</td><td>6m3</td></tr><tr><td>2 bedroom apart-ments</td><td>8m3</td></tr><tr><td>3 bedroom apart-ments</td><td>10m3</td></tr></table> <p>At least 50% of the required storage is to be located within the apartment</p>	Dwelling type	Storage size	Studio apartments	4m3	1 bedroom apart-ments	6m3	2 bedroom apart-ments	8m3	3 bedroom apart-ments	10m3	•		<p>The minimum storage requirements are met, with greater than 50% provided within the apartments. Refer to drawings</p> <p>Basement storage exceed minimum requirements. Refer to drawings</p>
Dwelling type	Storage size														
Studio apartments	4m3														
1 bedroom apart-ments	6m3														
2 bedroom apart-ments	8m3														
3 bedroom apart-ments	10m3														
		Storage is accessible from either circulation or living areas	•												
		Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street			N/A - no balcony storage										
		Left over space such as under stairs is used for storage	•												
	4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments													
		Storage not located in apartments is secure and clearly allocated	•		Storage rooms are located in the basementand easily located from car-park within 4S										
		Storage is provided for larger and less frequently accessed items, where practical	•		Storage rooms are located in the basement for larger storage items										
		Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible	•		Storage will not be designed to impede the car parking spaces.										
		If communal storage rooms are provided they should be accessible from common circulation areas of the building	•												
		Storage not located in an apartment is integrated into the overall building design and not visible from the public domain	•		Additional storage is located in the basement										
4H	Acoustic Privacy														
	4H-1	Noise transfer is minimised through the siting of buildings and building layout													

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Adequate building separation is provided within the development and from neighbouring buildings / adjacent uses (also see section 2F Building separation and section 3F Visual Privacy)		•	Refer to section 3F Visual Privacy
		Window and door openings are generally orientated away from noise sources	•		Majority of window and door openings are orientated to Hunter and Moragn Streets. However, noise is reduced by the depths of balconies to these facades.
		Noisy areas within buildings including building entries and corridors are located next to or above each other and quieter areas next to or above quieter areas	•		The floor plans are generally replicated from the ground to the top level.
		Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources	•		Service cupboards and circulation areas are centrally located, with bedrooms sitting on the outside of the apartments and non- habitable spaces on the inside of the apartments and abutting building services and common circulation
		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	•		Typically only 2 shared walls.
		Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas are located at least 3m away from bedrooms	•		Majority of plantrooms have been designed in the basement and garage door is located with Building 4S (refer to Building 4S SEPP65 Design Statement). Mechanical equipment has been placed on the roof with acoustic attenuation to private roof terraces and active communal spaces are more than 3 metres from windows.
4H-2		Noise impacts are mitigated through internal apartment layout and acoustic treatments			
		Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: rooms with similar noise requirements are grouped together doors separate different use zones wardrobes in bedrooms are co-located to act as sound buffers	•		Refer apartment plans.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: double or acoustic glazing acoustic seals use of materials with low noise penetration properties continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	•		
4J	Noise and Pollution				
	4J-1	In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings			
		To minimise impacts the following design solutions may be used: — physical separation between buildings and the noise or pollution source — residential uses are located perpendicular to the noise source and where possible buffered by other uses — non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces — Non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources — Buildings should respond to both solar access and noise. Where solar access is away from the noise source, nonhabitable rooms can provide a buffer — Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) — Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	•		The building is not located in a noisy or hostile environment.
		Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: — solar and daylight access — private open space and balconies — natural cross ventilation	•		Noted

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
	4J-2	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	•		Noted
		Design solutions to mitigate noise include: — limiting the number and size of openings facing noise sources — providing seals to prevent noise transfer through gaps — using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) — using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits	•		At lower levels - greater areas of solid balustrades are used.
4K	Apartment Mix				
	4K-1	A range of apartment types and sizes is provided to cater for different household types now and into the future			
		A variety of apartment types is provided	•		The building includes: -1 Bed apartments -2 Bed apartments -3 Bed apartments -Penthouse and sub-penthouses A number of the apartments incorporate a study for further variety.
		The apartment mix is appropriate, taking into consideration: — the distance to public transport, employment and education centres — the current market demands and projected future demographic trends — the demand for social and affordable housing — different cultural and socioeconomic group	•		1 Bed = 3 2 Bed + = 15 3 Bed + (incl. penthouses) = 5 TOTAL = 23 apartments
		Flexible apartment configurations, such as dual key apartments, are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	•		The apartments are typically larger than ADG requirements: 2 bedroom apartments are typically 80sqm and larger providing flexibility in layout. 3 Bedroom apartments are typically larger than 140sqm making them very flexible, supporting diverse household types. Flexible apartment plans have been designed, including some adapted accessible units.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
	4K-2	The apartment mix is distributed to suitable locations within the building			
		Different apartment types are located to achieve successful facade composition and to optimise solar access. See figure 4A.3			
		Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available	•		Larger 3 Bedroom apartments exist on upper floors and other levels with access to roof terraces (larger outdoor areas).
4L	Ground Floor Apartments				
	4L-1	Street frontage activity is maximised where ground floor apartments are located			
		Direct street access should be provided to ground floor apartments			N/A
		Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: both street and foyer entrances to ground floor apartments private open space is next to the street doors and windows face the street			N/A
		Retail or home office spaces are located along street frontages	•		
		Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion			N/A
	4L-2	Design of ground floor apartments delivers amenity and safety for residents			
		Privacy and safety is provided without obstructing causal surveillance. Design solutions may include: <ul style="list-style-type: none"> — elevation of private gardens and terraces above the street level by 1m - 1.5m (see Figure 4L.4) — landscaping and private courtyards — window sill heights that minimise sight lines into apartments — integrating balustrades, safety bars or screens with the exterior design 			N/A
		Solar access is maximised through: <ul style="list-style-type: none"> — high ceilings and tall windows — trees and shrubs that allow solar access in winter and shade in summer 			N/A

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
4M	Facades				
	4M-1	Building facades provide visual interest along the street respecting the character of the local area			
		Design solutions for front building facades may include: <ul style="list-style-type: none"> — A composition of varied building elements — A defined base, middle and top of the buildings — Revealing and concealing certain elements — Changes in texture, material, detail and colour to modify the prominence of elements 	•		<p>A subtle change in colour gradient across the new building reinforces the vertical composition and intent to maintain the fine grain character of the site.</p> <p>Building contrast between the new building facade and the retained heritage facades provides visual interest and allows for varied balcony compositions.</p>
		Building services should be integrated within the overall façade	•		Downpipes will not be visible along with condensers that are to be hidden on the roof.
		Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: <ul style="list-style-type: none"> — Well composed horizontal and vertical elements — Variation in floor heights to enhance the human scale — Elements that are proportional and arranged in patterns — Public artwork or treatments to exterior blank walls — Grouping of floors or elements such as balconies and windows on taller buildings 			<p>Building 4N has a very obvious rhythm that references the existing built context and elements of the retain heritage facades. Contrast of facade with the existing heritage buildings have been carefully considered.</p> <p>Horizontally, the floors are expressed through a extended slab edge Appropriately this somewhat formal façade meets the ground between heritage facades forming a colonnade at ground level.</p> <p>Extensive opportunities for Connecting with Country have been nominated to ground floor areas of blank walls</p> <p>Refer design report for diagrams and supporting material.</p>
		Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	•		Building facades and extended slab edges relate to the historical floor levels of the retained heritage facades

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Shadow is created on the façade throughout the day with building articulation, balconies and deeper window re-veals	•		Contrast with shadow to balconies and face of blades provide visual interest to facade Refer design report for diagrams and supporting material.
	4M-2	Building functions are expressed by the façade			
		Building entries should be clearly defined	•		Breaks in the façade highlight where the building entries exist
		Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	•		Corners are expressed by varied treatment to the facade blades (orientation) and roof expression.
		The apartment layout should be expressed externally through façade features as party walls and floor slabs	•		Extended slab edges and vertical fissures express apartments layout within the facade.
4N	Roof Design				
	4N-1	Roof treatments are integrated into the building design and positively respond to the street			
		Roof design relates to the street. Design solutions may include: <ul style="list-style-type: none"> — Special roof features and strong corners — Use of skillion or very low pitch hipped roofs — Breaking down the massing of the roof by using smaller elements to avoid bulk — Using materials or a pitched form complementary to adjacent buildings 	•		Flat roofs have been used throughout the building with landscaped roof gardens designed to be visible from the public domain and surrounding development from above. The roof design does not overpower in mass, as the form of the building is broken down with articulated breaks and varied heights and with decorated with some ornamentation in response to the ornated parapets of the retained heritage facades.
		Roof treatments should be integrated with the building design. Design solutions may include: Roof design proportionate to the overall building size, scale and form Roof materials complement the building Service elements are integrated	•		The expressed roof slab edge complements and is consistent with the lower levels slab expression. Service elements are setback from building edge and concealed from the public domain.
	4N-2	Opportunities to use roof space for residential accommodation and open space are maximised			

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Habitable roof space should be provided with good levels of amenity. Design solutions may include: <ul style="list-style-type: none"> — Penthouse apartments — Dormer or clerestory windows — Openable skylights 	•		Penthouse apartments have access to rooftop terraces and skylights. Habitable roof space is accessed by lower level penthouses where building heights are articulated. Additionally, communal open space is provided to upper floor habitable roof space to southern end of level 4 with consistent blade wall and fine mesh balustrade treatment.
		Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	•		
	4N-3	Roof design incorporates sustainability features			
		Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: <ul style="list-style-type: none"> — The roof lifts to the north — Eaves and overhangs shade walls and windows from summer sun 	•		Overhangs and deep balconies shade the walls in the summer
		Skylights and ventilation systems should be integrated into the roof design	•		
4O	Landscape Design				
	4O-1	Landscape design is viable and sustainable			
		Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: <ul style="list-style-type: none"> — Diverse and appropriate planting — Bio-filtration gardens — Appropriately planted shading trees — Areas for residents to plant vegetables and herbs — Composting — Green roofs or walls 	•		The landscape and architecture is an integrated design. It includes landscape on the roof and within the atrium / courtyard. Refer to COLA design report for landscape design intent.
		Ongoing maintenance plans should be prepared			Noted
		Microclimate in enhanced by: <ul style="list-style-type: none"> — Appropriately scaled trees near the eastern and western elevations for shade — A balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter — Shade structures such as pergolas for balconies and courtyards 	•		Refer to COLA design report for landscape design intent.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Tree and shrub selection considers size at maturity and the potential for roots to complete (see table 4)	•		Refer to COLA design report for landscape design intent.
	4O-2	Landscape design contributes to the streetscape and amenity			
		Landscape design responds to the existing site conditions including: Changes of levels — Views — Significant landscape features including trees and rock outcrops	•		Refer to COLA design report for landscape design intent.
		Significant landscape features should be protected by: — Tree protection zones (see figure 40.5) — Appropriate signage and fencing during construction			N/A
		Plants selected should be endemic to the region and reflect the local ecology	•		Refer to COLA design report for landscape design intent.
4P	Planting on Structures				
	4P-1	Appropriate soil profiles are provided	•		
		Structures are reinforced for additional saturated soil weight	•		Noted. Conceptual structural advice has been provided in respect to landscaped roofs. Refer to COLA design report for landscape design intent.
		Soil volume is appropriate for plant growth, considerations include: — Modifying depths and widths according to the planting mix and irrigation frequency — Free draining and long soil life span — Tree anchorage	•		Refer to COLA design report for landscape design intent.
		Minimum soil standards for plant sizes should be provided in accordance with Table 5	•		Refer to COLA design report for landscape design intent.
	4P-2	Plant growth is optimised with appropriate selection and maintenance			
		Plants are suited to site conditions, considerations include: — Drought and wind tolerance — Seasonal changes in solar access — Modified substrate depths for diverse range of plants — Plant longevity	•		Refer to COLA design report for landscape design intent.
		A landscape maintenance plan is prepared			Refer to COLA design report for landscape design intent.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Irrigation and drainage systems respond to: <ul style="list-style-type: none"> Changing site conditions Soil profile and the planting regime Whether rainwater, stormwater or recycled grey water is used 			Noted
	4P-3	Planting on structure contributes to the quality and amenity of communal and public open spaces			
		Building design incorporates opportunities for planting on structures. Design solutions may include: <ul style="list-style-type: none"> Green walls with specialised lighting for indoor green walls All design that incorporates planting Green roofs, particularly where roofs are visible from public domain Planter boxes Note: structures designed to accommodate green walls should be integrated into the building façade and consider the ability of the façade to change over time 	•		The landscape and architecture is an integrated design. It includes landscape on the roof and within the atrium / courtyard. Refer to COLA design report for landscape design intent.
4Q	Universal Design				
	4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members			
		Developments achieve a benchmark of 20% of the total apartment incorporating the Liveable Housing Guideline's silver level universal design features	•		A minimum of 20% of apartments incorporate the liveable Housing Guideline's silver level universal design features.
	4Q-2	A variety of apartments with adaptable designs are provided			
		Adaptable housing should be provided in accordance with the relevant council policy	•		The development (Stage 4) includes 10% adaptable apartments in accordance with the requirement
		Design solutions for adaptable apartments include: <ul style="list-style-type: none"> Convenient access to communal and public areas High level of solar access Minimal structural change and residential amenity loss when adapted Larger car parking spaces for accessibility Parking titled separately from apartments or shared car parking arrangements 	•		Noted - Refer apartment plans.
	4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs			

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		<p>Apartments design incorporates flexible design solutions which may include:</p> <ul style="list-style-type: none"> — Rooms with multiple functions — Dual master bedroom apartments with separate bathrooms — Larger apartments with various living space options — Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom 	•		The area of the apartments are generally larger than the minimums suggested in the ADG
4R	Adaptive Reuse				
	4R-1	New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place			
		<p>Design solutions may include:</p> <ul style="list-style-type: none"> — New elements to align with the existing building — Additions that complement the existing character, siting, scale, proportion, pattern form and detailing — Use of contemporary and complementary materials, finishes, textures and colours 	•		<p>Existing heritage facades and elements have been retained where possible. Refer to Heritage Report</p> <p>New built elements of Building 4N references the existing built context and items of the retained heritage facades.</p> <p>Proportioning and contrast of the facade with the existing heritage buildings have been carefully considered with the subtle colour gradient referencing the varied coloured and predominant red-brick facades to the historic city centre.</p> <p>Additionally, consistent with the heritage facades; ornamentation has been used sparingly and is appropriately located.</p>
	4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse			
		<p>Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include:</p> <ul style="list-style-type: none"> — Generously sized voids in deeper buildings — Alternative apartment types when orientation is poor — Using additions to expand the existing building envelope 	•		Heritage facades are only retained ensuring residential amenity is achieved.

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		<p>Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas:</p> <ul style="list-style-type: none"> Where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) Alternatives to providing deep soil where less than the minimum requirement is currently available on the site Building and visual separation – subject to demonstrating alternative design approaches to achieving privacy Common circulation Car parking Alternative approaches to private open space and balconies 	•		<p>To retain internal finishes of heritage facade (within balcony), Building 4N proposes that the heritage windows where applicable remain operable and be fully closed in event of rain.</p> <p>To promote the heritage facades - the line of the balcony slab edges and blades are setback from the street boundaries which has resulted in reduced effective balcony depths (minimum dimension).</p>
4S	Mixed Use				
	4S-1	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement			
		Mixed use development should be concentrated around public transport and centres	•		Building 4N is suitably located close to public transport and is within Newcastle city centre
	4S-2	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents			
		<p>Residential circulation areas should be clearly defined. Design solutions may include:</p> <ul style="list-style-type: none"> Residential entries are separated from commercial entries and directly accessible from the street Commercial service areas are separated from residential components Residential car parking and communal facilities are separated or secured Concealment opportunities are avoided 	•		<p>The building has 2 residential entries, which are from different streets allowing for legibility.</p> <p>Public and private spaces are visually separated and secure. Entrances are clearly defined using architectural expression within the new building facade and clearly delineated from the commercial shopfronts within the heritage facades</p>
		Landscape communal open space should be provided at podium or roof levels	•		

		Objective	Complies		
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes
4T	Awnings and Signage				
	4T-1	Awnings are well located and complement and integrate with the building design			
		Awnings should be located along streets with high pedestrian activity and active frontages	•		Awnings are continuous along Hunter Street and extends into Morghan Street. The awnings are diverse consistent with Hunter Street character
		A number of the following design solutions are used: <ul style="list-style-type: none"> — Continuous awnings are maintained and provided in areas with existing pattern — Height, depth, material and form complements the existing street character — Protection from the sun and rain is provided — Awnings are wrapped around the secondary frontages of corner sites — Awnings are retractable in areas without an established pattern 	•		Awnings are varied yet continuous primarily along the length of Hunter Street elevation and wraps around corner site into Morgan Street The bladed building facade where it touches the ground along Morgan Street and Laing Lane forms a protected collanaded pedestrian awning.
		Awnings should be located over building entries for building address and public domain amenity	•		Raised and varied awning treatments between the forms where the lobby entries are located promotes building address.
		Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	•		A expressed awning is proposed over the building entry,
		Gutters and down pipes should be integrated and concealed	•		Noted
		Lighting under awnings should be provided for pedestrian safety	•		Noted
	4T-2	Signage responds to the context and desired streetscape character			
		Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	•		Noted
		Legible and discrete way finding should be provided for larger developments	•		Noted
		Signage is limited to being on and below awnings and in single façade sign on the primary street frontage	•		Noted
4U	Energy Efficiency				
	4U-1	Development incorporates passive environmental design			
		Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Well located, screened outdoor areas should be provided for clothes drying	•		Where possible. Solid balcony upstands have been provided to allow balcony drying facilities to be screened from the public domain
	4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer			
		A number of the following design solutions are used: <ul style="list-style-type: none"> — The use of smart glass or other technologies on north and west elevations — Thermal mass in the floors and walls of north facing rooms is maximised — Polished concrete floor, tiles, or timber rather than carpet — Insulated roofs, walls and floors and seals on window and door openings — Overhangs and shading devices such as awnings, blinds and screens 	•		External curtains are used particularly on western windows. Bladed columns to balconies contribute to shading to glazed doors.
		Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	•		Service rooms are typically consolidated in the lower basement levels.
	4U-3	Adequate natural ventilation minimises the need for mechanical ventilation			
		A number of the following design solution are used: <ul style="list-style-type: none"> — Rooms with similar usage are grouped together — Natural cross ventilation for apartments is optimised — Natural ventilation is provided to all inhabitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible 	•		
4V	Water Management and Conservation				
	4V-1	Potable water use is minimised			
		Water efficient fittings, appliances and wastewater reuse should be incorporated	•		Refer BASIX certificate
		Apartments should be individually metered	•		
		Rainwater should be collected, stored and reused on site	•		Refer BASIX certificate
		Drought tolerant, low water use plants should be used within landscaped areas	•		Refer to COLA design report for landscape design.
	4V-2	Urban stormwater is treated on site before being discharged to receiving waters			
		Water sensitive urban design systems are designed by a suitably qualified professional			Refer to civil/ stormwater documentation.

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		A number of the following design solutions are used: — Runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation — Porous and open paving materials is maximised — On site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits			Refer to civil/ stormwater documentation.
	4V-3	Flood management systems are integrated into site design			
		Detention tanks should be located under paved areas, driveways or in basement car parks	•		Refer to civil/ stormwater documentation.
		On large sites parks or open spaces are designed to provide temporary on site detention basins			N/A
4W	Waste Management				
	4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents			
		Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	•		Storage of rubbish bins is discreetly located on the ground level for the eastern core and wholly within sub-basement where servicing the western core. Collection is via the loading dock with HRV access in Building 4S accessed from Laing Street.
		Waste and recycling storage areas should be well ventilated	•		
		Circulation design allows bins to be easily manoeuvred between storage and collection points	•		
		Temporary storage should be provided for large bulk items such as mattresses	•		A bulky items storage room, that is separate from the waste rooms, has been provided and is accessible to Building 4N occupants in the basement of Building 4S.
		A waste management plan should be prepared	•		
	4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling			
		All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling	•		Kitchens will incorporate waste storage in the layout which will then be taken to the waste chutes in the shared lobbies.

ADG Response Table

Part No.	Objective No	Objective	Complies		
		Design Criteria Design Guidance	Yes	No	Notes
		Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	•		There are two chutes per lift core accessed from common circulation or within unit; one for garbage and one for recycling.
		For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses	•		Refer to drawings
		Alternative waste disposal methods such as composting should be provided	•		Noted
4X	Building Maintenance				
	4X-1	Building design detail provides protection from weathering			
		A number of the following design solutions are used: — Roof overhangs to protect walls — Hoods over windows and doors to protect openings — Detailing horizontal edges with drip lines to avoid staining of surfaces — Methods to eliminate or reduce planter box leaching — Appropriate design and material selection for hostile locations	•		
	4X-2	Systems and access enable ease of maintenance			
		Window design enables cleaning from the inside of the building	•		There are only a few windows that are not accessed from a balcony and of the ones that can't be accessed the openable section of the window will be generally cleaned by the building management
		Building maintenance systems should be incorporated and integrated into the design of the building form, roof and façade	•		A roof hatch has been allowed for in order to gain access to the roof where condensers are located.
		Design solutions do not require external scaffolding for maintenance access	•		
		Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems	•		
		Centralised maintenance, services and storage should be provided for communal open space areas within the building	•		
	4X-3	Material selection reduces ongoing maintenance costs	•		



Hunter Street Elevation, Building 4N



4S on Newcomen Street

Prepared to accompany the Development Application submitted to Council

20 March 2024

Project Address
East End Stage 3 & 4 - Hunter, Morgan, Laing, King and Newcomen Streets, Newcastle

Prepared on behalf:
IRIS

Prepared by:
SJB Architects NSW

Verification of Qualifications

Adam Haddow and John Pradel are registered as Architects in New South Wales and are enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.

Their registration Numbers are 7188 and 7004.

Statement of Design

SJB Architects NSW have been responsible for the design of the project since its inception and have worked with related professionals and experts in respect of the matter. The project has been designed to provide a development that is respectful of local planning and design controls and responds to the nine design quality principles of SEPP No. 65.

SJB Architects NSW verify that as required by the Clause 50 (1AB) of the Environmental Planning and Assessment Regulation 2000 the design quality principles set out in Schedule 1, design quality principles of the State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development and the objectives in Part 3 and Part 4 of the Apartment Design Guide have been achieved for the proposed development as described in the following document.



Adam Haddow
Director
Registered Architect NSW, No. 7188



4N and 4S on Newcomen Street

The following content outlines the architectural scheme against the nine Principles of Design.

16.1 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.

The proposal is a direct response to the site, context and character of Newcastle City.

The urban design strategy for Stages 3 and 4 create a cohesive precinct that accommodates residential, commercial and retail space that will activate and enliven the East End of Newcastle.

It includes a new view corridor along Market Street to Christ Church Cathedral and delivers new public space for the people of Newcastle. There is a series of fine grain connections and spaces that link the public domain of the city.

The proposal resists ‘bigness’ and ‘newness’, instead the site is dived into smaller more scaled parcels. This has enabled multiple architectural offices to actively engage in the delivery of buildings, allowing nuance and difference to thrive.

4S is one piece of this bigger puzzle, it responds to it’s place in the city and precinct in order to enhance the context and character of Newcastle.

16.2 Principle 2: Built form and scale

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

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.

Siting at the corner of King Street and Newcomen Street, the building defines the Southeast corner of East End. It is a building of relationships - to the bedrock, the Cathedral, the city form and the Harbour.

The building is designed as four quadrants, expressed on the facade, and connected with an atrium at the centre.

Hugging the Southeast corner, at King and Newcomen Street the building is carved away to reduce height adjacent the Newcastle club.

The Northeast corner pops up and aligns with the adjacent developments on King Street and also pulls back from Newcomen Street to reduce the street wall.

On the West it is recessive and calm, allowing it to be a passive element on the skyline for the Cathedral.

At the lower street levels it is architecturally expressed with solidity and landscape. At the upper levels the building lightens.

16.3 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.

The proposal has a floor space that is responsive to the council controls, the approved concept DA and that is consistent with the density of the city centre.

The density proposed allows all apartments to achieve high levels of amenity.

Broadly, the mixed use development is located in a city centre with excellent access to transport, provision of public space, and proximity to retail and commercial uses. It is an ideal location for the density proposed.

The apartment mix proposed is:

- 1 Bedroom Apartments 7.3%
- 2 Bedroom Apartments 79.3%
- 3 Bedroom Apartments 13.4%

16.4 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.

The building has been designed to achieve high levels of amenity resulting in a sustainable outcome.

Broadly, the mixed use development is located in a city centre with good access to transport, provision of public space, and proximity to retail and commercial uses.

The precinct design has numerous socially sustainable benefits and initiatives with new public space, view corridors and improved public domain interfaces.

The design incorporates designing with county principles that have been developed with the community and are fully integrated into the scheme. This has been achieved with the input of Dhiira.

The building has a high proportion of apartments with access to cross ventilation (86%) and solar access (70%)

The apartment layouts have the following;

- 70% access to minimum ADG solar requirements.
- 86% access to cross ventilation requirements.
- Access to significant communal space both with 4S and 3E.
- Communal open space located on the roof of 4S with views to the Cathedral.
- Communal space within the lower ground floor of 4S including pool, gym and wellness area.
- Generous apartment layouts
- Generous private open space
- Views to the harbour

16.5 Principle 5: Landscape

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.

The orchestration of the buildings within the precinct has created a series of new landscape areas and public spaces.

In collaboration with the design team - SJB, DBJ, CP and COLA - an integrated architectural and landscape design has been achieved. A detailed explanation is outlined within the landscape and architectural design reports.

The design incorporates designing with county principles that have been developed with the community and are fully integrated into the scheme. This has been achieved with the input of Dhiira.

4S is a block defining building with a central atrium courtyard - landscape is integrated into the scheme in a number of ways.

On select rooftops and building ledges landscape is integrated with the architecture. This provides additional amenity to the dwellings, and enhances the streetscape.

Communal open space and terraces are provided on the roofs within a landscaped setting.

The atrium courtyard includes integrated landscape - it’s conceived as a forest floor, providing a tranquil threshold between the city and dwellings.

16.6 Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

The apartments in 4S have been designed to achieve very high levels of amenity.

Broadly, they are in a high quality mixed use development with good access to transport, provision of public space, retail uses, and extensive communal open space.

The development contributes to the general public amenity at ground floor with an activated walkway between Laing Street and Newcomen Street.

The building has a high proportion of apartments with access to cross ventilation (86%) and solar access (70%).

The apartment layouts have the following;

- 70% access to minimum ADG solar requirements.
- 86% access to cross ventilation requirements.
- Access to significant communal space both with 4S and 3E.
- Communal open space located on the roof of 4S with views to the Cathedral.
- Communal space within the lower ground floor of 4S including pool, gym and wellness area.
- Generous apartment layouts
- Generous private open space
- Views to the harbour

16.7 Principle 7: Safety

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

The layout of the buildings within Stage 4 have benefits for safety and security.

A new public link is created connecting Laing Street to Newcomen Street. It includes a public lift, cafe and the communal spaces along the Northern edge of 4S.

In addition to this new link design initiatives which have been incorporated into the building are:

- Two residential entrances, one from the Laing Street walkway and the other from King Street
- Residential entrances are clearly identifiable and allow for passive surveillance from the public domain.
- The building entrances provide a secure point.
- Passive surveillance is improved to all public interfaces, including the Laing Street walkway, King Street, Morgan Street and Newcomen Street.

16.8 Principle 8: Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

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

There are a broad range of apartment types within 4S providing generous housing diversity. This ranges from efficient 1 Bedroom apartments, through to large 3 bedroom and penthouse apartments.

At the centre of 4S a landscaped atrium is provided. This space provides a communal entry and a place for informal social interaction.

From the atrium each lobby is accessible. These lobbies more intimate - 3 apartments from each - promoting casual interaction with your immediate neighbours.

There is a mix of communal and open space across both stages (3&4) allowing for a broad range of opportunities to socially interact. They include;

- The communal open space on the rooftop of 4S.
- The communal space in on the lower ground of 4S, including gym, pool, spa and sauna for general wellness.
- A new public space in stage 3 - Market Square - which includes water play, seating, landscape and a flexible space for both residents and the community.
- Interstitial spaces, such as the public walkway from Laing Street to Newcomen Street along the Northern edge of 4S.

16.9 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.

The proposal is carefully considered, with architectural expression and material choice specific and responsive to the precinct and context.

The building is designed as four quadrants, expressed on the facade, and connected with an atrium at the centre.

At the lower street levels it is architecturally expressed with solidity and landscape. This provides privacy and establishes a relationship with the Sandstone walls along King Street - a building embedded into the geology.

At the public interfaces, King Street and Newcomen Street, an additional buffer is created with a continuous balcony - a loggia to the dwellings.

At the upper levels the building lightens, at each level the sill lowers and the columns narrow - talking to the sky, the sun and the views.

The Northern edge celebrates the sun and the view. A continuous open facade, with balcony threshold, activates Laing Street walkway.

At the centre is a carved courtyard, allowing the building to breathe. This secret garden has vertical slots at the North and South that offer glimpses from the public domain into the landscaped floor.

	<p>The following content outlines the architectural scheme’s response to Part 3 & Part 4 of the Apartment Design Guide.</p>

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
3		Siting the development			
3A		Site Analysis			
	3A-1	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context			
		Each element in the Site Analysis Checklist should be addressed (see ADG Appendix 1)			Noted
3B		Orientation			
	3B - 1	Building types and layouts respond to the streetscape and site while optimising solar access within the development			
		Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	•		Access is from King Street.
		Where the street frontage is to the east or west, rear buildings should be orientated to the north	•		A single building defines the block.
		Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	•		
	3B-2	Overshadowing of neighbouring properties is minimised during midwinter			
		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	•		
		Solar access to living rooms, balconies and private open spaces of neighbours should be considered	•		
		Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%			N/A
		If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy			N/A
		Overshadowing should be minimised to the south or downhill by increased upper level setbacks			N/A-The southern boundary is to a public road (King Street).

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development			N/A The building boundaries are with King Street, Newcomen Street, Morgan Street and a public walkway.
		A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	•		
3C	Public Domain Interface				
	3C-1	Transition between private and public domain is achieved without compromising safety and security			
		Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	•		Entry for all apartments is through the courtyard, accessed via King Street or the Laing Street walkway. This is appropriate for the site and building design.
		Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)	•		The apartments that address the boundaries are above street level.
		Upper level balconies and windows should overlook the public domain	•		All apartments and balconies overlook the streets and public domain.
		Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m	•		The building typology is zero lot setback/ urban infill. The apartments are raised above the street to provide privacy, this means there are solid walls/ balustrades. Apartments address the street, providing surveillance and achieving the intent/ objectives.
		Length of solid walls should be limited along street frontages	•		Noted
		Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	•		The courtyard, associated entries and the Laing Street walkway provide casual interaction between residents and the public domain.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: — architectural detailing — changes in materials — plant species — colours	•		The building has 2 entries, which are from different streets allowing for legibility.
		Opportunities for people to be concealed should be minimised	•		
	3C-2	Amenity of public domain is retained and enhanced			
		Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	•		Planting is provided at select locations on raised terraces.
		Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	•		The mailbox is provided from the residential entry from King Street.
		The visual prominence of underground car park vents should be minimised and located at a low level where possible			Services coordinated to conceal carpark exhaust.
		Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	•		Services, substation and garbage rooms are concealed
		Ramping for accessibility should be minimised by building entry locations and setting ground floor levels in relation to footpath levels	•		Ramping is minimised. A walkway is provided from the King Street entry to allow for a level difference between the public domain and apartments.
		Durable, graffiti resistant and easily cleanable materials should be used	•		Noted
		Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions: — Street access, pedestrian paths and building entries which are clearly defined — Paths, low fences and plating that clearly delineate between communal/private open space and the adjoining public open space — Minimal use of blank walls, fences and ground level parking	•		A public walkway is proposed on the North - joining Laing Street with Newcomen Street. The interface with the building is a communal facility, allowing activation along the public walkway.
		On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	•		The carpark is concealed by the Laing Street walkway.
3D		Communal and public open space			

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	3D-1	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.			
		Communal open space has a minimum area equal to 25% of the site			<p>Refer to precinct drawings (DA-PR-8032) for communal open space calculations and compliance.</p> <p>Communal open space is provided on the roof of 3E, with additional communal space provided in 4S on lower ground floor including pool, gym and wellness area.</p> <p>The communal open space and communal space of stage 3 and stage 4 is supplemented with new public open space, which when combined together is greater than 25% of the site areas.</p> <p>In 4S the primary communal open space proposed is located on the roof.</p> <p>In addition the 4S provides communal space on lower ground including gym, wellness area and spa</p> <p>An entry courtyard that allows for informal/passive open space is also provided in 4S.</p>
		Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)	•		The principle usable open space on the roof achieves in excess of 2 hours of direct sunlight.
		Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	•		3m minimum provided.
		Communal open space should be co-located with deep soil areas		•	The site is located in a town centre / dense urban area, so deep soil is not co-located with the communal open space. As per the ADG design criteria (outlined below), the communal space is located on the roof.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	•		All communal open space has equitable access.
		Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	•		Communal open space is provided on the roof.
		Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should: <ul style="list-style-type: none"> — provide communal spaces elsewhere such as a landscaped roof top terrace or a common room — provide larger balconies or increased private open space for apartments — demonstrate good proximity to public open space and facilities and/or provide contributions to public open space 	•		Communal open space is provided on the roof, with additional communal space provided on lower ground floor including pool, gym and wellness area.
	3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting			
		Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: <ul style="list-style-type: none"> — seating for individuals or groups — barbecue areas — play equipment or play areas — swimming pools, gyms, tennis courts or common rooms 	•		The communal space includes seating, landscape, swimming pool, gym and wellness area.
		The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	•		
		Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	•		Services are integrated.
	3C-3	Communal open space is designed to maximise safety			
		Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: <ul style="list-style-type: none"> — bay windows — corner windows — balconies 	•		
		Communal open space should be well lit	•		

		Objective	Complies													
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes											
		Where communal open space/facilities are provided for children and young people they are safe and contained	•													
	3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood														
		The public open space should be well connected with public streets along at least one edge	•		The public walkway connects Laing Street with Newcomen Street.											
		The public open space should be connected with nearby parks and other landscape elements	•		The public walkway connects Laing Street with Newcomen Street.											
		Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	•		There is a clear view line from Newcomen Street through to Stage 3.											
		Solar access should be provided year round along with protection from strong winds			N/A - The only public space for stage 3 is a public walkway.											
		Opportunities for a range of recreational activities should be provided for people of all ages	•		N/A - The only public space for stage 3 is a public walkway.											
		A positive address and active frontages should be provided adjacent to public open space	•		4S, 4N and the cafe building address and activate stage 4.											
		Boundaries should be clearly defined between public open space and private areas	•		4S defines the boundary of the walkway.											
3E	Deep soil zones															
	3E-1	Deep soil zones provide areas on the site that allow for and support healthy plant tree growth. They improve residential amenity and promote management of water and air quality														
		Deep soil zones are to meet the following minimum requirements. <table><tr><th>Site area</th><th>Minimum dimensions</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 - 1,500m²</td><td>3m</td></tr><tr><td>Greater than 1,500m²</td><td>6m</td></tr><tr><td>Greater than 1,500m² with significant existing cover</td><td>6m</td></tr></table>	Site area	Minimum dimensions	Deep soil zone (% of site area)	Less than 650m²	-	7%	650m² - 1,500m²	3m	Greater than 1,500m²	6m	Greater than 1,500m² with significant existing cover	6m	•	Refer to precinct drawings (DA-PR-8031) for deep soil calculations and compliance. As noted in the ADG achieving the design criteria may not be possible where the location and building typology have limited or no space for deep soil at ground level including high density areas and in centres. The proposal provides alternative forms of planting including on structure as noted in the ADG.
Site area	Minimum dimensions	Deep soil zone (% of site area)														
Less than 650m²	-	7%														
650m² - 1,500m²	3m															
Greater than 1,500m²	6m															
Greater than 1,500m² with significant existing cover	6m															
		On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: 10% of the site as deep soil on sites with an area of 650m² - 1,500m² 15% of the site as deep soil on sites greater than 1,500m²			N/A - not possible as it is a dense urban area.											

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:</p> <ul style="list-style-type: none"> — basement and sub-basement car park design that is consolidated beneath building footprints — use of increased front and side setbacks — adequate clearance around trees to ensure long term health — co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil 		•	Refer to precinct drawings (DA-PR-8031) for deep soil calculations and compliance.
		<p>Achieving the design criteria may not be possible on some sites including where:</p> <ul style="list-style-type: none"> — The location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) — There is 100% site coverage or non-residential uses at ground floor level — Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure 		•	<p>Refer to precinct drawings (DA-PR-8031) for deep soil calculations and compliance.</p> <p>As noted, achieving the design criteria is not possible due to the location and building typology (high density area / town centre).</p> <p>The proposal provides alternative forms of planting including on structure as noted in the ADG.</p>
3F-1		Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy			

Objective		Complies		Notes												
Part No.	Objective No	Design Criteria Design Guidance	YesNo													
		<p>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:</p> <table><tr><th>Building Height</th><th>Habitable Room and Balconies</th><th>Non Habitable</th></tr><tr><td>Up to 12 (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> <p>Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties</p>	Building Height	Habitable Room and Balconies	Non Habitable	Up to 12 (4 storeys)	6m	3m	Up to 25m (5-8 storeys)	9m	4.5m	Over 25m (9+ storeys)	12m	6m	<ul style="list-style-type: none">	<p>The building addresses; -Morgan Street to the West -King Street to the South -Newcomen Street to the East These are public streets and comply.</p> <p>On the North; -The cafe presents a blank facade to the 4S to achieve visual privacy to apartments in 4S.</p> <p>-Separation between 4N + 4S ranges from 8.6m (upper ground + L01) and 16.4m (L02 and above). 4N presents as a defensive facade to 4S to achieve visual privacy to apartments in 4S.</p> <p>-The setback from the north facade of 4S to the neighbouring boundary of 16-18 Newcomen Street is 8-8.35m (glazing of 4S is setback 9m). The neighbour has a blank wall to the boundary. The building at 16-18 Newcomen has windows setback 1.5m from the boundary.</p> <p>The building separation in the atrium/courtyard complies _Approx. 17m East - West (non habitable to non-habitable) _Approx. 23m North - South (non habitable to habitable).</p> <p>Refer to the design report for diagrams and additional information.</p>
Building Height	Habitable Room and Balconies	Non Habitable														
Up to 12 (4 storeys)	6m	3m														
Up to 25m (5-8 storeys)	9m	4.5m														
Over 25m (9+ storeys)	12m	6m														
		<p>Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a ‘ziggurat’ appearance</p>	<ul style="list-style-type: none">	<p>The building form does not present as a ziggurat</p>												
		<p>For residential buildings next to commercial buildings, separation distances should be measured as follows:</p> <ul style="list-style-type: none">— for retail, office spaces and commercial balconies use the habitable room distances— for service and plant areas use the non-habitable room distances	<ul style="list-style-type: none">	<p>Noted</p>												

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: <ul style="list-style-type: none"> — site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) — on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4) 	•		Privacy impacts are minimised through site layout.
		Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)			N/A
		Direct lines of sight should be avoided for windows and balconies across corners	•		Window placement along the Northern boundary is setback from the facade, and staggered in the North East corner,
		No separation is required between blank walls	•		Noted
	3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space			
		Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: <ul style="list-style-type: none"> — setbacks — solid or partially solid balustrades to balconies at lower levels — fencing and/or trees and vegetation to separate spaces — screening devices — bay windows or pop out windows to provide privacy in one direction and outlook in another — raising apartments/private open space above the public domain or communal open space — planter boxes incorporated into walls and balustrades to increase visual separation — pergolas or shading devices to limit overlooking of lower apartments or private open space — on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies 	•		<p>Apartments on upper levels are provided with privacy from the rooftop communal open space.</p> <p>A deep ledge and landscape is provided to the rooftop communal open space to provide privacy to the edge.</p> <p>The active communal space, such as pool, is located on lower ground is located away from apartments.</p>

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	•		The gallery access, between the lobbies, is provided with high level windows, and is associated with bathrooms.
		Balconies and private terraces should be located in front of living rooms to increase internal privacy	•		Refer plans.
		Windows should be offset from the windows of adjacent buildings	•		Refer plans.
		Recessed balconies and/or vertical fins should be used between adjacent balconies	•		Refer plans.
3G	Pedestrian Access and Entries				
	3G-1	Building entries and pedestrian access connects to and address the public domain			
		Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge	•		There is an entry from King Street and the Laing Street walkway.
		Entry locations relate to the street and subdivision pattern and the existing pedestrian network	•		There is an entry from King Street and the Laing Street walkway.
		Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries	•		The primary residential entry from King Street is clearly marked with a double height arched opening and corresponding awning.
		Where street frontage is limited and multiple buildings are located on the site, a primary street address is provided with clear sight lines and pathways to secondary building entries	•		N/A
	3G-2	Access, entries and pathways are equitable and easy to identify	•		Equitable access is provided from all entries.
		Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces	•		The entry and lobbies are clearly legible.
		The design of ground floors and underground car parks minimise level changes along pathways and entries	•		Level changes are integrated into the entry court design.
		Steps and ramps are integrated into the overall building and landscape design	•		Level changes are integrated into the entry court design.
		For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	•		To future design development.
		For large developments electronic access and audio/video intercom should be provided to manage access	•		To future design development.
	3G-3	Pedestrian links through developments provide access to streets and connect destinations			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	•		A private pedestrian link is provided from King Street to Laing Street walkway, A public link is provided from Laing Street to Newcomen Street.
		Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate	•		There are clear sight lines for both public and private links.
3H	Vehicle Access				
	3H-1	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes			
		Car park access is integrated with the building's overall facade, design solutions may include: <ul style="list-style-type: none"> the materials and colour palette minimise visibility from the street security doors or gates at entries that minimise voids in the facade where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed 	•		Integrated door provided.
		Car park entries are located behind the building line	•		Integrated into the building facade.
		Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	•		From Laing Street
		Car park entry and access is located on secondary streets or lanes where available	•		From Laing Street.
		Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	•		
		Access point locations avoid headlight glare to habitable rooms	•		No conflict with apartments.
		Adequate separation distances are provided between vehicular entries and street intersections	•		
		The width and number of vehicle access points is limited to the minimum	•		One vehicle entry provided.
		Visual impact of long driveways is minimised through changing alignments and screen planting	•		No driveway proposed.
		The requirement for large vehicles to enter or turnaround within the site is avoided	•		HRV access required by council and provided.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Garbage collection, loading and servicing areas are screened	•		To occur within the loading dock.
		Clear sight lines should be provided at pedestrian and vehicle crossings	•		
		Traffic calming devices such as changes in paving material or textures should be used where appropriate			N/A
		Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: changes in surface materials level changes the use of landscaping for separation	•		Pedestrian and vehicle entries separated.
3J	Bicycle and Car Parking				
	3J-1	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas			
		For development in the following locations: — on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or — on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less The car parking needs for a development must be provided off street			Refer to Traffic Report.
		Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site			Refer to Traffic report.
		Where less car parking is provided in a development, council should not provide on street resident parking permits			Refer to Traffic report.
	3J-2	Parking and facilities are provided for other modes of transport			
		Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	•		All apartments are provided with carspaces which can be used for motorcycle parking. The development is provided with secure storage cages on upper ground level which can be used for bike storage.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	•		The development is provided with secure storage cages on upper ground level which can be used for bike storage.
		Conveniently located charging stations are provided for electric vehicles, where desirable	•		Charging spaces are provided.
	3J-3	Car park design and access is safe and secure			
		Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	•		The carpark layout is clear and legible.
		Direct, clearly visible and well lit access should be provided into common circulation areas	•		The carpark layout is clear and legible.
		A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	•		The lobby area is clearly defined.
		For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards	•		The carpark layout is clear and legible.
	3J-4	Visual and environmental impacts of underground car parking are minimised			
		Excavation should be minimised through efficient car park layouts and ramp design	•		The development includes excavation due to the level changes on site however an efficient car parking layout is provided to minimise unnecessary excavation.
		Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	•		An efficient car parking layout is provided.
		Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	•		The carpark is typically concealed below ground.
		Natural ventilation should be provided to basement and sub-basement car parking areas		•	The site is below ground and not naturally ventilated.
		Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	•		The driveway access point can be provided with ventilation.
	3J-5	Visual and environmental impacts of on-grade car parking are minimised			
		On-grade car parking should be avoided	•		On-grade parking not proposed.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		<p>Where on-grade car parking is unavoidable, the following design solutions are used:</p> <ul style="list-style-type: none"> — parking is located on the side or rear of the lot away from the primary street frontage — cars are screened from view of streets, buildings, communal and private open space areas — safe and direct access to building entry points is provided — parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space — stormwater run-off is managed appropriately from car parking surfaces — bio-swales, rain gardens or on site detention tanks are provided, where appropriate — light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving 			N/A - on-grade parking not proposed.
	3J-6	Visual and environmental impacts of above ground enclosed car parking are minimised			
		Exposed parking should not be located along primary street frontages			N/A - on-grade parking not proposed.
		<p>Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include:</p> <ul style="list-style-type: none"> — car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) — car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/ Home Office (SOHO) units along the street frontage (see figure 3J.9) 			N/A - on-grade parking not proposed.
		Positive street address and active frontages should be provided at ground level			N/A - on-grade parking not proposed.
4	Designing the Building				
4A	Solar and daylight access				
	4A-1	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		3. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	•		70% of apartments receive 2 hours of direct sunlight in mid-winter. Refer compliance drawings.
		4. 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			N/A
		5. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter	•		15% of apartments receive no direct sunlight in mid-winter.
		The design maximises north aspect and the number of single aspect south facing apartments is minimised	•		There are no single orientation south facing apartments proposed.
		Single aspect, single storey apartments should have a northerly or easterly aspect	•		The majority of apartments face North, East or West and are dual orientation.
		Living areas are best located to the north and service areas to the south and west of apartment	•		Refer apartment layouts.
		To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: — dual aspect apartments — shallow apartment layouts — two storey and mezzanine level apartments — bay windows	•		The majority of apartments are dual aspect apartments.
		To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m ² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	•		This is achieved to the majority of apartments.
		Achieving the design criteria may not be possible on some sites. This includes: — where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source — on south facing sloping sites — where significant views are oriented away from the desired aspect for direct sunlight — Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective			N/A
4A-2		Daylight access is maximised where sunlight is limited			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms	•		The courtyard atrium, which has high level windows, is used for secondary spaces such as bathrooms.
		Where courtyards are used: <ul style="list-style-type: none"> — use is restricted to kitchens, bathrooms and service areas — building services are concealed with appropriate detailing and materials to visible walls — courtyards are fully open to the sky — access is provided to the light well from a communal area for cleaning and maintenance — acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved 	•		The courtyard/atrium is a secondary space, fully open to the sky and is accessed from the communal areas. Privacy is maintained in the space with minimum separation distances.
		Opportunities for reflected light into apartments are optimised through: <ul style="list-style-type: none"> — reflective exterior surfaces on buildings opposite south facing windows — positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light — integrating light shelves into the design — light coloured internal finishes 	•		Light coloured finishes are proposed to the atrium space.
	4A-3	Design incorporates shading and glare control, particularly for warmer months			
		A number of the following design features are used: <ul style="list-style-type: none"> — balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas — shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting — horizontal shading to north facing windows — vertical shading to east and particularly west facing windows — operable shading to allow adjustment and choice — high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided) 	•		Balconies are recessed providing shade in summer.
	4B	Natural Ventilation			
	4B-1	All habitable rooms are naturally ventilated			
		The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	•		The building has access to all orientations.
		Depths of habitable rooms support natural ventilation	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		The area of unobstructed window openings should be equal to at least 5% of the floor area served	•		
		Light wells are not the primary air source for habitable rooms	•		The atrium courtyard provides amenity to secondary spaces.
		Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: <ul style="list-style-type: none"> — adjustable windows with large effective openable areas — a variety of window types that provide safety and flexibility such as awnings and louvres — windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors 	•		A variety of window types are proposed that provide natural ventilation.
4B-2		The layout and design of single aspect apartments maximises natural ventilation			
		Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	•		The majority of apartments are dual aspect - depths are limited as a result.
		Natural ventilation to single aspect apartments is achieved with the following design solutions: <ul style="list-style-type: none"> — primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) — stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries — courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells 	•		There are very few single aspect apartments.
4B-3		The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents			
	1.	At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. 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	•		71/82 of apartments achieve cross ventilation which is well above the minimum requirement. Refer compliance drawing (DA-4S-8002).
	2.	Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	•		Cross through apartments are very shallow, typically 9-9.5m which is half the 18m requirement.
		The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	•		The majority of apartments are corner apartments and cross through apartments.

		Objective	Complies													
Part No.	Objective No	Design Criteria Design Guidance	Yes	No	Notes											
		In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)		<ul style="list-style-type: none">	The windows respond to their location. The windows on the street/ public facades are larger in scale, the windows on the courtyard are more intimate. However, the apartments are very shallow which provides adequate cross ventilation.											
		Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	<ul style="list-style-type: none">		Refer plans.											
		Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	<ul style="list-style-type: none">		The apartments are very shallow.											
4C	Ceiling heights															
	4C-1	Ceiling height achieves sufficient natural ventilation and daylight access														
		Measured from finished floor level to finished ceiling level, minimum ceiling heights are: <table><tr><th colspan="2">Minimum ceiling height for apartment and mixed use buildings</th></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable 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 apartment 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 people 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>	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 apartment area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope	If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use	<ul style="list-style-type: none">	<p>Habitable ceiling heights will be minimum 2.7m.</p> <p>Non-habitable ceiling heights will be minimum 2.4m</p> <p>Ground Floor + Level 1 From the early concept masterplan stage, Building 4 South has always been deemed for residential use only. The extremely steep level changes across Newcomen Street make pedestrian amenity challenging for active retail use.</p> <p>It is highly unlikely Level 1 would be adapted due to this site constraint, and it would also go against the precinct wide masterplan strategy for distribution of building use.</p>
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 apartment area does not exceed 50% of the apartment area															
Attic spaces	1.8m at edge of room with a 30 people degree minimum ceiling slope															
If located in mixed use areas	3.3m for ground and first floor to promote future flexibility of use															
		These minimums do not preclude higher ceilings if desired														
		Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	<ul style="list-style-type: none">													
	4C-2	Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms														

		Objective	Complies		Notes										
Part No.	Objective No	Design Criteria Design Guidance	Yes	No											
		A number of the following design solutions can be used: <ul style="list-style-type: none">— The hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces— Well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings— Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist	•												
	4C-3	Ceiling heights contribute to the flexibility of building use over the life of the building													
		Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)			N/A										
4D	Apartment size and layout														
	4D-1	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity													
		1. Apartments are required to have the following minimum internal areas: <table><tr><th>Apartment Type</th><th>Minimum Internal Area</th></tr><tr><td>Studio</td><td>35m²</td></tr><tr><td>1 bedroom</td><td>50m²</td></tr><tr><td>2 bedroom</td><td>70m²</td></tr><tr><td>3 bedroom</td><td>90m²</td></tr></table> The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each	Apartment Type	Minimum Internal Area	Studio	35m²	1 bedroom	50m²	2 bedroom	70m²	3 bedroom	90m²	•		The apartments have been designed with generous internal areas and will all meet the minimum requirements of 4D-1 1 Bedroom apartments meet the minimum requirement of 50sqm 2 Bedroom apartments meet the minimum requirement of 70/75sqm 3 Bedroom apartments meet the minimum requirement of 90/95sqm
Apartment Type	Minimum Internal Area														
Studio	35m²														
1 bedroom	50m²														
2 bedroom	70m²														
3 bedroom	90m²														
		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	•												
		Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	•												

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		A window should be visible from any point in a habitable room	•		
		Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits			N/A
	4D-2	Environmental performance of the apartment is maximised			
		1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	•		
		2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	•		Refer plans
		Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths			Noted
		All living areas and bedrooms should be located on the external face of the building	•		Refer apartments layouts.
		Where possible: — bathrooms and laundries should have an external openable window — main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	•		Main living spaces address the street. The majority of apartments have bathrooms with windows as a result of the courtyard/atrium.
	4D-3	Apartment layouts are designed to accommodate a variety of household activities and needs			
		1. Master bedrooms have a minimum area of 10m ² and other bedrooms 9m ² (excluding wardrobe space)	•		Refer plans
		2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	•		Refer plans
		3. Living rooms or combined living/dining rooms have a minimum width of: — 3.6m for studio and 1 bedroom apartments — 4m for 2 and 3 bedroom apartments	•		Refer plans
		4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	•		Refer plans
		Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	•		Refer plans - bathrooms and laundries are typically not accessed from living rooms.

ADG Response Table

Objective		Complies		Notes																
Part No.	Objective No	Design Criteria Design Guidance	Yes		No															
		All bedrooms allow a minimum length of 1.5m for robes	•		Refer plans															
		The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	•		Refer plans															
		Apartment layouts allow flexibility over time, design solutions may include: <ul style="list-style-type: none">— dimensions that facilitate a variety of furniture arrangements and removal— spaces for a range of activities and privacy levels between different spaces within the apartment— dual master apartments— dual key apartments— Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments— room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))— efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	•		Apartments are oversized which allows for greater flexibility than the ADG minimum.															
4E	Private Open Space and Balconies																			
	4E-1	Apartments provide appropriately sized private open space and balconies to enhance residential amenity																		
		All apartments are required to have primary balconies as follows: <table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio Apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr></table> The minimum balcony depth to be counted as contributing to the balcony area is 1m	Dwelling Type	Minimum Area	Minimum Depth	Studio Apartments	4m ²	-	1 bedroom apartments	8m ²	2m	2 bedroom apartments	10m ²	2m	3+ bedroom apartments	12m ²	2.4m	•		The balconies all meet the minimum areas of 4E-1 1 Bedroom apartments meet the minimum requirement of 8sqm 2 Bedroom apartments meet the minimum requirement of 10sqm 3 Bedroom apartments meet the minimum requirement of 12sqm
Dwelling Type	Minimum Area	Minimum Depth																		
Studio Apartments	4m ²	-																		
1 bedroom apartments	8m ²	2m																		
2 bedroom apartments	10m ²	2m																		
3+ bedroom apartments	12m ²	2.4m																		
		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 15m ² and a minimum depth of 3m	•		Larger balconies are provided for apartments on King Street and meet the minimum requirements.															

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Increased communal open space should be provided where the number or size of balconies are reduced			N/A - Balconies are typically oversized.
		Storage areas on balconies is additional to the minimum balcony size			N/A
		Balcony use may be limited in some proposals by: <ul style="list-style-type: none"> — consistently high wind speeds at 10 storeys and above — close proximity to road, rail or other noise sources — exposure to significant levels of aircraft noise — heritage and adaptive reuse of existing buildings — In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated 			N/A
4E-2		Primary private open space and balconies are appropriately located to enhance liveability for residents			
		Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	•		Refer plans.
		Private open spaces and balconies predominantly face north, east or west	•		Refer plans.
		Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	•		Refer plans.
4E-3		Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building			
		Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	•		Balustrade design responds to the location. Lower levels are more solid with depth, upper levels are more open.
		Full width full height glass balustrades alone are generally not desirable	•		Full height glass balustrades are not proposed.
		Projecting balconies should be integrated into the building design and the design of soffits considered	•		The balconies are completely integrated and form part of the facade design
		Operable screens, shutters, hoods and pergolas are used to control sunlight and wind			Not proposed.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	•		Balconies are located along public streets so balustrades are not required to be set back.
		Downpipes and balcony drainage are integrated with the overall facade and building design	•		Services integrated.
		Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	•		A/C units will be integrated - located in plant area, on the roof and the basement.
		Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	•		No A/C units are proposed on the balconies.
		Ceilings of apartments below terraces should be insulated to avoid heat loss	•		In accordance with BASIX.
		Water and gas outlets should be provided for primary balconies and private open space			TBC during design development.
	4E-4	Private open space and balcony design maximises safety			
		Changes in ground levels or landscaping are minimised	•		
		Design and detailing of balconies avoids opportunities for climbing and falls	•		
4F	Common Circulation and Spaces				
	4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments			
		1. The maximum number of apartments off a circulation core on a single level is eight	•		Typical core is 3 apartments off a core maximum.
		2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	•		
		Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors	•		The lobbies are typically 2m or more and allow for comfortable entry.
		Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	•		Natural daylight is provided to all common lobbies. The entry atrium has natural light and ventilation.
		Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	•		The end of the lobbies are fully glazed.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: a series of foyer areas with windows and spaces for seating wider areas at apartment entry doors and varied ceiling heights			N/A
		Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	•		There are only maximum three apartments accessing each core per floor.
		Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including: — sunlight and natural cross ventilation in apartments — access to ample daylight and natural ventilation in common circulation spaces — common areas for seating and gathering — generous corridors with greater than minimum ceiling heights — other innovative design solutions that provide high levels of amenity	•		The design criteria is achieved.
		Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	•		The design criteria is achieved.
		Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled	•		
	4F-2	Common circulation spaces promote safety and provide for social interaction between residents			
		Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	•		
		Tight corners and spaces are avoided	•		
		Circulation spaces should be well lit at night	•		Noted
		Legible signage should be provided for apartment numbers, common areas and general wayfinding	•		Noted

ADG Response Table

		Objective	Complies		Notes										
Part No.	Objective No	Design Criteria Design Guidance	Yes	No											
		Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	•		The courtyard/atrium provides a location for incidental spaces.										
		In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space	•		The courtyard/atrium provides a location.										
		Where external galleries are provided, they are more open than closed above the balustrade along their length	•		The gallery, located between the lobbies, is open along the length.										
4G	Storage														
	4G-1	Adequate, well designed storage is provided in each apartment													
		In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: <table><tr><th>Dwelling type</th><th>Storage size</th></tr><tr><td>Studio apartments</td><td>4m3</td></tr><tr><td>1 bedroom apart-ments</td><td>6m3</td></tr><tr><td>2 bedroom apart-ments</td><td>8m3</td></tr><tr><td>3 bedroom apart-ments</td><td>10m3</td></tr></table> At least 50% of the required storage is to be located within the apartment	Dwelling type	Storage size	Studio apartments	4m3	1 bedroom apart-ments	6m3	2 bedroom apart-ments	8m3	3 bedroom apart-ments	10m3	•		The minimum storage requirements are meet. A minimum 50% is provided within the apartments. Where there is not 100% in the apartments, a storage room is located in the basement, which provides additional storage outside the apartment to meet the storage minimum requirements. Refer to storage schedule.
Dwelling type	Storage size														
Studio apartments	4m3														
1 bedroom apart-ments	6m3														
2 bedroom apart-ments	8m3														
3 bedroom apart-ments	10m3														
		Storage is accessible from either circulation or living areas	•												
		Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street			N/A - no balcony storage										
		Left over space such as under stairs is used for storage			N/A - no stairs										
	4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments													
		Storage not located in apartments is secure and clearly allocated	•		A storage room is located on upper ground level which is secure.										
		Storage is provided for larger and less frequently accessed items, where practical	•		A storage room is located on upper ground level for larger storage items										
		Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible	•		The storage is separate to the parking typically.										
		If communal storage rooms are provided they should be accessible from common circulation areas of the building	•												

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Storage not located in an apartment is integrated into the overall building design and not visible from the public domain	•		The storage room is located within the building footprint.
4H		Acoustic Privacy			
	4H-1	Noise transfer is minimised through the siting of buildings and building layout			
		Adequate building separation is provided within the development and from neighbouring buildings / adjacent uses (also see section 2F Building separation and section 3F Visual Privacy)	•		Refer previous.
		Window and door openings are generally orientated away from noise sources	•		Primary openings are orientated to the public domain (King Street, Newcomen Street, Morgan Street and the Laing Street walkway.
		Noisy areas within buildings including building entries and corridors are located next to or above each other and quieter areas next to or above quieter areas	•		The floor plans are typically replicated. All lobbies are stacked vertically and are separated from the courtyard / atrium with glazed doors.
		Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources	•		Living rooms and bedrooms are on the outside of the apartments and non-habitable spaces on the inside of the apartments.
		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	•		Typically only 2 shared walls.
		Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas are located at least 3m away from bedrooms	•		Plant rooms have been designed in the basement. The basement entry is on basement 1 which is 2 floors below the apartments. Mechanical equipment has been placed on the roof and in the basement. Active communal spaces are more than 3 metres from windows.
	4H-2	Noise impacts are mitigated through internal apartment layout and acoustic treatments			
		Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: rooms with similar noise requirements are grouped together doors separate different use zones wardrobes in bedrooms are co-located to act as sound buffers	•		Refer plans.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: double or acoustic glazing acoustic seals use of materials with low noise penetration properties continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	•		
4J	Noise and Pollution				
	4J-1	In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings			
		To minimise impacts the following design solutions may be used: — physical separation between buildings and the noise or pollution source — residential uses are located perpendicular to the noise source and where possible buffered by other uses — non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces — Non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources — Buildings should respond to both solar access and noise. Where solar access is away from the noise source, nonhabitable rooms can provide a buffer — Where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) — Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	•		The building is not located in a noisy or hostile environment.
		Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: — solar and daylight access — private open space and balconies — natural cross ventilation	•		The building is not located in a noisy or hostile environment.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4J-2	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	•		Noted
		Design solutions to mitigate noise include: <ul style="list-style-type: none"> — limiting the number and size of openings facing noise sources — providing seals to prevent noise transfer through gaps — using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) — using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits 	•		At lower levels solid balustrades are used.
4K	Apartment Mix				
	4K-1	A range of apartment types and sizes is provided to cater for different household types now and into the future			
		A variety of apartment types is provided	•		<p>The building includes</p> <ul style="list-style-type: none"> -1 Bed apartments -2 Bed apartments -3 Bed apartments -Penthouse and sub-penthouses <p>A number of the apartments incorporate a study for further variety.</p>
		<p>The apartment mix is appropriate, taking into consideration:</p> <ul style="list-style-type: none"> — the distance to public transport, employment and education centres — the current market demands and projected future demographic trends — the demand for social and affordable housing — different cultural and socioeconomic group 	•		<p>The building includes</p> <ul style="list-style-type: none"> -1 Bed apartments -2 Bed apartments -3 Bed apartments -Penthouse and sub-penthouses
		Flexible apartment configurations, such as dual key apartments, are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	•		<p>The apartments are typically larger than ADG requirements.</p> <p>Larger apartments provide flexibility, supporting diverse household types.</p>
	4K-2	The apartment mix is distributed to suitable locations within the building			
		Different apartment types are located to achieve successful facade composition and to optimise solar access. See figure 4A.3			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available	•		Larger 3 Bedroom apartments are provided on King Street and the upper floors.
4L		Ground Floor Apartments			
	4L-1	Street frontage activity is maximised where ground floor apartments are located			
		Direct street access should be provided to ground floor apartments		•	The building has zero setbacks and it wasn't desirable to have direct street access. All apartments enter through the courtyard atrium accessed from King Street and the Laing Street walkway.
		Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: both street and foyer entrances to ground floor apartments private open space is next to the street doors and windows face the street	•		All facades have windows and balconies which address activate the street.
		Retail or home office spaces are located along street frontages	•		Larger apartments at the King Street interface could support a small home office due to the size and configuration.
		Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for con-version into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor ameni-ties for easy conversion	•		Larger apartments at the King Street interface could support a small home office due to the size and configuration.
	4L-2	Design of ground floor apartments delivers amenity and safety for residents			
		Privacy and safety is provided without obstructing causal surveillance. Design solutions may include: — elevation of private gardens and terraces above the street level by 1m - 1.5m (see Figure 4L.4) — landscaping and private courtyards — window sill heights that minimise sight lines into apartments — integrating balustrades, safety bars or screens with the exterior design	•		Ground floor apartments are elevated above street level with landscaping provided to help screen the terraces. The landscaping is integrated with the balustrade.
		Solar access is maximised through: — high ceilings and tall windows — trees and shrubs that allow solar access in winter and shade in summer	•		The building meets the solar requirements of the ADG.
4M		Facades			

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4M-1	Building facades provide visual interest along the street respecting the character of the local area			
		Design solutions for front building facades may include: <ul style="list-style-type: none"> — A composition of varied building elements — A defined base, middle and top of the buildings — Revealing and concealing certain elements — Changes in texture, material, detail and colour to modify the prominence of elements 	•		<p>The facade responds to the context both in form and material choice.</p> <p>The building form is composed to respond to the site and context.</p> <p>The material choice references the sandstone walls along Kings Street, and acknowledges Awabakal people with material expression at the base (Laing Street and walkway).</p> <p>Refer design report for diagrams and supporting material.</p>
		Building services should be integrated within the overall façade	•		<p>Services are integrated into the facade so as to be concealed.</p>
		Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: <ul style="list-style-type: none"> — Well composed horizontal and vertical elements — Variation in floor heights to enhance the human scale — Elements that are proportional and arranged in patterns — Public artwork or treatments to exterior blank walls — Grouping of floors or elements such as balconies and windows on taller buildings 	•		<p>The building form is composed to respond to the site and context.</p> <p>Public art and connecting to country narratives will be integrated with facades at the base on Laing Street and the Laing Street walkway.</p> <p>Refer design report for diagrams and supporting material.</p>
		Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	•		<p>The building setbacks and relate to the context and it's datum. Sandstone walls on King Street, the adjacent building at 60 King Street, and surrounding context.</p> <p>Refer design report for diagrams and supporting material.</p>
		Shadow is created on the façade throughout the day with building articulation, balconies and deeper window re-veals	•		<p>The facade allows a play of shadows using deep and reveals.</p>
	4M-2	Building functions are expressed by the façade			
		Building entries should be clearly defined	•		<p>The building entry is clearly defined with a double height arched opening with corresponding awning.</p>

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	•		The building is block defining. The South West and South East corners on King Street include landscape and corbeled parapet to define the building. Refer design report for diagrams and supporting material.
		The apartment layout should be expressed externally through façade features as party walls and floor slabs	•		The quadrant building layout is legible on the facade.
4N	Roof Design				
	4N-1	Roof treatments are integrated into the building design and positively respond to the street			
		Roof design relates to the street. Design solutions may include: <ul style="list-style-type: none"> — Special roof features and strong corners — Use of skillion or very low pitch hipped roofs — Breaking down the massing of the roof by using smaller elements to avoid bulk — Using materials or a pitched form complementary to adjacent buildings 	•		There is a larger order at the top storey to define the roof, which includes a corbeled brick parapet.
		Roof treatments should be integrated with the building design. Design solutions may include: Roof design proportionate to the overall building size, scale and form Roof materials complement the building Service elements are integrated	•		The roof is integrated into parapet.
	4N-2	Opportunities to use roof space for residential accommodation and open space are maximised			
		Habitable roof space should be provided with good levels of amenity. Design solutions may include: <ul style="list-style-type: none"> — Penthouse apartments — Dormer or clerestory windows — Openable skylights 	•		The lower roof are proposed as both communal open space, and private open space.
		Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	•		The lower roof are proposed as both communal open space, and private open space.
	4N-3	Roof design incorporates sustainability features			
		Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: <ul style="list-style-type: none"> — The roof lifts to the north — Eaves and overhangs shade walls and windows from summer sun 	•		Overhangs and deep balconies shade the walls in the summer.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Skylights and ventilation systems should be integrated into the roof design	•		
40		Landscape Design			
	40-1	Landscape design is viable and sustainable			
		Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: <ul style="list-style-type: none"> — Diverse and appropriate planting — Bio-filtration gardens — Appropriately planted shading trees — Areas for residents to plant vegetables and herbs — Composting — Green roofs or walls 	•		The landscape and architecture is an integrated design. It includes landscape on the roof and within the atrium / courtyard. Refer to COLA design report for landscape design intent.
		Ongoing maintenance plans should be prepared	•		Refer to COLA design report for landscape design intent.
		Microclimate is enhanced by: <ul style="list-style-type: none"> — Appropriately scaled trees near the eastern and western elevations for shade — A balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter — Shade structures such as pergolas for balconies and courtyards 	•		Refer to COLA design report for landscape design intent.
		Tree and shrub selection considers size at maturity and the potential for roots to complete (see table 4)	•		Refer to COLA design report for landscape design intent.
	40-2	Landscape design contributes to the streetscape and amenity			
		Landscape design responds to the existing site conditions including: Changes of levels <ul style="list-style-type: none"> — Views — Significant landscape features including trees and rock outcrops 	•		Refer to COLA design report for landscape design intent.
		Significant landscape features should be protected by: <ul style="list-style-type: none"> — Tree protection zones (see figure 40.5) — Appropriate signage and fencing during construction 	•		Refer to COLA design report for landscape design intent.
		Plants selected should be endemic to the region and reflect the local ecology	•		Refer to COLA design report for landscape design intent.
4P		Planting on Structures			
	4P-1	Appropriate soil profiles are provided			
		Structures are reinforced for additional saturated soil weight	•		Noted

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Soil volume is appropriate for plant growth, considerations include: — Modifying depths and widths according to the planting mix and irrigation frequency — Free draining and long soil life span — Tree anchorage	•		Refer to COLA design report for landscape design intent.
		Minimum soil standards for plant sizes should be provided in accordance with Table 5	•		Refer to COLA design report for landscape design intent.
	4P-2	Plant growth is optimised with appropriate selection and maintenance			
		Plants are suited to site conditions, considerations include: — Drought and wind tolerance — Seasonal changes in solar access — Modified substrate depths for diverse range of plants — Plant longevity	•		Refer to COLA design report for landscape design intent.
		A landscape maintenance plan is prepared	•		Refer to COLA design report for landscape design intent.
		Irrigation and drainage systems respond to: — Changing site conditions — Soil profile and the planting regime — Whether rainwater, stormwater or recycled grey water is used	•		Refer to COLA design report for landscape design intent.
	4P-3	Planting on structure contributes to the quality and amenity of communal and public open spaces			
		Building design incorporates opportunities for planting on structures. Design solutions may include: — Green walls with specialised lighting for indoor green walls — All design that incorporates planting — Green roofs, particularly where roofs are visible from public domain — Planter boxes — Note: structures designed to accommodate green walls should be integrated into the building façade and consider the ability of the façade to change over time	•		The landscape and architecture is an integrated design. It includes landscape on the roof and within the atrium / courtyard. Refer to COLA design report for landscape design intent.
4Q	Universal Design				
	4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Developments achieve a benchmark of 20% of the total apartment incorporating the Liveable Housing Guideline's silver level universal design features	•		A minimum of 20% of apartments incorporate the liveable Housing Guideline's silver level universal design features.
	4Q-2	A variety of apartments with adaptable designs are provided			
		Adaptable housing should be provided in accordance with the relevant council policy	•		The development (Stage 4) includes 10% adaptable apartments in accordance with the requirement.
		Design solutions for adaptable apartments include: <ul style="list-style-type: none"> — Convenient access to communal and public areas — High level of solar access — Minimal structural change and residential amenity loss when adapted — Larger car parking spaces for accessibility — Parking titled separately from apartments or shared car parking arrangements 			Noted - Refer apartment plans.
	4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs			
		Apartments design incorporates flexible design solutions which may include: <ul style="list-style-type: none"> — Rooms with multiple functions — Dual master bedroom apartments with separate bathrooms — Larger apartments with various living space options — Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom 	•		The area of the apartments are generally larger than the minimums suggested in the ADG to allow flexibility.
4R	Adaptive Reuse				
	4R-1	New additional to existing buildings are contemporary and complementary and enhance an area's identity and sense of place			
		Design solutions may include: <ul style="list-style-type: none"> — New elements to align with the existing building — Additions that complement the existing character, siting, scale, proportion, pattern form and detailing — Use of contemporary and complementary materials, finishes, textures and colours 			N/A
	4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse			

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: <ul style="list-style-type: none"> — Generously sized voids in deeper buildings — Alternative apartment types when orientation is poor — Using additions to expand the existing building envelope 			N/A
		Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: <ul style="list-style-type: none"> — Where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) — Alternatives to providing deep soil where less than the minimum requirement is currently available on the site — Building and visual separation – subject to demonstrating alternative design approaches to achieving privacy — Common circulation — Car parking — Alternative approaches to private open space and balconies 			N/A
4S	Mixed Use				
	4S-1	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement			
		Mixed use development should be concentrated around public transport and centres			N/A - Refer 4N and Stage 3
	4S-2	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents			
		Residential circulation areas should be clearly defined. Design solutions may include: <ul style="list-style-type: none"> — Residential entries are separated from commercial entries and directly accessible from the street — Commercial service areas are separated from residential components — Residential car parking and communal facilities are separated or secured — Concealment opportunities are avoided 			N/A - Refer 4N and Stage 3

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Landscape communal open space should be provided at podium or roof levels			N/A - Refer 4N and Stage 3
4T		Awnings and Signage			
	4T-1	Awnings are well located and complement and integrate with the building design			
		Awnings should be located along streets with high pedestrian activity and active frontages	•		This development does not provide an awning which is consistent with the context including 60 King Street and adjacent development on Newcomen Street.
		A number of the following design solutions are used: — Continuous awnings are maintained and provided in areas with existing pattern — Height, depth, material and form complements the existing street character — Protection from the sun and rain is provided — Awnings are wrapped around the secondary frontages of corner sites — Awnings are retractable in areas without an established pattern			N/A
		Awnings should be located over building entries for building address and public domain amenity	•		An awning is proposed over the building entry.
		Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	•		Noted
		Gutters and down pipes should be integrated and concealed	•		Noted
		Lighting under awnings should be provided for pedestrian safety	•		Noted
	4T-2	Signage responds to the context and desired streetscape character			
		Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	•		Noted
		Legible and discrete way finding should be provided for larger developments	•		Noted
		Signage is limited to being on and below awnings and in single façade sign on the primary street frontage	•		Noted
4U		Energy Efficiency			
	4U-1	Development incorporates passive environmental design			
		Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	•		

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		Well located, screened outdoor areas should be provided for clothes drying	•		At lower level solid balcony upstands have been provided - this allows balcony drying facilities to be screened from the public domain. In addition, balconies are typically well in excess of minimum requirements which allows space for drying.
	4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer			
		A number of the following design solutions are used: — The use of smart glass or other technologies on north and west elevations — Thermal mass in the floors and walls of north facing rooms in maximised — Polished concrete floor, tiles, or timber rather than carpet — Insulated roofs, walls and floors and seals on window and door openings — Overhangs and shading devices such as awnings, blinds and screens	•		Deep balconies maximise shading to sliding doors.
		Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	•		Service rooms are consolidated in the lower basement levels.
	4U-3	Adequate natural ventilation minimises the need for mechanical ventilation			
		A number of the following design solution are used: — Rooms with similar usage are grouped together — Natural cross ventilation for apartments is optimised — Natural ventilation is provided to all inhabitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	•		
4V	Water Management and Conservation				
	4V-1	Potable water use is minimised			
		Water efficient fittings, appliances and wastewater reuse should be incorporated	•		Refer BASIX certificate
		Apartments should be individually metered	•		
		Rainwater should be collected, stored and reused on site	•		Refer BASIX certificate
		Drought tolerant, low water use plants should be used within landscaped areas	•		Refer to COLA design report for landscape design.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
	4V-2	Urban stormwater is treated on site before being discharged to receiving waters			
		Water sensitive urban design systems are designed by a suitably qualified professional	•		Refer to civil/ stormwater documentation.
		A number of the following design solutions are used: — Runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation — Porous and open paving materials is maximised — On site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	•		Refer to civil/ stormwater documentation.
	4V-3	Flood management systems are integrated into site design			
		Detention tanks should be located under paved areas, driveways or in basement car parks	•		Refer to hydraulic/ stormwater documentation.
		On large sites parks or open spaces are designed to provide temporary on site detention basins			N/A
4W	Waste Management				
	4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents			
		Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	•		Waste storage and collection occurs within the loading dock of 4S.
		Waste and recycling storage areas should be well ventilated	•		
		Circulation design allows bins to be easily manoeuvred between storage and collection points	•		
		Temporary storage should be provided for large bulk items such as mattresses	•		A bulky items storage room, that is separate from the waste rooms, has been provided in each basement.
		A waste management plan should be prepared	•		
	4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling			
		All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling	•		Kitchens will incorporate waste storage in the layout which will then be taken to the waste chutes in the shared lobbies.
		Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	•		There are two chutes per lift core; one for garbage and one for recycling.

ADG Response Table

Part No.	Objective No	Objective	Complies		Notes
		Design Criteria Design Guidance	Yes	No	
		For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses			N/A
		Alternative waste disposal methods such as composting should be provided			Noted - body corporate to review.
4X	Building Maintenance				
	4X-1	Building design detail provides protection from weathering			
		A number of the following design solutions are used: <ul style="list-style-type: none"> — Roof overhangs to protect walls — Hoods over windows and doors to protect openings — Detailing horizontal edges with drip lines to avoid staining of surfaces — Methods to eliminate or reduce planter box leaching — Appropriate design and material selection for hostile locations 	•		Noted. The building facades are simple, with windows and glazing typically protected and associated with balconies.
	4X-2	Systems and access enable ease of maintenance			
		Window design enables cleaning from the inside of the building	•		Windows and glazing is typically associated with balconies which allows simple cleaning. Other windows will be cleaned by the building management,
		Building maintenance systems should in incorporated and integrated into the design of the building form, roof and façade	•		Noted - to be developed at design development stage.
		Design solutions do not require external scaffolding for maintenance access	•		Noted - to be developed at design development stage.
		Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems			N/A
		Centralised maintenance, services and storage should be provided for communal open space areas within the building	•		
	4X-3	Material selection reduces ongoing maintenance costs			
		A number of the following design solutions are used: <ul style="list-style-type: none"> — Sensors to control artificial lighting in common circulation and spaces — Natural materials that weather well and improve with time such as face brickwork — Easily cleaned surfaces that are graffiti resistant — Robust and durable materials and finished are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors 	•		



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