

CHAPTER 4 OF HOUSING SEPP
DESIGN STATEMENT
146 ARTHUR STREET,
NORTH SYDNEY

W—B
WOODS BAGOT

Chapter 4 of Housing SEPP Design Statement
146 Arthur Street, North Sydney

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DESIGN
VERIFICATION
STATEMENT

Design Verification Statement

28 March 2024

Prepared on behalf:
Aqualand

Prepared by:
Woods Bagot

To whom it may concern,

Architectural Design Verification Statement
146 Arthur Street
(SEAR No. SSD-61000021)

I can confirm that I designed, or directed the design of, the development at 146 Arthur Street, North Sydney NSW.

I believe the proposal addresses:

- the **design principles for residential apartment development**
- each of the **objectives in Parts 3 and 4** of the *Apartment Design Guide* (ADG)

I am a registered architect in New South Wales and am enrolled in the Division of Chartered Architects in the register of Architects pursuant to the Architect Act 1921.

My registration number is 8431.

Please don't hesitate to contact us for further information.



Jason Fraser
Registered NSW Architect #8431
Principal
Woods Bagot

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SEPP65
DESIGN
PRINCIPLES

Housing SEPP Design Principles

2

2.1 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 site is located on the eastern edge of North Sydney CBD overlooking the Warringah Freeway and Sydney harbor and CBD beyond. North of the site is Doris Fitton Park, which provides a pleasant green space adjacent to the site. To the east is Arthur Street which serves as a major vehicle connection and to the west is Little Walker Street, which is calmer, with less vehicle movements.

The proposal will create a strong connect to Doris Fitton Park by introducing a green spine running north to south through the site. Further to this, laneways from Little Walker Street and a stair from Arthur Street will draw pedestrians into the site and connect residents and visitors to the park and surround city. There is a future laneway connection to Walker Street and Victoria Cross metro station that is aligned with main lobby entrance.

North Sydney CBD has traditionally had a low residential density with the focus on commercial uses. This has resulted in a lack of vibrancy and diversity, particularly during weekends. This proposal will interject life and character into the local neighbourhood. The site is appropriately located to bring more residences into the area with its proximity to Doris Fitton Park and neighbouring high density residential zone to the north.

The Metro station will initiate a wave of urban transformation with a need for increased high-rise apartment developments. Changes in building heights have ensured that this eastern edge of the city responds to the Warringah freeway and decreases in height towards the leafy suburban surrounds and harbor beyond.

The proposed design is a dynamic form, the top steps down towards eastern city edge and up towards taller existing and proposed buildings. In plan the building steps in towards the east to minimize visual impact to neighbours and increase view shafts out of the CBD. The podium breaks down into a collection of pavilions to draw the park into the site and create green fringes to the public domain. The tower lands elegantly atop the pavilions, their scale and materiality speak to the heritage buildings that once occupied this area.

Earthy, natural materials are used for the façades. Terracotta to the tower and brick to the podium. These material choices and forms create a dialogue that is derived from the key indigenous narrative of coming together. This design framework embraces our Designing with Country engagement learnings.

The proposal is centred around access for residents and visitors to generous open and planted space that provides spectacular views towards the harbor. This informs the dynamic character of the façade which responds views as well as environmental conditions.

This considered approach to design and context will enrich the neighbourhood and serve to provide a high standard of residences in North Sydney.



Proposal in North Sydney Context

Housing SEPP Design Principles

2

2.2 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 addressed LEP and DCP controls and where possible these have been observed and in selected instances the tower goes beyond the envelope control to improve the overall outcome of the proposal.

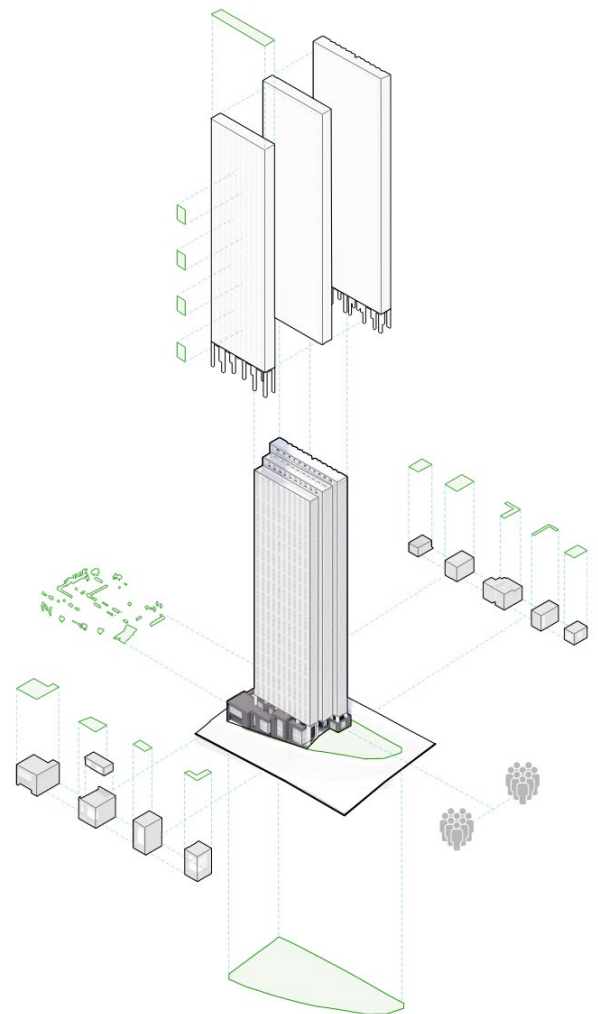
The additional height beyond the LEP height limit has no overt additional impact on the surrounding context. The RE1 zone southeast of the site is not shaded as described in the shadow analysis.

The tower is setback further from the boundary than required to the south and east as per the DCP. While to the north and west the tower sits beyond these controls to result in better amenity to residence and reduces the possible impacts to neighbours south of the site.

ADG principles and metrics are generally observed and where appropriate the build-to-rent flexibility objectives are applied.

The tower steps towards the east in plan which opens majority of residential apartments up to have an outlook of the harbor. Communal open space is also prioritized in this location to connect residence to the harbor as well as located to the north for sun and connection to the park.

The proposed building envelope responds appropriately to the relevant design guidelines ensuring the proposals built-form and scale creates a positive impact to the North Sydney context.



Proposed Massing and Dialogue of Parts

Housing SEPP Design Principles

2

2.3 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 proposed development is located within an area well served by public transport and community facilities and this amenity is projected to improve further with various infrastructure initiatives and upgrades.

The proposal is currently serviced by the North Sydney train station approximately 500m away and will be less than 500m to the new Victoria Cross Metro Station. This existing and in progress infrastructure connects the site with greater Sydney.

Bus stops are also available on Miller Street and Pacific Highway nearby, approximately 500m.

A 5-10 minute walk from the site will take you to these transport options connecting residents to Sydney CBD and surrounds with ease.

Within the North Sydney CBD are a range of lifestyle options. The site is located near retail, cafés, bars, fine dining, gyms, health and childcare facilities. This proposal's emphasis on a porous ground plane, connected to park and retail offerings will contribute to the wide neighbourhood giving North Sydney some destination style public offerings.

Residents will also be conveniently close to major parks and attractions such as North Sydney Oval, Saint Leonards Park, Forsyth Park and Anderson Park.



The sites North Sydney location and proximity Sydney CBD

Housing SEPP Design Principles

2

2.4 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 design proposal is structured around the concepts of sustainability and building longevity. It incorporates several strategies to achieve a positive environmental outcome, including:

- Solar renewable energy generation and water capture
- Façade optimization through horizontal and vertical passive design shading
- Connection to nature and history through biophilic design
- Naturally ventilated apartments and communal sky gardens
- Motorway noise treated through fixed glazing to east with acoustically treated internal operable panels to draw fresh air through facade
- Low embodied-carbon materials with recycled site material
- 100% electric building
- Tree canopies and shading devices for communal terrace comfort
- Promotes wellness through a variety of spaces with harbor views and maximized daylight access
- Connections to existing and future pedestrian routes to public transport
- Provision for easy access to car share

Additional Sustainability Excellence Initiatives

- Maximum solar PV to offset energy consumption of common areas
- Automated control of building systems such as motion sensors for lighting and CO sensors for carpark fans
- Energy efficient lifts



Façade Optimisation Tests

Housing SEPP Design Principles

2

2.5 Principle 5: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

The existing site condition has completely impervious surfaces. This proposal seeks to create pockets of deep soil planting to the northern park edge and down Arthur St to the east. The proposal has made every effort to provide landscaping in the public domain, down Little Walker St, through the central green spine and over podium terraces and roof tops.

The residential amenity offering includes a variety of diverse landscaped sky gardens and terraces which provide natural air and generous planting. These spaces with pleasant and practical with glazing to the east to protect occupants from motorway noise and wind at the upper levels. While at the lower levels with noise and wind are less prevalent they are protected by the surrounding mature trees. All these spaces are oriented towards to harbor views and many have northern aspects towards the sun and Dorris Fitton Park. This allows residents to as all times feel a connection with the outdoors and each other.

A generous amount of communal amenity spaces located at lower ground which sleeved by vegetation. The pool visually connects on to an external water feature embedded at the base of the public domain. A water all flows into it responding to the natural fall of the topography towards the harbor edge.

The rooftop space also provides residents with access to natural elements; direct sunlight, shaded outdoor space and barbeque facilities.



Proposed Park Connection and Integrated Landscape

Housing SEPP Design Principles

2

2.6 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 proposed building design achieves a high degree of resident amenity, maximizing access to natural light and air while protecting residences from motorway noise through fixed glazing to the east. These eastern windows are generously proportioned giving majority of living space and bedrooms views to the harbor, including north-west and south-west apartments due to the stepping face. Good outlook is balanced with privacy screening towards Dorris Fitton Park and the surrounding public realm. Many of the living spaces contain a built in windows seat to take in the harbor views, provide seating in direct sunlight and give visual privacy from below.

Where appropriate to environmental conditions, living spaces contain generous openings. These form part of the apartment cross ventilation strategy and provide a strong connection to the outdoor environment. These living spaces are able to be closed up and used year-round in all whether conditions, similar to a winter garden.

Circulation to the apartment on approximately one third of levels has a direct visual connection to the harbour via shared fresh air sky gardens. These provide natural connection for residents on their journey home and encourage residents to foster smaller community neighbourhoods.

A feature of the proposal is the extensive and diverse offering of communal space throughout the building. Including large flexible spaces at the lower levels, pools, gym, sauna, kids play, games rooms, lounges, a library, bookable space, work from home spaces, four sky gardens each with their own character and roof terraces.

Levels throughout the development have been determined to maintain accessibility to every element of the proposal.

Room dimensions and shapes, as well as storage have been carefully considered to maximise the space available and create efficient desirable apartments to live in.



CBD Facing Living & Balconies

Housing SEPP Design Principles

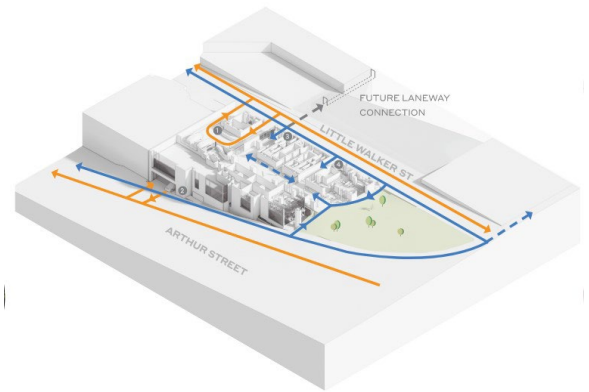
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2.7 Principle 7: Safety

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 proposed building design incorporates a number of planning initiatives to optimise safety and security within private spaces and the public domain.

- a) Easily identified entries and laneways on Little Walker Street for residents and public.
- b) The central green spine and pedestrian links create continuous sight lines avoiding any dead-end spaces.
- c) Rooftop terraces, sky gardens and open space areas provide for an enhanced residential experience within the site where neighbourly interaction is encouraged.
- d) Public and private open space encourage social interaction and shared ownership.



Porous Ground Plane

Housing SEPP Design Principles

2

2.8 Principle 8: Housing Diversity and Social Interaction

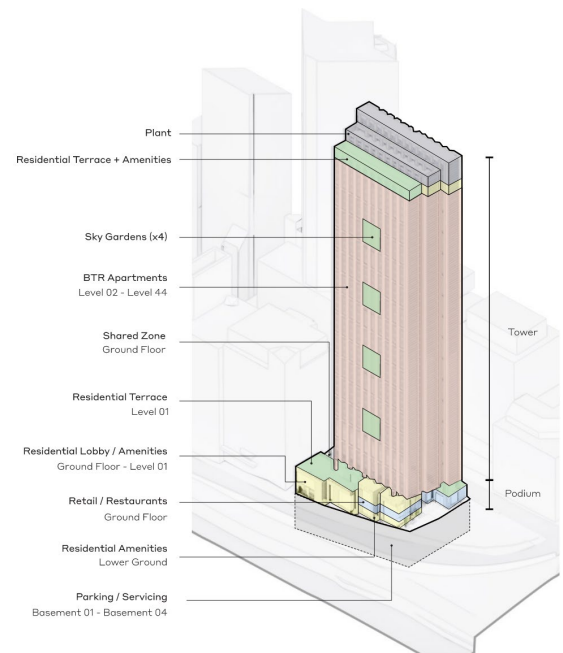
Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical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

The proposed development located in the North Sydney CBD incorporates an appropriate selection of apartment types to balance market availability in the area.

Apartment types all sit within ADG guidelines in terms of overall areas. Living areas and open space areas have been designed and consider producing a high-quality standard of living and amenity outcome through applying the ADG flexibility allowance to clauses 4A, 4D and 4E. A total number of 390 apartments are included.

In consideration of the view opportunities surrounding the development the glazing in all apartments is generous with a deep façade articulation and shading devices for protection from the summer sun.

Open space areas provide for a variety of enhanced residential experiences catering for a broad range of residents, whilst common circulation and diverse amenity areas provide further opportunities for social interaction.



Diverse Proposed Program

Housing SEPP Design Principles

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2.9 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.



Dialogue of Podium and Tower with Complementary Materials

The built form proposed is a considered response to the existing and historical context of the surrounding area. Though contrasting and complimenting scale, materiality, tone, and texture building elements come together to create a harmonious dialogue. This sits respectfully within the site and wider urban context.

The building responds to its existing and future context through several initiatives:

- The colour and texture of materials have been selected to complement the existing local context while equally responding to a modern architectural composition. The podium emulates whether sandstone and reflects historical buildings in the area. The tower has a complimentary light and earthy tone, while a play between textured matt and flat glazed finishes reflects the shimmering harbor.
- The proposed form has been articulated to create contemporary building additions of visual interest, exhibiting design excellence in a prominent site. The expressed vertical articulation of the tower creates a dynamic experience when viewed from at a distance from different angles.
- Fine detailing and texture of the materiality overlay an additional layer of consideration.
- Potential to incorporate expression in the building and façade will imbue the building with a unique, design led character within the emerging precinct.
- Street frontage to Little Walker Street is set back to increase footpath and improve the public domain, while the tower is further setback for privacy to residence. Opening in this frontage consider future links like the proposed Metro laneway.

3

APARTMENT
DESIGN GUIDE
ASSESSMENT

ADG Assessment

3

Item	3A – Site Analysis	Yes	No	Notes
Objective	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding content	✓		See Section 02 – Site Context and Analysis of Design Report
	Refer to Site Analysis Checklist Sheet.	✓		

Item	3B – Orientation	Yes	No	Notes
Objective	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.	✓		See Section 05 – Compliance of Design Report
Design Guidance	Solar access to living rooms, balconies and private open spaces of neighbours should be considered	✓		NA, Adjoining buildings are commercial office buildings within a CBD setting
	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%	✓		NA
	If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy	✓		NA, it is noted that the proposal respects the existing easement adjacent to the southern boundary
	Overshadowing should be minimised to the south or downhill by increased upper level setbacks	✓		NA, Adjoining buildings are commercial office buildings
	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	✓		NA, Adjoining buildings are commercial office buildings within a CBD setting
	A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings.	✓		NA, Adjoining buildings are commercial office buildings within a CBD setting

Item	3C – Public Domain Interface	Yes	No	Notes
Objective	Objective 3C 1 Transition between private and public domain is achieved without compromising safety and security	✓		The development's lobby acts as a control point between private and public domain.
Design Guidance	Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	✓		NA, All apartments are above street level
	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)	✓		NA, All apartments are above street level
	Upper level balconies and windows should overlook the public domain	✓		Upper level balconies and windows provide for passive surveillance of 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	✓		NA, fencing/walls are not proposed
	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	✓		The development has been designed to provide an active street and park interface.
	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 Opportunities for people to be concealed should be minimised.	✓		The development has been designed to provide a sense of address for resident, as well as separate access to the food and beverage offerings for the public.

Item	3D – Communal/Public Open Space	Yes	No	Notes
Objective	Objective 3D 1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	✓		See Design Report – Sections 04.03, 0.4.04 & 05.02
Design Criteria Design Guidance	Communal open space has a minimum area equal to 25% of the site. See figure 3D.3	✓		Communal open space included at ground plane, level 1, roof terrace and sky gardens (approx. 77%)
	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)	✓		See design report 05.02 -Solar and daylight access
	Communal open space should be consolidated into a well-designed, easily identified and usable area	✓		The development provides for well-considered, useable communal open space
	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	✓		All communal open space exceeds dimension
	Communal open space should be co-located with deep soil areas	✓		Communal open space incorporates deep soil and hardstand areas
	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	✓		Direct, equitable access has been provided
	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	✓		Requirement satisfied
	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	✓		Beyond level 1 and roof terraces, 4 communal sky gardens are located through the residential floors. Strong connection public park to Dorris Fitton Park at ground plane.

Item	3D – Communal/Public Open Space	Yes	No	Notes
Objective	Objective 3D 2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting.	✓		See Design Report – Sections 04.03, 0.4.04 the development provides for a wide range of activities in various locations through out the building.
Design Guidance	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 spaces provide for both individuals and groups and range from quiet areas (sky gardens / lounges), active play and recreation (pool, gym, sauna) and celebration / coming together (BBQ, dining rooms, cinema)
	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	✓		A variety of spaces are provided suitable for all seasons and climatic conditions
	Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks.	✓		The visual impacts of services have been well considered by their location and use of appropriate screening.
Item	3D – Communal/Public Open Space	Yes	No	Notes
Objective	Objective 3D 3 Communal open space is designed to maximize safety	✓		The communal spaces have been designed to maximise safety
Design Guidance	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 - bay windows - corner windows - balconies	✓		The communal spaces are located to take advantage of views and to provide a range of activities, whilst generally not visible from habitable rooms the nature of the use being BTR means that the development will have onsite management and programming of spaces, adding to the safety of the spaces.
	Communal open space should be well lit	✓		The spaces will be lit commensurate with

	Where communal open space/facilities are provided for children and young people they are safe and contained.	✓		The communal spaces associated with children/young people will be safe and designed for surveillance by adults.
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Item	3D – Communal/Public Open Space	Yes	No	Notes
Objective	Objective 3D 4 Public open spaces where provided is responsive to the existing pattern and uses of the neighbourhood	✓		See Design Report 04.02 - Public Domain
Design Guidance	The public open space should be well connected with public streets along at least one edge	✓		The active ground plane is well connected to Little Walker Street and Arthur Street.
	The public open space should be connected with nearby parks and other landscape elements	✓		The connection between the site and Doris Fitton Park is a feature of the ground plane and landscape response.
	Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	✓		The ground plane response provides for view lines and pedestrian desire lines through the site.
	Solar access should be provided year round along with protection from strong winds	✓		Solar access has been provided and the wind analysis report is favourable.
	Opportunities for a range of recreational activities should be provided for people of all ages	✓		A range of recreational activities will be available for all ages
	A positive address and active frontages should be provided adjacent to public open space	✓		The entry to the development form is Little Walker St is a key feature of the development and the location of the food and beverage offerings provide for passive surveillance over the adjoining park
	Boundaries should be clearly defined between public open space and private areas	✓		The boundaries between public and private areas will be defined by the architecture, materiality and controlled access points such as the BTR lobby.

Item	3E – Deep Soil Zones	Yes	No	Notes												
Objective	Objective 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.	✓		Satisfied - Refer to Landscape Design Report												
Design Criteria	Deep soil zones are to meet the following minimum requirements.<table><tr><th>Site Area</th><th>Min Dimensions</th><th>Deep Soil Zone (% of site area)</th></tr><tr><td><650m²</td><td></td><td rowspan="4">7%</td></tr><tr><td>650-1500m²</td><td>3m</td></tr><tr><td>>1500m²</td><td>6m</td></tr><tr><td>>1500m² with significant tree cover</td><td>6m</td></tr></table> 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	Site Area	Min Dimensions	Deep Soil Zone (% of site area)	<650m ²		7%	650-1500m ²	3m	>1500m ²	6m	>1500m ² with significant tree cover	6m		✓	Existing full site basement to be retained while introducing deep soil pockets to Arthur Street frontage
Site Area	Min Dimensions	Deep Soil Zone (% of site area)														
<650m ²		7%														
650-1500m ²	3m															
>1500m ²	6m															
>1500m ² with significant tree cover	6m															
Design Guidance	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 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.	✓		Adjacent park deep soil trees retained where appropriate, refer arborist report and landscape design. The trees to be removed are within areas impacted by the demolition of the existing building												
		✓		Extensive planting incorporated through and over new structure, refer landscape design.												

Item	3F – Visual Privacy	Yes	No	Notes												
Objective	Objective 3E 1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	✓		Adequate building separation has been provided												
Design Criteria	<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</td><td>9m</td><td>4.5m</td></tr><tr><td>Over 25m</td><td>12m</td><td>6m</td></tr></table> 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: - 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.	Building Height	Habitable Room and Balconies	Non Habitable	Up to 12 (4 Storeys)	6m	3m	Up to 25m	9m	4.5m	Over 25m	12m	6m		✓	The residential tower is located as far north and east as reasonability possible where there are no neighbouring buildings. Setbacks to south step, increasingly 6m, 9m, 10.5m. The façade typology varies in each of the setback zones to address privacy objectives.
Building Height	Habitable Room and Balconies	Non Habitable														
Up to 12 (4 Storeys)	6m	3m														
Up to 25m	9m	4.5m														
Over 25m	12m	6m														
Design Guidance	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 design of the building responds to its location, views and location of adjacent development												
	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	✓		The design responds to the location of adjacent office buildings through the setbacks provided, location of windows and orientation of rooms												

	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)	✓		Façade steps and articulation address this, along with location of solid and visual façade elements
	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)			Not applicable
	Direct lines of sight should be avoided for windows and balconies across corners	✓		Designs satisfies this requirement
	No separation is required between blank walls.	✓		Noted

Item	3F – Visual Privacy	Yes	No	Notes
Objective	Objective 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.	✓		The façade and window configurations satisfies this requirement.
Design Guidance	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: - 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	✓		Solid façade panels and window seats to 450mm give privacy to east and west faces. While shading louvres to give visual privacy north and south facades.
	Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	✓		Satisfied
	Balconies and private terraces should be located in front of living rooms to increase internal privacy			Not applicable
	Windows should be offset from the windows of adjacent buildings	✓		Not Applicable
	Recessed balconies and/or vertical fins should be used between adjacent balconies.			Not applicable

Item	3G – Pedestrian Access and Entries	Yes	No	Notes
Objective	Objective 3G 1 Building entries and pedestrian access connects to and address the public domain	✓		Satisfied
Design Guidance	Multiple entries (including communal building entries and individual ground floor entries) are provided to activate the street edge	✓		Little Walker St is well activated
	Entry locations relate to the street and subdivision pattern and the existing pedestrian network	✓		Entry locations meet pedestrian desire lines
	Building entries are clearly identifiable. Communal entries are clearly distinguishable from private entries	✓		Requirement satisfies by design
	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.	✓		Not applicable

Item	3G – Pedestrian Access and Entries	Yes	No	Notes
Objective	Objective 3G 2 Access, entries and pathways are equitable and easy to identify	✓		Requirement satisfied
Design Guidance	Building access areas including lift lobbies, stairwells and hallways are clearly visible from the public domain and communal spaces	✓		Requirement satisfied
	The design of ground floors and underground car parks minimise level changes along pathways and entries	✓		Requirement satisfied
	Steps and ramps are integrated into the overall building and landscape design	✓		Requirement satisfied
	Finding maps are provided to assist visitors and residents	✓		Will be provided as part of the development
	For large developments electronic access and audio/video intercom should be provided to manage access	✓		Will be provided as part of the development

Item	3G – Pedestrian Access and Entries	Yes	No	Notes
Objective	Objective 3G 3 Pedestrian links through developments provide access to streets and connect destinations	✓		Pedestrian desire lines have informed the design
Design Guidance	Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	✓		Requirement satisfied with the site well located

	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.	✓		Pedestrian links are well located and the BTR project will have onsite management, security camera systems and electronic, proximity controls
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Item	3H – Vehicle Access	Yes	No	Notes
Objective	Objective 3H 1 Vehicle access points are designed and located to achieve safety, minimize conflicts between pedestrians and vehicles and create high quality streetscapes	✓		Requirement is satisfied, pedestrian and vehicular access is separated
Design Guidance	Car park access is integrated with the building's overall facade, design solutions may include: - 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	✓		The car park access is integrated into the building design
	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.	✓		Requirement is satisfied
	Car park entries are located behind the building line	✓		Requirement is satisfied
	Vehicle entries are located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	✓		Requirement is satisfied
	Car park entry and access is located on secondary streets or lanes where available	✓		The main vehicle access is from Arthur St in the vicinity of the existing access arrangement
	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	✓		Requirement is satisfied
	Access point locations avoid headlight glare to habitable rooms	✓		Screening provided to residence lounge.

	Adequate separation distances are provided between vehicular entries and street intersections	✓		Requirement is satisfied
	The width and number of vehicle access points is limited to the minimum	✓		Requirement is satisfied
	Visual impact of long driveways is minimised through changing alignments and screen planting	✓		Requirement is satisfied
	The requirement for large vehicles to enter or turnaround within the site is avoided	✓		Provision has been made for adequate turning of vehicles on site.
	Garbage collection, loading and servicing areas are screened	✓		All loading and servicing is within the basement area
	Clear sight lines should be provided at pedestrian and vehicle crossings	✓		Clear site lines have been provided
	Traffic calming devices such as changes in paving material or textures should be used where appropriate	✓		This principle has been adopted in the porte cocher
	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	✓		The design uses materiality, landscaping and physical barriers to separate pedestrians and vehicles where required

Item	3J – Bicycle and Car Parking	Yes	No	Notes
Objective	Objective 3J 1 Car Parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	✓		The development given its proximity to public transport provides a reduced level of onsite parking.
Design Criteria	For development in the following locations: - on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or - on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre	✓		The proposal satisfies the Housing SEPP with regards to minimising parking

Design Guidance	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.	✓		
	Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	✓		
	Where less car parking is provided in a development, council should not provide on street resident parking permits			Not Applicable

Item	3J – Bicycle and Car Parking	Yes	No	Notes
Objective	Objective 3J-2 Parking and facilities are provided for other modes of transport	✓		
Design Guidance	Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters			Not Applicable
	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	✓		Undercover bicycle parking has been provided.
	Conveniently located charging stations are provided for electric vehicles, where desirable	✓		Provision in parking levels

Item	3J – Bicycle and Car Parking	Yes	No	Notes
Objective	Objective 3J-4 Visual and experimental impacts of underground car parking are minimised	✓		
Design Guidance	Excavation should be minimised through efficient car park layouts and ramp design	✓		Excavation has been minimised
	Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	✓		Car parking has been designed to be efficient
	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 design of the basement has taken into account the slope of the site, as well as existing access conditions.
	Natural ventilation should be provided to basement and sub-basement car parking areas		✓	Mechanically ventilated basement

	Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	✓		This principle has been addressed in the design. Further it is noted that the proposal removes an existing exhaust stack from the park which is a positive outcome.
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Item	3J – Bicycle and Car Parking	Yes	No	Notes
Objective	Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised	✓		All car parking is within the basement
Design Guidance	On-grade car parking should be avoided	✓		All car parking is within the basement
	Where on-grade car parking is unavoidable, the following design solutions are used: - 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			Not Applicable

Item	3J – Bicycle and Car Parking	Yes	No	Notes
Objective	Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised			Not Applicable
Design Guidance	Exposed parking should not be located along primary street frontages			Not Applicable All parking is visually concealed.
	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: - car parking that is concealed behind the facade, with windows integrated into the overall façade 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)			Not Applicable
	Positive street address and active frontages should be provided at ground level	✓		The proposal provides a much improved streetscape and reflects the design intent for an active streetscape to Little Walker St

Item	4A – Solar and Daylight Access	Yes	No	Notes
Objective	Objective 4A-1 To optimize the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Criteria	Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	✓		47% of spaces meet this criteria, while 45% of spaces this allow for 2 hours of direct sunlight from 8am. With this flexibility applied 92% is achieved. The constraints are due to CBD location and site orientation for western apartments.
	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	NA		Refer design report for detail in design flexibility being applied
	A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter	NA		Refer design report for detail in design flexibility being applied
	The design maximises north aspect and the number of single aspect south facing apartments is minimised	✓		There are no single aspect south facing apartments proposed
	Single aspect, single storey apartments should have a northerly or easterly aspect	✓		West facing apartments minimized
	Living areas are best located to the north and service areas to the south and west of apartment	✓		Living areas prioritized to north and east for views. Core to west
	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	✓		40-50% dual aspect units on all floors. Bay windows to majority of living spaces.
	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	✓		Tested and achieved
	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	✓		Not applicable

	- 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.			
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Item	4A – Solar and Daylight Access	Yes	No	Notes
Objective	Objective 4A-2 Daylight access is maximized where sunlight is limited	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms			Not applicable
	Where courtyards are used: - 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			Not applicable
	Opportunities for reflected light into apartments are optimised through: - 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	✓		This principle will be further enhanced during the detailed design of the project

Item	4A – Solar and Daylight Access	Yes	No	Notes
Objective	Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>

Design Guidance	A number of the following design features are used: - 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)	✓		These matters have been adopted in the design of the building and in particular the detailed design of the façade and how it adapts and varies dependent on the façade's orientation
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Item	4B – Natural Ventilation	Yes	No	Notes
Objective	Objective 4B-1 All habitable rooms are naturally ventilated	✓		Satisfied
Design Guidance	The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	✓		Satisfied, considering the buildings location and site configuration
	Depths of habitable rooms support natural ventilation	✓		Satisfied
	The area of unobstructed window openings should be equal to at least 5% of the floor area served	✓		Satisfied
	Light wells are not the primary air source for habitable rooms	✓		No light wells are proposed
	Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: - 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	✓		Where openable windows are not suitable due to motorway noise an alternative natural ventilation system is used, drawing fresh air through façade and internal operable panels.
Item	4B – Natural Ventilation	Yes	No	Notes

Objective	Objective 4B-2 The layout and design of single aspect apartments maximizes natural ventilation	✓		Adopted
Design Guidance	Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	✓		Adopted in the design
	Natural ventilation to single aspect apartments is achieved with the following design solutions: - 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	✓		Not applicable

Item	4B – Natural Ventilation	Yes	No	Notes
Objective	Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	✓		Principle adopted in the design where the site and building design permits, refer design report for detail
Design Criteria	At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed		✓	40% are naturally cross ventilated to facades where large openings are appropriate to site conditions. Due to motorway noise an alternative acoustically treated fresh air system has been incorporated to ensure all apartments are comfortable and receive fresh air.
Design Guidance	Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	✓		Not applicable
	The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths	✓		Opportunity has been maximised
	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)	✓		Not applicable

	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	✓		The apartment designs respond to this principle.	
Item	4C – Ceiling Heights	Yes	No	Notes	
Objective	Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access	✓			
Design Criteria	Measured from finished floor level to finished ceiling level, minimum ceiling heights are:	✓		The proposal complies, 2.7m for habitable rooms and 2.4m for non-habitable rooms.	
	Minimum ceiling height (for apartment and mixed use buildings)				
	Habitable rooms				2.7m
	Non-habitable				2.4m
	For 2 storey apartments				2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area
	Attic spaces				1.8m at edge of room with a 30 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				
Design Guidance	Ceiling height can accommodate use of ceiling fans for cooling and heat distribution	✓		Ceiling fans can be accommodated	

Item	4C – Ceiling Heights	Yes	No	Notes
Objective	Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms	✓		
Design Guidance	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	✓		Not applicable
	well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings	✓		Noted
	Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from	✓		This principle has been adopted

	floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist			
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Item	4C – Ceiling Heights	Yes	No	Notes
Objective	Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building	✓		Noted, the development will remain a BTR project
Design Guidance	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)	✓		The ground and first floor levels have been expressly designed and dedicated to non-residential uses.

Item	4D – Apartment Size and Layout	Yes	No	Notes										
Objective	Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>										
Design Criteria	1. Apartments are required to have the following minimum internal areas: <table><tr><th>Apartment Type</th><th>Min. 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 12 m² each	Apartment Type	Min. Internal Area	Studio	35m ²	1 bedroom	50m ²	2 bedroom	70m ²	3 bedroom	90m ²	✓		The proposal complies, all internal min. areas are achieved
Apartment Type	Min. Internal Area													
Studio	35m ²													
1 bedroom	50m ²													
2 bedroom	70m ²													
3 bedroom	90m ²													
Design Guidance	Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	✓		The proposal complies										
	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	✓		The proposal complies										
	A window should be visible from any point in a habitable room	✓		The proposal complies										
	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.	✓		Additional depth is given to spaces where required and functional layouts are demonstrated.										

Item	4D – Apartment Size and Layout	Yes	No	Notes
Objective	Objective 4D-2 Environmental performance of the apartment is maximised	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Criteria Design Guidance	Habitable room depths are limited to a maximum of 2.5 x the ceiling height	✓		Complies, apartments are configured so rooms do not exceed 6.75m in depth.
	In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	✓		Additional depth is given to spaces where required for functional layouts as allowable under the flexibility fact sheet. Largest open plan depth of 9.3m is less than a standard 10.5m depth where balconies are included (8 room + 2.5 balcony)
	Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	✓		Not applicable
	All living areas and bedrooms should be located on the external face of the building	✓		The proposal complies

Item	4D – Apartment Size and Layout	Yes	No	Notes
Objective	Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Criteria Design Guidance	Master bedrooms have a minimum area of 10m ² and other bedrooms 9 m ² (excluding wardrobe space)	✓		The proposal complies
	Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	✓		The proposal complies
	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		✓	Additional depth is given to 2 and 3 bedroom apartments and functional layouts are demonstrated as allowable under the flexibility fact sheet.
	The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	✓		Not applicable

	All bedrooms allow a minimum length of 1.5m for robes	✓		The proposal complies
	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	✓		The proposal complies
	Apartment layouts allow flexibility over time, design solutions may include: - 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.	✓		The proposal complies

Item	4E – Private Open Space and Balconies	Yes	No	Notes															
Objective	Objective 4E-1 Apartment provide appropriately sized private open space and balconies to enhance residential amenity	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>															
Design Criteria	All apartments are required to have primary balconies as follows: <table><tr><td>Dwelling Type</td><td>Minimum Area</td><td>Minimum Depth</td></tr><tr><td>Studio Apartments</td><td>4m²</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8 m²</td><td>2 m²</td></tr><tr><td>2 bedroom apartments</td><td>10 m²</td><td>2 m²</td></tr><tr><td>3+ bedroom apartments</td><td>12 m²</td><td>2.4 m²</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	8 m ²	2 m ²	2 bedroom apartments	10 m ²	2 m ²	3+ bedroom apartments	12 m ²	2.4 m ²		✓	Diverse communal open space and amenity is provided in leu of balconies as per the flexible design Fact sheet. Balconies are not suitable due to noise and wind. North Sydney CBD design guide recommends commercial appearance to buildings, removing balconies achieves this objective. Refer design report for detail.
Dwelling Type	Minimum Area	Minimum Depth																	
Studio Apartments	4m ²	-																	
1 bedroom apartments	8 m ²	2 m ²																	
2 bedroom apartments	10 m ²	2 m ²																	
3+ bedroom apartments	12 m ²	2.4 m ²																	

Design Guidance	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			Not applicable
	Increased communal open space should be provided where the number or size of balconies are reduced	✓		The proposal complies and this principle has been a key driver in the design of the project
	Storage areas on balconies is additional to the minimum balcony size			Not applicable
	Balcony use may be limited in some proposals by: - 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.	✓		This site is limited by high winds and freeway proximity. Where suitable at lower levels and away from freeway, sliding windows and glass balustrades are provided to connect to the outdoors. Where not suitable bay windows are located against fixed glazing and natural ventilation provided through acoustically treated operable panels.

Item	4E – Private Open Space and Balconies	Yes	No	Notes
Objective	Objective 4E-2 Primary private open space and balconies are appropriately located to enhance livability for residents	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space		✓	Communal Open spaces are distributed throughout the building to encourage regular use based on residence needs.
	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	✓		The variety and location of the communal area satisfy this principle and provide for a variety of activities.

Item	4E – Private Open Space and Balconies	Yes	No	Notes
Objective	Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	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	✓		Balustrades associated with terraces or communal spaces have been designed to respond to the type of space its location and how it is viewed within the overall
	Full width full height glass balustrades alone are generally not desirable	✓		Noted, the balustrade choices respond to the overall design of the building
	Projecting balconies should be integrated into the building design and the design of soffits considered	✓		Not applicable
	Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	✓		Adopted in the design of the project
	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	✓		Adopted in the design of the project
	Downpipes and balcony drainage are integrated with the overall facade and building design	✓		Adopted in the design of the project
	Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	✓		Services have been fully integrated into the building design
	Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design			Not Applicable
	Ceilings of apartments below terraces should be insulated to avoid heat loss	✓		Adopted in the design of the project
	Water and gas outlets should be provided for primary balconies and private open space	✓		Adopted in the design of the project, noting however the project is gas

Item	4E – Private Open Space and Balconies	Yes	No	Notes
Objective	Objective 4E-4 Private open space and balcony design maximizes safety	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	Changes in ground levels or landscaping are minimised	✓		Noted, adopted in communal areas
	Design and detailing of balconies avoids opportunities for climbing and falls	✓		Noted, adopted in communal areas

Item	4F – Common Circulation and Spaces	Yes	No	Notes
Objective	Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Criteria	The maximum number of apartments off a circulation core on a single level is eight	✓		Between 8 and 10, where there are 10 apartments these are mostly 1 bedroom.
Design Guidance	For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	✓		5 lifts have been calculated to service the building well.
	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	✓		Incorporated into design.
	Daylight and natural ventilation should be provided to all common circulation spaces that are above ground		✓	Due to site conditions natural ventilation is not possible. Daylighting is provided to all 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 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	✓		Windows provided to all lobbies / cores
	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	✓		Noted, adopted in the design of the project
	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	NA		Not Applicable

	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			
	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	✓		Max 10 apartments
	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.	✓		Noted, adopted in the design of the project

Item	4F – Common Circulation and Spaces	Yes	No	Notes
Objective	Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	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	✓		Noted, adopted in the design of the project
	Tight corners and spaces are avoided	✓		Noted, adopted in the design of the project
	Circulation spaces should be well lit at night	✓		Noted, will be adopted in the design of the project
	Legible signage should be provided for apartment numbers, common areas and general wayfinding Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	✓		Noted, will be adopted in the design of the project
	In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally collocated with communal open space	✓		Noted, adopted in the design of the project
	Where external galleries are provided, they are more open than closed above the balustrade along their length	✓		Not applicable

Item	4G – Storage	Yes	No	Notes										
Objective	Objective 4G-1 Adequate, well designed storage is provided in each apartment	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>										
Design Criteria	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 apartments</td><td>6 m3</td></tr><tr><td>2 bedroom apartments</td><td>8 m3</td></tr><tr><td>3+ bedroom apartments</td><td>10 m3</td></tr></table>	Dwelling Type	Storage Size	Studio Apartments	4m3	1 bedroom apartments	6 m3	2 bedroom apartments	8 m3	3+ bedroom apartments	10 m3	✓		The proposed apartments are large and designed to include joinery that typically exceeds the minimum requirements
Dwelling Type	Storage Size													
Studio Apartments	4m3													
1 bedroom apartments	6 m3													
2 bedroom apartments	8 m3													
3+ bedroom apartments	10 m3													
Design Guidance	with at least 50% located within the apartment 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	✓ NA ✓		Noted, will be adopted in the design of the project Not Applicable Not applicable										

Item	4G – Storage	Yes	No	Notes
Objective	Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	Storage not located in apartments is secure and clearly allocated	✓		Noted, adopted in the design of the project
	Storage is provided for larger and less frequently accessed items, where practical	✓		Noted, will be adopted in the design of the project, located in basement
	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	✓		Noted, adopted in the design of the project
	If communal storage rooms are provided they should be accessible from common circulation areas of the building	✓		Noted, adopted in the design of the project

	Storage not located in an apartment is integrated into the overall building design and not visible from the public domain	✓		Noted, adopted in the design of the project
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Item	4H – Acoustic Privacy	Yes	No	Notes
Objective	Objective 4H-1 Noise transfer is minimized through the siting of buildings and building layout	✓		
Design Guidance	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)	✓		Noted, adopted in the design of the project
	Window and door openings are generally orientated away from noise sources	✓		Noted, adopted in the design of the project particularly in relation to façade design
	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	✓		Noted, adopted in the design of the project
	Storage, circulation areas and non-habitable rooms are located to buffer noise from external sources	✓		Noted, adopted in the design of the project
	The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	✓		Noted, adopted in the design of the project
	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	✓		Proposal complies

Item	4H – Acoustic Privacy	Yes	No	Notes
Objective	Objective 4H-2 Noise transfer is minimised through the siting of buildings and building layout	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project

	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	✓		Noted, adopted in the design of the project and in accordance with the recommendations contained in the submitted acoustic report
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Item	4J – Noise and Pollution	Yes	No	Notes
Objective	Objective 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimized through the careful siting and layout of buildings.	✓		
Design Guidance	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, non-habitable 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	✓		Noted, adopted in the design of the project and in accordance with the recommendations contained in the submitted acoustic report

	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, adopted in the design of the project and in accordance with the recommendations contained in the submitted acoustic report
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Item	4J – Noise and Pollution	Yes	No	Notes
Objective	Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project and in accordance with the recommendations contained in the submitted acoustic report

Item	4K – Apartment Mix	Yes	No	Notes
Objective	Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future.	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	A variety of apartment types is provided	✓		A variety of apartment types has been provided (A through to G)
	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 groups	✓		The apartment mix reflects market research pertaining to BTR 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	✓		Not applicable however a variety of apartment sizes has been provided

Item	4K – Apartment Mix	Yes	No	Notes
Objective	Objective 4K-2 The apartment mix is distributed to suitable locations within the building	✓		Relevant to the <i>NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023</i>
Design Guidance	Different apartment types are located to achieve successful facade composition and to optimize solar access. See figure 4A.3	✓		Noted, adopted in the design of the project
	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	✓		Not applicable
Item	4L – Ground Floor Apartments	Yes	No	Notes
Objective	Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located	✓		
Design Guidance	Direct street access should be provided to ground floor apartments			Not Applicable
	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	✓		Not applicable
	Retail or home office spaces are located along street frontages	✓		Noted, adopted in the design of the project and in accordance with the recommendations contained in the submitted acoustic report
	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			Not Applicable

Item	4L – Ground Floor Apartments	Yes	No	Notes
Objective	Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	✓		Not applicable
Design Guidance	Privacy and safety is provided without obstructing casual 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	✓		Not applicable

	• window sill heights that minimise sight lines into apartments • integrating balustrades, safety bars or screens with the exterior design			
	Solar access is maximised through: • high ceilings and tall windows • trees and shrubs that allow solar access in winter and shade in summer	✓		Not applicable

Item	4M – Facades	Yes	No	Notes
Objective	Objective 4M-1 Building facades provide visual interest along the street respecting the character of the local area	✓		Noted, adopted in the design of the project
Design Guidance	Design solutions for front building facades may include: - 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	✓		Noted, adopted in the design of the project. Refer to the Design Report – Section 03
	Building services should be integrated within the overall façade	✓		Building services are integrated.
	Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: - 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	✓		Noted, adopted in the design of the project. Refer to the Design Report – Section 03, 04 and particularly 04.05
	Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	✓		Noted, adopted in the design of the project. See Design Report
	Shadow is created on the façade throughout the day with building articulation, balconies and deeper window reveals	✓		Noted, adopted in the design of the project. See Design Report - Section 04.05

Item	4M – Facades	Yes	No	Notes
Objective	Objective 4M-2 Building functions are expressed by the facade	✓		
Design Guidance	Building entries should be clearly defined	✓		The building entries are clearly defined
	Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	✓		Noted, adopted in the design of the project.
	The apartment layout should be expressed externally through façade features as party walls and floor slabs	✓		Noted, adopted in the design of the project.
Item	4N – Roof Design	Yes	No	Notes
Objective	Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	✓		
Design Guidance	Roof design relates to the street. Design solutions may include: • 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	✓		Not applicable
	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 treatment forms an integral and consistent component of the façade treatment

Item	4N – Roof Design	Yes	No	Notes
Objective	Objective 4N-2 Roof treatments are integrated into the building design and positively respond to the street	✓		
Design Guidance	Habitable roof space should be provided with good levels of amenity. Design solutions may include: - 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	✓		Not applicable

	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 treatment forms an integral and consistent component of the façade treatment
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Item	4N – Roof Design	Yes	No	Notes
Objective	Objective 4N-3 Roof design incorporates sustainability features	✓		
Design Guidance	Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: - The roof lifts to the north - Eaves and overhangs shade walls and windows from summer sun	✓		Not Applicable
	Skylights and ventilation systems should be integrated into the roof design	✓		Not applicable

Item	4O – Landscape Design	Yes	No	Notes
Objective	Objective 4O – 1 Landscape design is viable and sustainable	✓		
Design Guidance	Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: - Diverse and appropriate planting - Bio-filtration gardens - Appropriately planted shading trees - Areas for residents to plant vegetables and herbs - Composting - Green roofs or walls	✓		Noted, adopted in the design of the project, see Landscape Design Report for detailed information
	Ongoing maintenance plans should be prepared	✓		By Others
	Microclimate in enhanced by: - 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	✓		Noted, adopted in the design of the project, see Landscape Design Report for detailed information
	Tree and shrub selection considers size at maturity and the potential for roots to complete (see table 4)	✓		Noted, adopted in the design of the project, see Landscape Design Report for detailed information

Item	4O – Landscape Design	Yes	No	Notes
Objective	Objective 4O – 2 Landscape design is contributes to the streetscape and amenity	✓		
Design Guidance	Landscape design responds to the existing site conditions including: • Changes of levels • Views • Significant landscape features including trees and rock outcrops	✓		Noted, adopted in the design of the project, see Landscape Design Report for detailed information
	Significant landscape features should be protected by: • Tree protection zones (see figure 40.5) • Appropriate signage and fencing during construction	✓		The proposal involves the demolition of the existing building including the basement which extends across the entire site
	Plants selected should be endemic to the region and reflect the local ecology	✓		The plants selected include endemic species and have been chosen for their suitability in achieving the desired landscape effect.

Item	4P – Planting on Structures	Yes	No	Notes
Objective	Objective 4P – 1 Appropriate soil profiles are provided	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project, see Landscape Design Report for detailed information
	Minimum soil standards for plant sizes should be provided in accordance with Table 5	✓		The soil standards provided are based on expert advice

Item	4P – Planting on Structures	Yes	No	Notes
Objective	Objective 4P – 2 Plant growth is optimised with appropriate selection and maintenance	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project, see Landscape Design Report for detailed information

	A landscape maintenance plan is prepared	✓		A landscape maintenance plan will be prepared
	Irrigation and drainage systems respond to : - Changing site conditions - Soil profile and the planting regime - Whether rainwater, stormwater recycled grey water is used	✓		The irrigation and drainage systems will be designed to satisfy these key principles

Item	4P – Planting on Structures	Yes	No	Notes
Objective	Objective 4P – 3 Planting on structure contributes to the quality and amenity of communal and public open spaces	✓		
Design Guidance	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	✓		A variety of landscape opportunities have been incorporated into the design of and throughout the building.

Item	4Q – Universal Design	Yes	No	Notes
Objective	Objective 4Q – 1 Universal design features are included in apartment design to promote flexible housing for all community members	✓		
Design Guidance	Developments achieve a benchmark of 20% of the total apartment incorporating the Livable Housing Guideline's silver level universal design features	✓		Noted, adopted in the design of the project

Item	4Q – Universal Design	Yes	No	Notes
Objective	Objective 4Q – 2 A variety of apartments with adaptable designs are provided	✓		
Design Guidance	Adaptable housing should be provided in accordance with the relevant council policy	✓		Noted, adopted in the design of the project

	Design solutions for adaptable apartments include: • 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, adopted in the design of the project, It is also noted that the development will not be strata subdivided and will remain under one ownership. This allow for greater opportunity to respond to a tenants need or changing circumstances.
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Item	4Q – Universal Design	Yes	No	Notes
Objective	Objective 4Q – 3 Apartment layouts are flexible and accommodate a range of lifestyle needs	✓		
Design Guidance	Apartments design incorporates flexible design solutions which may include: • 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	✓		As a BTR development the mix of apartments provide a greater opportunity to respond to the needs of changing circumstances of a tenant where they may change apartments but not leave the development.

Item	4R – Adaptive Reuse	Yes	No	Notes
Objective	Objective 4R – 1 New additional to existing buildings are contemporary and complementary and enhance area’s identity and sense of place			Not Applicable
Design Guidance	Design solutions may include: • 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			The development sits well within the North Sydney CBD and adds additional vibrancy and vitality to the north-eastern corner of the North Sydney CBD
	Additions to heritage items should be clearly identifiable form the original building			
	New additions allow for the interpretation and future evolution of the building			

Item	4R – Adaptive Reuse	Yes	No	Notes
Objective	Objective 4R – 2 Adapted buildings provide residential amenity while not precluding future adaptive reuse			Not Applicable
Design Guidance	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: • Generously sized voids in deeper buildings • Alternative apartment types when orientation is poor • Using additions to expand the existing building envelope			Not applicable
	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: • 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			Not applicable

Item	4S – Mixed Use	Yes	No	Notes
Objective	Objective 4S – 1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	✓		
Design Guidance	Mixed use development should be concentrated around public transport and centres	✓		The development is well located on the north-eastern corner of the North Sydney CBD in close walking distance to amenities including transport and retail offerings
	Mixed use developments positively contribute to the public domain. Design solutions may include: • Development addresses the street • Active frontages are provided • Diverse activities and uses • Avoiding blank walls at the ground level • Live/work apartments on the ground floor level, rather than commercial	✓		Noted, adopted in the design of the project. Active streetscape, diverse activities and uses.

Item	4S – Mixed Use	Yes	No	Notes
Objective	Objective 4S – 2 Residential levels of the building are integrated within the development, and safety and amenity is maximized for residents	✓		
Design Guidance	Residential circulation areas should be clearly defined. Design solutions may include: • 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	✓		Noted, adopted in the design of the project. The development provides a quality sense of address for residents
	Landscape communal open space should be provided at podium or roof levels	✓		Communal open space is provided in the podium, roof top and four sky gardens space throughout the building

Item	4T – Awnings and Signage	Yes	No	Notes
Objective	Objective 4T – 1 Awnings are well located and compliment and integrate with the building design	✓		
Design Guidance	Awnings should be located along streets with high pedestrian activity and active frontages	✓		Awnings are provided where appropriate
	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	✓		Noted, adopted in the design of the project.
	Awnings should be located over building entries for building address and public domain amenity	✓		Noted, adopted in the design of the project.
	Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	✓		Noted, adopted in the design of the project.
	Gutters and down pipes should be integrated and concealed	✓		Noted, adopted in the design of the project.
	Lighting under awnings should be provided for pedestrian safety	✓		Noted, adopted in the design of the project.

Item	4T – Awnings and Signage	Yes	No	Notes
Objective	Objective 4T – 2 Signage responds to the context and desired streetscape character	✓		
Design Guidance	Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	✓		Signage will be integrated into the design of the building
	Legible and discrete way finding should be provided for larger developments	✓		Way finding will be provided in the detailed design of the project
	Signage is limited to being on and below awnings and in single façade sign on the primary street frontage	✓		Noted

Item	4U – Energy Efficiency	Yes	No	Notes
Objective	Objective 4U – 1 Development incorporates passive environmental design	✓		
Design Guidance	Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	✓		Project meets requirement
	Well located, screened outdoor areas should be provided for clothes drying	✓		Not applicable

Item	4U – Energy Efficiency	Yes	No	Notes
Objective	Objective 4U – 2 Development incorporates passive solar design to optimize heat storage in winter and reduce heat transfer in summer	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project. Please refer to ESD report for further information.
	Provision of consolidated heating and cooling infrastructure should be located in a centralized location (e.g. the basement)	✓		Consolidated services are located in roof top plant area

Item	4U – Energy Efficiency	Yes	No	Notes
Objective	Objective 4U – 3 Adequate natural ventilation minimizes the need for mechanical ventilation	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project. Please refer to ESD report for further information

Item	4V – Water management and conservation	Yes	No	Notes
Objective	Objective 4V – 1 Potable water use is minimised	✓		
Design Guidance	Water efficient fittings, appliances and wastewater reuse should be incorporated	✓		Noted, adopted in the design of the project. Please refer to ESD report for further information
	Apartments should be individually metered	✓		
	Rainwater should be collected, stored and reused on site	✓		
	Drought tolerant, low water use plants should be used within landscaped areas	✓		

Item	4V – Water management and conservation	Yes	No	Notes
Objective	Objective 4V – 2 Urban stormwater is treated on site before being discharged to receiving waters	✓		
Design Guidance	Water sensitive urban design systems are designed by a suitably qualified professional	✓		Noted, adopted in the design of the project. Please refer to Landscape, ESD and Civil reports for further information
	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	✓		

Item	4V – Water management and conservation	Yes	No	Notes
Objective	Objective 4V – 3 Flood management systems are designed to minimise impacts on the streetscape, building entry and amenity of residents	✓		
Design Guidance	Detention tanks should be located under paved areas, driveways or in basement car parks	✓		Not applicable
	On large sites parks or open spaces are designed to provide temporary on site detention basins	✓		Not applicable

Item	4W – Waste Management	Yes	No	Notes
Objective	Objective W – 1 Flood management systems are designed to minimise impacts on the streetscape, building entry and amenity of residents	✓		
Design Guidance	Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	✓		Noted, adopted in the design of the project. Please refer to Construction and Operational Waste Management Plans for further information
	Waste and recycling storage areas should be well ventilated	✓		
	Circulation design allows bins to be easily maneuvered between storage and collection points	✓		
	Temporary storage should be provided for large bulk items such as mattresses	✓		
	A waste management plan should be prepared	✓		

Item	4W – Waste Management	Yes	No	Notes
Objective	Objective W – 2 Domestic waste is minimised by providing safe and convenient source separation and recycling	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project. Please refer to Construction and Operational Waste Management Plans for further information
	Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	✓		
	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		✓	

Item	4X – Building Maintenance	Yes	No	Notes
Objective	Objective 4 X – 1 Building design detail provides protection from weathering	✓		
Design Guidance	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	✓		Noted, adopted in the design of the project.

Item	4X – Building Maintenance	Yes	No	Notes
Objective	Objective 4 X – 2 Systems and access enable ease of maintenance	✓		
Design Guidance	Window design enables cleaning from the inside of the building	✓		Noted, adopted in the design of the project. With regards to Building Maintenance, it is noted that the building will remain under one ownership and will be professionally managed as a commercial asset.
	Building maintenance systems should be incorporated and integrated into the design of the building form, roof and façade	✓		
	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	✓		