# HOUSING SEPP DESIGN STATEMENT
# LARKIN STREET, ROSEVILLE

W—B
WOODS BAGOT

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Housing SEPP Design Statement
Larkin Street, Roseville

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Prepared by: DS
Checked by: JF

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W—B
WOODS BAGOT

# Contents

# 1

# DESIGN VERIFICATION STATEMENT

W—B
WOODS BAGOT

# Design Verification Statement

14th April 2025

Prepared on behalf:
Aqualand Prestige

Prepared by:
Woods Bagot

To whom it may concern,

**Architectural Design Verification Statement**
**Proposed mixed use development a *2 & 4 Larkin Street and 1,3 & 5 Pockley Avenue, Roseville***

I can confirm that I designed, or directed the design of, the proposed residential development at *2 & 4 Larkin Street and 1,3 & 5 Pockley Avenue, Roseville* 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

# 2

# HOUSING SEPP 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 in Roseville on west side of the ridge in which the Pacific Highway runs along the top of. Along the northern boundary of the site a pedestrian laneway (The Rifleway) connects to Roseville station within a 300m walk to the east, while cutting through a biodiversity corridor connecting to Shirley St towards the west.

Roseville has historically been a suburban residential area, with large lot manor homes. Over time this has slowly shifted, increasing the low to medium density housing, growing outwards from around the town centre. The character of the historic manor homes and importance of the lush green landscaping is still visible in the area.

The development aims to increase Roseville's residential population providing much needed apartment living to market, appealing to small families, down sizers and key workers.

Central to the proposal is a green spine linking the biodiversity corridor up through the development. This incorporation of nature and generous planting responds to a "Designing with Country" strategy developed for the site.

Proposal Roseville 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 utilises the TOD SEPP for sites within 800m of key transport hubs, including a 30% uplift with 15% +2 % affordable housing.
Due to the sloping nature of the site the proposed development subtly breeches the height plane in a few instances however when assessing the encroachment on average, the amount of building that is not utilising the envelope under the building height plane a greater amount which is over.

The envelope addressed LEP and DCP controls and where possible. The setback on Larkin Street has been reduced to 6m as it was considered to be more consistent with the existing context. The reduced front setback also allows for a larger buffer between the development to the southwest. Which improves the adjoining developments access to natural light.

The additional height beyond the LEP height limit has no overt additional impact on the surrounding context.
The upper two levels are set back to limit any impact to the adjoining sites.

The building form has a large open break through the middle to break down the perceived mass. Expressed horizontal slabs seek to reduce the perceived height of the building.
ADG envelope design criteria and metrics are generally achieved. Within the central break there are some potential encroachments due to the 6m separation distance however privacy concerns of these have been easily addressed through the use of translucent glass and screens.

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

# 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 the vision of the TOD SEPP within Roseville.

The proposal is currently serviced by Roseville train station approximately 300m away. This existing infrastructure connects the site with greater Sydney. Chatswood is only 1.3km away providing more transport options including the metro.

Bus stops are also available on Pacific Highway and Roseville town centre nearby, approximately 300m.

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

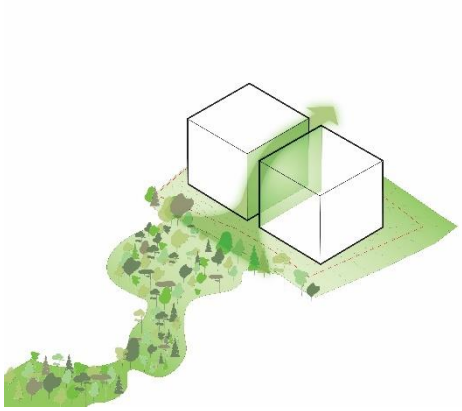
Chatswood is the closest major business hub which is only 1.3km away. While Roseville has a nice offering of lifestyle options Chatswood provides an increased amount more, including retail, cafés, bars, fine dining, gyms, health and childcare facilities.

Residents will also be conveniently close to many nature reserves and waterways providing opportunities for walks. These parks include; Blue Gum Reserve and other parks along Lane Cove River.

The sites Roseville location and proximity Sydney CBD

## 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
- Rainwater reuse for irrigation
- Passive design shading
- Connection to nature through biophilic design
- Low embodied-carbon materials
- Naturally lit and ventilated lobbies
- Maximised dual fronted, naturally vented apartments
- Minimised excavation and cut & fill

NatHERS

The project is designed to Australian Excellence NatHERS targets. The NatHERS targets are 6 Star minimum, 7 Star average.

Additional Sustainability Excellence Initiatives

- Maximum solar PV to offset energy consumption of common areas
- Rainwater capture and reuse, water efficient fixtures and fittings, recirculation of fire sprinkler test water.
- Automated control of building systems such as motion sensors for lighting and CO sensors for carpark fans
- Energy efficient lifts

# 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 a leafy suburban character. This proposal seeks to retain as much of this existing street character through the retention of some of the non-native trees, while looking to slowly regenerate the native habitat with the return of endemic plant species.
There are great opportunities deep soil planting along the Pockley Street frontage and along the south western boundary.

The building has been set closer towards Larkin St to allow a greater deep soil area and planting opportunity near the biodiversity corridor. This is to allow planting of larger trees and provide residents with the feeling of living in the tree canopy.

A generous amount of communal open space is located at lower ground which surrounded by vegetation. There is a visual landscape extension between the communal open space and the adjoining Rifleway.

As previously mentioned core to the buildings concept is the idea of extending the adjoining biodiversity zone through the site through the use of landscaping. This is achieved through the central part of the building which has open air lobby bridges that have edge planters.

The large ground floor terraces also provide residents with private courtyard gardens with direct access to natural elements; direct sunlight, shaded outdoor space with the opportunity for personal bbq's.

# 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. Apartment sizes are generous with well sized and functional private outdoor space.
Larkin Street is a no through road and is well buffered from Pacific Highway providing residents with a quiet living environment.

The façade has been design to maximise access to natural light and connect residents with the external environment and the future tree canopies.

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.

Circulation to the apartments is through centralised open air lobbies.

ADG compliant Livable housing has been provided allowing ease of access for a range of age groups and for a various degree of mobility.
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.

View of internal amenity room.

# Housing SEPP Design Principles 2

## 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.

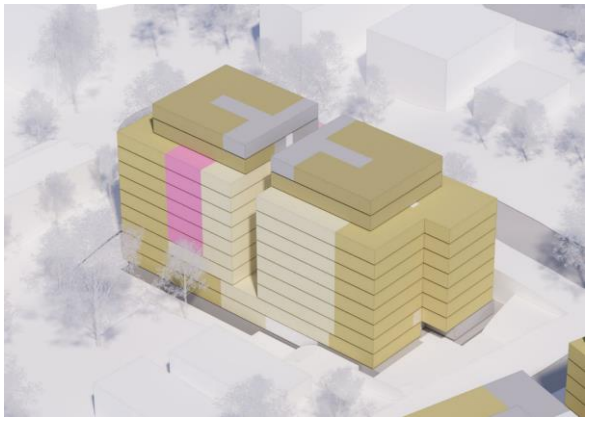
a) Easily identified entries and open lobbies providing visibility as residents navigate to their apartments with screening to provide privacy to adjacent apartments.
b) A building in the round; views out towards all aspects to ensure passive surveillance of surrounding context; the Rifleway, Pockley Street, the communal open space and Larkin St.
c) Large street front gardens provide for an enhanced residential experience within the site where neighbourly interaction is encouraged.
d) Communal open space and circulation spaces encourage social interaction and shared ownership.

View of pedestrian entry and open lobbies.

# 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.



Diverse apartment typologies across the development.

The proposed development located in Roseville 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 and in many cases on the larger side to appeal to downsizers. 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 111 apartments are included (82 BTS and 29 AFH).

In consideration of the view opportunities surrounding the development the glazing in all apartments is generous with a deep façade articulation and shading devises 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.

# Housing SEPP Design Principles 2

## 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.

Façade language

The built form proposed is a considered response to the existing nature character of the surrounding biodiversity area. The idea of living in the tree tops or a tree house is explored though natural appearing materials and lightweight vertical screen elements. This sits respectfully within the site and wider suburban 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 ground plane exposes the natural sandstone character. While the building has complimentary light and earthy tones to relate to the treetops.
- contemporary building additions of visual interest, exhibiting design excellence in a prominent site. The expressed horizontal slab articulation of the building creates a lightweight dynamic contrast to the verticality of the future trees.
- Fine detailing and texture of the vertical screen materiality overlay an additional layer of consideration.
- A secondary layer between the slabs will provide a textural backdrop.
- Street frontage to Larkin Street is open to allow natural sunlight in and views out to the street.

# 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 | ✓ | | The best outlook from the apartments will face south-west towards the CBD. An increase of 1 bed apartments face north to maximise solar compliance. The building has been sited to reduce impacts on adjoining residents with an increased side setback. |
| | 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 | ✓ | | The adjacent existing houses still achieve good northern aspect. |
| | Overshadowing should be minimised to the south or downhill by increased upper level setbacks | ✓ | | The massing has been pushed towards the East to minimise overshadowing. The upper 2 levels are set back. |

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|---|---|---|---|---|
| | 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 | ✓ | | The proximity to adjoining residential properties greatly exceeds minimum building separation distances |
| | A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings. | ✓ | | The envelope has been defined to reduce impacts on surrounding residents |

| Item | 3C – Public Domain Interface | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 3C 1<br>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 | ✓ | | Ground or podium level apartments have direct secondary entry points to communal open space. |
| | 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) | ✓ | | Due to the sloping nature of the site there are a variety of ground plane interfaces. The apartments along Larkin St provide good passive surveillance. |
| | Upper level balconies and windows should overlook the public domain | ✓ | | |
| | Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m | ✓ | | Permeable fencing is proposed for apartments that are adjacent to the street and communal open space with 1.2m high fences along the street. |

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| | 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 main building entry has been centrally located to break up the length of street fences. Landscape shrubs are proposed to grow in front of the fences. |
| | 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:<br>- architectural detailing<br>- changes in materials<br>- plant species<br>- colours<br><br>Opportunities for people to be concealed should be minimised. | ✓ | | Larkin Street is the defined residential address. The resident access off Pockley Ave will be a more discrete with gated access |

| Item | 3D – Communal/Public Open Space | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 3D 1<br>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 | Communal open space has a minimum area equal to 25% of the site. See figure 3D.3 | ✓ | | Communal open space included at the rear and along Pockley Ave – 906.1m2 (approx. 25.5%) |
| | 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 |
| Design Guidance | 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:<br>- provide communal spaces elsewhere such as a landscaped roof top terrace or a common room<br>- provide larger balconies or increased private<br>- open space for apartments<br>- demonstrate good proximity to public open space and facilities and/or provide contributions to public open space | ✓ | | Many apartments achieve larger than minimum balconies. |
| Item | 3D – Communal/Public Open Space | Yes | No | Notes |
| Objective | Objective 3D 2<br>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:<br>- seating for individuals or groups<br>- barbecue areas<br>- play equipment or play areas<br>- swimming pools, gyms, tennis courts or common rooms | ✓ | | The communal spaces provide for both individuals and groups and range from quiet areas to celebration / coming together (BBQ & fire pit). A gym space has been provided on the Ground Floor level with equitable access. |
| | 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<br>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<br>- bay windows<br>- corner windows<br>- balconies | ✓ | | The communal open space is visible from the apartments above and readily visible from the street. The adjoining apartments will also have visibility over the communal open space. |
| | Communal open space should be well lit | ✓ | | The spaces will be lit |
| | 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. |

| Item | 3D – Communal/Public Open Space | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 3D 4<br>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 | ✓ | | N/A<br>The site context is of a suburban character without the necessity for a formal public open space |
| | The public open space should be connected with nearby parks and other landscape elements | ✓ | | |
| | Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid | ✓ | | |
| | Solar access should be provided year round along with protection from strong winds | ✓ | | |
| | Opportunities for a range of recreational activities should be provided for people of all ages | ✓ | | |
| | A positive address and active frontages should be provided adjacent to public open space | ✓ | | |
| | Boundaries should be clearly defined between public open space and private areas | ✓ | | |

<table>
<tr><th>Item</th><th>3E – Deep Soil Zones</th><th>Yes</th><th>No</th><th>Notes</th></tr>
<tr><td>Objective</td><td>Objective 3E 1<br>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.</td><td>✓</td><td></td><td>Satisfied - Refer to Landscape Design Report</td></tr>
<tr><td rowspan="3">Design Criteria<br><br>Design Guidance</td><td>Deep soil zones are to meet the following minimum requirements.<br><br>
<table>
<tr><th>Site Area</th><th>Min Dimensions</th><th>Deep Soil Zone (% of site area)</th></tr>
<tr><td><650m$^2$</td><td></td><td rowspan="4">7%</td></tr>
<tr><td>650-1500m$^2$</td><td>3m</td></tr>
<tr><td>>1500m$^2$</td><td>6m</td></tr>
<tr><td>>1500m$^2$ with significant tree cover</td><td>6m</td></tr>
</table>
<br>On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:<br>- 10% of the site as deep soil on sites with an area of 650m2 - 1,500m2<br>- 15% of the site as deep soil on sites greater than 1,500m2</td><td>✓</td><td></td><td>The development achieves the minimum 7% deep soil with a total of 422.9saqm</td></tr>
<tr><td>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:<br>- basement and sub-basement car park design that is consolidated beneath building footprints<br>- use of increased front and side setbacks<br>- adequate clearance around trees to ensure long term health<br>- co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil</td><td>✓</td><td></td><td>Deep soil has been located near trees which are to be retained, refer arborist report and landscape design.</td></tr>
<tr><td>Achieving the design criteria may not be possible on some sites including where:<br>- 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).<br>- 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.</td><td>✓</td><td></td><td>As part of the design concept extensive planting flows up from the biodiversity corridor through the centre of the building. The landscape is within planters on the balustrade.</td></tr>
</table>

<table>
<tr><th>Item</th><th>3F – Visual Privacy</th><th>Yes</th><th>No</th><th>Notes</th></tr>
<tr><td>Objective</td><td>Objective 3E 1<br>Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy</td><td>✓</td><td></td><td>Adequate building separation has been provided</td></tr>
<tr><td rowspan="4">Design Guidance</td><td>Design Criteria<br><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:<br>- Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)<br>- Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.</td><td></td><td>✓</td><td>Separation distances are predominantly achieved. Where a secondary outlook encroaches the minimum separation distances between balconies, batten screening is provided.</td></tr>
<tr><td>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</td><td>✓</td><td></td><td>There is one step provided for the upper 2 levels.</td></tr>
<tr><td>For residential buildings next to commercial buildings, separation distances should be measured as follows:<br>- for retail, office spaces and commercial<br>- balconies use the habitable room distances<br>- for service and plant areas use the non-habitable room distances</td><td>✓</td><td></td><td>N/A</td></tr>
<tr><td>New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:<br>- site layout and building orientation to minimise privacy impacts (see also section 3B Orientation)<br>- - on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)</td><td>✓</td><td></td><td>The development has been located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings</td></tr>
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|---|---|---|---|---|
| | Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5) | ✓ | | N/A |
| | Direct lines of sight should be avoided for windows and balconies across corners | | ✓ | Screening has been provided between balconies across corners. |
| | No separation is required between blank walls. | ✓ | | Noted |

| Item | 3F – Visual Privacy | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 3F 2<br>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.<br>Design solutions may include:<br>- setbacks<br>- solid or partially solid balustrades to balconies at lower levels<br>- fencing and/or trees and vegetation to separate spaces<br>- screening devices<br>- bay windows or pop out windows to provide privacy in one direction and outlook in another<br>- raising apartments/private open space above the public domain or communal open space<br>- planter boxes incorporated into walls and balustrades to increase visual separation<br>- pergolas or shading devices to limit overlooking of lower apartments or private open space<br>- on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies | ✓ | | Communal open space is set away from the street to the rear of the building. |
| | 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 | ✓ | | |
| | Windows should be offset from the windows of adjacent buildings | ✓ | | Windows within the slot that are for cross ventilation will have translucent glass. |
| | 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<br>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 | ✓ | | The main entry is via Larkin St while the secondary entry is from Pockley Ave. |
| | 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<br>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 |

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| | 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<br>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 | ✓ | | N/A |
| | 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. | ✓ | | N/A |

| Item | 3H – Vehicle Access | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 3H 1<br>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 Pockley Ave which is a secondary street. |
| | Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided | ✓ | | Requirement is satisfied |

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| | 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 | ✓ | | |
| | Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include:<br>- changes in surface materials<br>- level changes<br>- 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<br>Car Parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas | ✓ | | |
| Design Criteria | For development in the following locations:<br>- on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or<br>- 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 |
| | 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 | ✓ | | |

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| Design Guidance | 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 | ✓ | | One car share is provided as per the Green Plan requirement. |
| | 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<br>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<br>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 |

| | | | | |
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| | 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. |

| Item | 3J – Bicycle and Car Parking | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 3J-5<br>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:<br>- parking is located on the side or rear of the lot away from the primary street frontage<br>- cars are screened from view of streets, buildings, communal and private open space areas<br>- safe and direct access to building entry points is provided<br>- parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space<br>- stormwater run-off is managed appropriately from car parking surfaces<br>- bio-swales, rain gardens or on site detention tanks are provided, where appropriate<br>- 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<br>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:<br>- 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)<br>- 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 positive street address. |

| Item | 4A – Solar and Daylight Access | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4A-1<br>To optimize the number of apartments receiving sunlight to habitable rooms, primary windows and private open space | ✓ | | |
| Design Criteria | Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas | | ✓ | 64% of spaces meet this criteria, while 60% of apartments provide dual frontages. The constraints are due to axis of the site. Prime views are towards the south. |
| | 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 |
| | A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter | ✓ | | Only 6% of the total apartments receive no direct sunlight between 9 am and 3 pm at mid-winter |
| | The design maximises north aspect and the number of single aspect south facing apartments is minimised | ✓ | | The One bedroom apartments are all located on the East facade |
| | Single aspect, single storey apartments should have a northerly or easterly aspect | ✓ | | The design maximises dual fronted apartments through the use of a large open landing between the centre of the building. |
| | 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. Centralised core. |
| Design Guidance | To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used:<br>- dual aspect apartments<br>- shallow apartment layouts<br>- two storey and mezzanine level apartments<br>- bay windows | ✓ | | On average, 57% dual aspect units on the typical floor plate. |
| | To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m2 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:<br>- where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source | ✓ | | Not applicable |

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| | - on south facing sloping sites<br>- where significant views are oriented away from the desired aspect for direct sunlight<br>Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective. | | | |

| Item | 4A – Solar and Daylight Access | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4A-2<br>Daylight access is maximized where sunlight is limited | ✓ | | |
| 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 | ✓ | | High level windows are used as a secondary light + air source in habitable rooms |
| | Where courtyards are used:<br>- use is restricted to kitchens, bathrooms and service areas<br>- building services are concealed with appropriate detailing and materials to visible walls<br>- courtyards are fully open to the sky<br>- access is provided to the light well from a communal area for cleaning and maintenance<br>- 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:<br>- reflective exterior surfaces on buildings opposite south facing windows<br>- positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light<br>- integrating light shelves into the design<br>- 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<br>Design incorporates shading and glare control, particularly for warmer months | ✓ | | |
| Design Guidance | A number of the following design features are used:<br>- balconies or sun shading that extend far enough to shade summer sun, but | ✓ | | Vertical screens provide sun shading. |

| | | | | |
|---|---|---|---|---|
| | allow winter sun to penetrate living areas<br>- shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting<br>- horizontal shading to north facing windows<br>- vertical shading to east and particularly west facing windows<br>- operable shading to allow adjustment and choice<br>- 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) | | | |

| Item | 4B – Natural Ventilation | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4B-1<br>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 | ✓ | | The building maximises dual fronted apartments and has projecting fins to capture breezes |
| | 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:<br>- adjustable windows with large effective<br>- openable areas<br>- a variety of window types that provide safety and flexibility such as awnings and louvres<br>- windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors | ✓ | | Large doors and awning windows maximise natural ventilation |

| Item | 4B – Natural Ventilation | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4B-2<br>The layout and design of single aspect apartments maximizes natural ventilation | ✓ | | |
| Design Guidance | Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3) | | ✓ | The number of single oriented apartments have been limited. |
| | Natural ventilation to single aspect apartments is achieved with the following design solutions:<br>- primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation)<br>- stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries<br>- 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 | | ✓ | |

| Item | 4B – Natural Ventilation | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4B-3<br>The number of apartments with natural cross ventilation is mazimised 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 | ✓ | | 60% are naturally cross ventilated. |
| | 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 |
| Design Guidance | 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) | ✓ | | Condition satisfied |
| | 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. |

<table>
<tr><th>Item</th><th>4C – Ceiling Heights</th><th>Yes</th><th>No</th><th>Notes</th></tr>
<tr><td>Objective</td><td>Objective 4C-1<br>Ceiling height achieves sufficient natural ventilation and daylight access</td><td>✓</td><td></td><td></td></tr>
<tr><td>Design Criteria</td><td>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:<br><table><tr><td colspan="2">Minimum ceiling height (for apartment and mixed use buildings)</td></tr><tr><td>Habitable rooms</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>For 2 storey apartments</td><td>2.7m for main living area floor<br>2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 people degree minimum ceiling slope</td></tr><tr><td>If located in mixed use areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr></table>These minimums do not preclude higher ceilings if desired</td><td>✓</td><td></td><td>The proposal complies, 2.7m for habitable rooms and 2.4m for non-habitable rooms.</td></tr>
<tr><td>Design Guidance</td><td>Ceiling height can accommodate use of ceiling fans for cooling and heat distribution</td><td>✓</td><td></td><td>Ceiling fans can be accommodated</td></tr>
</table>

| Item | 4C – Ceiling Heights | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4C-2<br>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 | ✓ | | Not applicable |
| | Ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist | ✓ | | This principle has been adopted |

| Item | 4C – Ceiling Heights | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4C-3<br>Ceiling heights contribute to the flexibility of building use over the life of the building | ✓ | | Due to the steep sloping character of the street the site is not ideal for retail / commercial purposes. |
| 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 lower levels have been expressly designed and dedicated to residential uses. |

| Item | 4D – Apartment Size and Layout | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4D-1<br>The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity | ✓ | | |
| Design Criteria | 1. Apartments are required to have the following minimum internal areas:<br><br>Apartment Type / Min. Internal Area<br>Studio / 35m$^2$<br>1 bedroom / 50m$^2$<br>2 bedroom / 70m$^2$<br>3 bedroom / 90m$^2$<br><br>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each<br><br>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12 m$^2$ each | ✓ | | The proposal complies, all internal min. areas are achieved |
| 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. Within a 3b typology the corridor width has been increased to allow adequate circulation in front of island bench when in use. L-Shapes kitchen have been avoided. |
| | A window should be visible from any point in a habitable room | ✓ | | The proposal complies |

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|---|---|---|---|---|
| | 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<br>Environmental performance of the apartment is maximised | ✓ | | |
| Design Criteria | Habitable room depths are limited to a maximum of 2.5 x the ceiling height | | ✓ | In some typology this dimension is greater. In this case Still complies with the below |
| Design Guidance | 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 9.95m is equal to a standard 10.5m depth where balconies are included (8m room + 2.5m balcony) in our instance (7.4 room + 3.1m deep 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<br>Apartment layouts are designed to accommodate a variety of household activities and needs | ✓ | | |
| Design Criteria | Master bedrooms have a minimum area of 10m2 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 |

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| Design Guidance | Living rooms or combined living/dining rooms have a minimum width of:<br>- 3.6m for studio and 1 bedroom apartments<br>- 4m for 2 and 3 bedroom apartments | | ✓ | Minimum width are predominantly achieved. Additional depth is given to 2 and 3 bedroom apartments and functional layouts are demonstrated as allowable under the flexibility fact sheet. Openings located in the corners have been provided to maximise views. |
| | 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:<br>- dimensions that facilitate a variety of furniture arrangements and removal<br>- spaces for a range of activities and privacy levels between different spaces within the apartment<br>- dual master apartments<br>- dual key apartments<br>- 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<br>- room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))<br>- efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms. | ✓ | | The proposal complies |

<table>
<tr><th>Item</th><th>4E – Private Open Space and Balconies</th><th>Yes</th><th>No</th><th>Notes</th></tr>
<tr><td>Objective</td><td>Objective 4E-1<br>Apartment provide appropriately sized private open space and balconies to enhance residential amenity</td><td>✓</td><td></td><td></td></tr>
<tr><td rowspan="5">Design Criteria<br><br>Design Guidance</td><td>All apartments are required to have primary balconies as follows:<br><br><table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio Apartments</td><td>4m$^2$</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8 m$^2$</td><td>2 m$^2$</td></tr><tr><td>2 bedroom apartments</td><td>10 m$^2$</td><td>2 m$^2$</td></tr><tr><td>3+ bedroom apartments</td><td>12 m$^2$</td><td>2.4 m$^2$</td></tr></table><br>The minimum balcony depth to be counted as contributing to the balcony area is 1m</td><td></td><td>✓</td><td>The balconies under the minimum area are open in the corner to offer double frontage and maximise the views. Their depth is above the minimum depth to maximise the functional layouts.</td></tr>
<tr><td>For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m</td><td>✓</td><td></td><td>Complies</td></tr>
<tr><td>Increased communal open space should be provided where the number or size of balconies are reduced</td><td>✓</td><td></td><td>Not applicable</td></tr>
<tr><td>Storage areas on balconies is additional to the minimum balcony size</td><td>✓</td><td></td><td>Not applicable</td></tr>
<tr><td>Balcony use may be limited in some proposals by:<ul><li>consistently high wind speeds at 10 storeys and above</li><li>close proximity to road, rail or other noise sources</li><li>exposure to significant levels of aircraft noise</li><li>heritage and adaptive reuse of existing buildings</li></ul>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.</td><td>✓</td><td></td><td>The site doesn’t experience adverse environmental conditions</td></tr>
</table>

| Item | 4E – Private Open Space and Balconies | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4E-2<br>Primary private open space and balconies are appropriately located to enhance livability for residents | ✓ | | |
| Design Guidance | Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space | ✓ | | Complies |
| | Private open spaces and balconies predominantly face north, east or west<br>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 | ✓ | | Balconies are typically located on corners, providing expansive views and access to light from private open space. |

| Item | 4E – Private Open Space and Balconies | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4E-3<br>Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building | ✓ | | |
| 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 | ✓ | | Predominately glass balustrades are proposed due to the quiet leafy character of the neighbourhood and to provide residents with increased outlooks. |
| | Full width full height glass balustrades alone are generally not desirable | ✓ | | The glass balustrades are broken up with feature vertical screens and glazed façade elements. Textural façade panels also break up the extent of glazing. |
| | Projecting balconies should be integrated into the building design and the design of soffits considered | ✓ | | The architectural aesthetic has corner balconies to provide an appearance of projecting balconies |
| | 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 |

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|---|---|---|---|---|
| | 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<br>Private open space and balcony design maximizes safety | ✓ | | |
| Design Guidance | Changes in ground levels or landscaping are minimised | ✓ | | |
| | 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<br>Common circulation spaces achieve good amenity and properly service the number of apartments | ✓ | | |
| Design Criteria | The maximum number of apartments off a circulation core on a single level is eight | ✓ | | Between 8 and 10, where there are 10 apartments these are mostly 1 bedroom. |
| | For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40 | ✓ | | 2 lifts have been calculated to service the building well. |
| Design Guidance | 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 | ✓ | | Access to natural daylight is provided to every corridor. Natural ventilation to corridors. |
| | Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors<br>Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include:<br>• a series of foyer areas with windows and spaces for seating | ✓ | | Windows provided to all lobbies / cores |

| | | | | |
|---|---|---|---|---|
| | • wider areas at apartment entry doors and varied ceiling heights | | | |
| | 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 apartments should be demonstrated, including:<br>• sunlight and natural cross ventilation in apartments<br>• access to ample daylight and natural ventilation in common circulation spaces<br>• common areas for seating and gathering<br>• generous corridors with greater than minimum ceiling heights<br>• other innovative design solutions that provide high levels of amenity | NA | | Not applicable |
| | Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level | ✓ | | There are 14 apartments per level with 7 apartments per core. The core is centralised to provide redundancies if the lift breaks down. |
| | 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<br>Common circulation spaces promote safety and provide for social interaction between residents | ✓ | | Relevant to the *NSW Build-to-rent housing and flexible design Fact sheet, Feb 2023* |
| 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<br>Adequate, well designed storage is provided in each apartment | ✓ | | |
| Design Criteria | In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:<br><br>Dwelling Type / Storage Size<br>Studio Apartments / 4m3<br>1 bedroom apartments / 6 m3<br>2 bedroom apartments / 8 m3<br>3+ bedroom apartments / 10 m3<br><br>with at least 50% located within the apartment | ✓ | | Refer to Architectural Drawings and Architectural Design Report for further details |
| Design Guidance | Storage is accessible from either circulation or living areas | ✓ | | Noted, will be adopted in the design of the project |
| | 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 | NA | | Not applicable |
| | Left over space such as under stairs is used for storage | ✓ | | Not applicable |

| Item | 4G – Storage | Yes | No | Notes |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Objective | Objective 4G-2<br>Additional storage is conveniently located, accessible and nominated for individual apartments | ✓ | | |
| 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 |

| Item | 4H – Acoustic Privacy | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4H-1<br>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 |
|---|---|---|---|---|

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|---|---|---|---|---|
| Objective | Objective 4H-2<br>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:<br>• rooms with similar noise requirements are grouped together<br>• doors separate different use zones<br>• 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:<br>• double or acoustic glazing<br>• acoustic seals<br>• use of materials with low noise penetration<br>• 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 |

| Item | 4J – Noise and Pollution | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4J-1<br>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:<br>• physical separation between buildings and the noise or pollution source<br>• residential uses are located perpendicular to the noise source and where possible buffered by other uses<br>• 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<br>• 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<br>• 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<br>• Where solar access is in the same direction as the noise source, dual | ✓ | | Not applicable |

| | | | | |
|---|---|---|---|---|
| | aspect apartments with shallow building depths are preferable (see figure 4J.4)<br>• Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry | | | |
| | 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:<br>• solar and daylight access<br>• private open space and balconies<br>• natural cross ventilation | ✓ | | Not applicable |

| Item | 4J – Noise and Pollution | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4J-2<br>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:<br>- limiting the number and size of openings facing noise sources<br>• providing seals to prevent noise transfer through gaps<br>• using double or acoustic glazing, acoustic<br>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 | ✓ | | Not applicable |

| Item | 4K – Apartment Mix | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4K-1<br>A range of apartment types and sizes is provided to cater for different household types now and into the future. | ✓ | | |
| Design Guidance | A variety of apartment types is provided | ✓ | | A variety of apartment types has been provided |
| | The apartment mix is appropriate, taking into consideration:<br>• the distance to public transport, employment and education centres<br>• the current market demands and projected future demographic trends<br>• the demand for social and affordable housing<br>• different cultural and socioeconomic groups | ✓ | | The apartment mix reflects market research and AFH requirements. |

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| | 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 | ✓ | | A variety of apartment sizes and types have been provided |

| Item | 4K – Apartment Mix | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4K-2<br>The apartment mix is distributed to suitable locations within the building | ✓ | | |
| 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 | ✓ | | Achieved |
| Item | 4L – Ground Floor Apartments | Yes | No | Notes |
| Objective | Objective 4L-1<br>Street frontage activity is maximised where ground floor apartments are located | ✓ | | |
| Design Guidance | Direct street access should be provided to ground floor apartments | | ✓ | Ground level apartments do not align with street level. |
| | Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:<br>• both street and foyer entrances to ground floor apartments<br>• private open space is next to the street<br>• doors and windows face the street | ✓ | | Private open space faces the street |
| | Retail or home office spaces are located along street frontages | ✓ | | Not applicable |
| | 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<br>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:<br>• elevation of private gardens and terraces above the street level by 1m – 1.5m (see Figure 4L.4)<br>• landscaping and private courtyards | ✓ | | Not applicable |

| | | | | |
|---|---|---|---|---|
| | • window sill heights that minimise sight lines into apartments<br>• integrating balustrades, safety bars or screens with the exterior design | | | |
| | Solar access is maximised through:<br>• high ceilings and tall windows<br>• 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<br>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:<br>- A composition of varied building elements<br>- A defined base, middle and top of the buildings<br>- Revealing and concealing certain elements<br>- 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 |
| | 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:<br>- Well composed horizontal and vertical elements<br>- Variation in floor heights to enhance the human scale<br>- Elements that are proportional and arranged in patterns<br>- Public artwork or treatments to exterior blank walls<br>- Grouping of floors or elements such as balconies and windows on taller buildings | ✓ | | Well composed horizontal and vertical elements assist in complementing the context and the natural topography. |
| | Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights | ✓ | | Not applicable. Due to the isolated suburban context there are no datums of key value |
| | Shadow is created on the façade throughout the day with building articulation, balconies and deeper window reveals | ✓ | | Varied façade modules provide visual variation. |

| Item | 4M – Facades | Yes | No | Notes |
|---|---|---|---|---|

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|---|---|---|---|---|
| Objective | Objective 4M-2<br>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<br>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:<br>• Special roof features and strong corners<br>• Use of skillion or very low pitch hipped roofs<br>• Breaking down the massing of the roof by using smaller elements to avoid bulk<br>• Using materials or a pitched form complementary to adjacent buildings | ✓ | | The upper two levels set back to provide a tapering off to the top of the building |
| | Roof treatments should be integrated with the building design. Design solutions may include:<br>- Roof design proportionate to the overall building size, scale and form<br>- Roof materials complement the building<br>- 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<br>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:<br>- Special roof features and strong corners<br>- Use of skillion or very low pitch hipped roofs<br>- Breaking down the massing of the roof by using smaller elements to avoid bulk<br>- 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:<br>- Roof design proportionate to the overall building size, scale and form<br>- Roof materials complement the building<br>- 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-3<br>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:<br>- The roof lifts to the north<br>- Eaves and overhangs shade walls and windows from summer sun | ✓ | | Roof designs provide solar shading to upper level apartments |
| | Skylights and ventilation systems should be integrated into the roof design | ✓ | | Not applicable |

| Item | 4O – Landscape Design | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4O – 1<br>Landscape design is viable and sustainable | ✓ | | |
| Design Guidance | Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating:<br>- Diverse and appropriate planting<br>- Bio-filtration gardens<br>- Appropriately planted shading trees<br>- Areas for residents to plant vegetables and herbs<br>- Composting<br>- 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:<br>- Appropriately scaled trees near the eastern and western elevations for shade<br>- A balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter<br>- 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<br>Landscape design is contributes to the streetscape and amenity | ✓ | | |

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|---|---|---|---|---|
| Design Guidance | Landscape design responds to the existing site conditions including:<br>• Changes of levels<br>• Views<br>• 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:<br>• Tree protection zones (see figure 40.5)<br>• Appropriate signage and fencing during construction | ✓ | | Noted, refer to arborist report. Basement walls have been set back to allow for tree protection zones |
| | 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<br>Appropriate soil profiles are provided | ✓ | | |
| Design Guidance | Soil volume is appropriate for plant growth, considerations include:<br>• Modifying depths and widths according to the planting mix and irrigation frequency<br>• Free draining and long soil life span<br>• 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 expect advice |

| Item | 4P – Planting on Structures | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4P – 2<br>Plant growth is optimised with appropriate selection and maintenance | ✓ | | |
| Design Guidance | Plants are suited to site conditions, considerations include:<br>• Drought and wind tolerance<br>• Seasonal changes in solar access<br>• Modified substrate depths for diverse range of plants<br>• 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 :<br>• Changing site conditions<br>• Soil profile and the planting regime<br>• 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<br>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:<br>• Green walls with specialised lighting for indoor green walls<br>• All design that incorporates planting<br>• Green roofs, particularly where roofs are visible form public domain<br>• Planter boxes<br>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<br>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<br>A variety of apartments with adaptable designs are provided | N/A | | |
| Design Guidance | Adaptable housing should be provided in accordance with the relevant council policy | N/A | | Kur-ring-gai Council does not have an adaptable apartment requirement. Therefore no adaptable apartments are proposed. |
| | Design solutions for adaptable apartments include:<br>• Convenient access to communal and public areas<br>• High level of solar access<br>• Minimal structural change and residential amenity loss when adapted<br>• Larger car parking spaces for accessibility<br>• Parking titled separately from apartments or shared car parking arrangements | N/A | | Not applicable |

| Item | 4Q – Universal Design | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4Q – 3<br>Apartment layouts are flexible and accommodate a range of lifestyle needs | ✓ | | |
| Design Guidance | Apartments design incorporates flexible design solutions which may include:<br>• Rooms with multiple functions<br>• Dual master bedroom apartments with separate bathrooms<br>• Larger apartments with various living space options<br>• Open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom | | ✓ | Not applicable |

| Item | 4R – Adaptive Reuse | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4R – 1<br>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:<br>• New elements to align with the existing building<br>• Additions that complement the existing character, siting, scale, proportion, pattern form and detailing | | | |

| | | | | |
|---|---|---|---|---|
| | • Use of contemporary and complementary materials, finishes, textures and colours | | | |
| | 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<br>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:<br>• Generously sized voids in deeper buildings<br>• Alternative apartment types when orientation<br>• is poor<br>• Using additions to expand the existing<br>• 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:<br>• 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 an daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation)<br>• Alternatives to providing deep soil where less than the minimum requirement is currently available on the site<br>• Building and visual separation subject to demonstrating alternative design approaches to achieving privacy<br>• Common circulation<br>• Car parking<br>• Alternative approaches to private open space and balconies | | | Not applicable |

| Item | 4S – Mixed Use | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4S – 1<br>Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement | | ✓ | Not applicable |
| Design Guidance | Mixed use development should be concentrated around public transport and centres | | ✓ | Not applicable<br>Not a mixed use development |
| | Mixed use developments positively contribute to the public domain. Design solutions may include:<br>• Development addresses the street<br>• Active frontages are provided<br>• Diverse activities and uses<br>• Avoiding blank walls at the ground level<br>• Live/work apartments on the ground floor level, rather than commercial | | ✓ | Not applicable<br>Not a mixed use development |

| Item | 4S – Mixed Use | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4S – 2<br>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:<br>• Residential entries are separated from commercial entries and directly accessible from the street<br>• Commercial service areas are separated from residential components<br>• Residential car parking and communal facilities are separated or secured<br>• Concealment opportunities are avoided | | ✓ | Not applicable<br>Not a mixed use development |
| | 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<br>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 | | ✓ | Not applicable<br>No awnings required |
| | A number of the following design solutions are used:<br>• Continuous awnings are maintained and provided in areas with existing pattern | | ✓ | Not applicable<br>No awnings required |

| | | | | |
|---|---|---|---|---|
| | • Height, depth, material and form complements the existing street character<br>• Protection from the sun and rain is provided<br>• Awnings are wrapped around the secondary frontages of corner sites<br>• Awnings are retractable in areas without an established pattern | | | |
| | Awnings should be located over building entries for building address and public domain amenity | | ✓ | Not applicable No awnings required |
| | Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure | | ✓ | Not applicable No awnings required |
| | Gutters and down pipes should be integrated and concealed | ✓ | | Not applicable No awnings required |
| | Lighting under awnings should be provided for pedestrian safety | ✓ | | Not applicable No awnings required |

| Item | 4T – Awnings and Signage | Yes | No | Notes |
|---|---|---|---|---|
| Objective | Objective 4T – 2<br>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<br>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<br>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:<br>• The use of smart glass or other technologies on north and west elevations<br>• Thermal mass in the floors and walls of north facing rooms in maximised<br>• Polished concrete floor, tiles, or timber rather than carpet<br>• Insulated roofs, walls and floors and seals on window and door openings<br>• 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<br>Adequate natural ventilation minimizes the need for mechanical ventilation | ✓ | | |
| Design Guidance | A number of the following design solution are used:<br>• Rooms with similar usage are grouped together<br>• Natural cross ventilation for apartments is optimised<br>• 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<br>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 and Landscape reports for further information |
| | Apartments should be individually metered | ✓ | | |
| | Rainwater should be collected, stored and reused on site | ✓ | | |

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|---|---|---|---|---|
| | 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<br>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:<br>• Runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation<br>• Porous and open paving materials is maximised<br>• 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<br>Flood management systems are designed to minimise impacts on the streetscape, building entry and amenity of residents | ✓ | | Driveway entry locations and levels have been designed to respond to flood levels |
| Design Guidance | Detention tanks should be located under paved areas, driveways or in basement car parks | ✓ | | OSD tank has been located based on invert levels to stormwater system and maximising deep soil zones |
| | 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<br>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 | ✓ | | |
| | Waste and recycling storage areas should be well ventilated | ✓ | | |

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|---|---|---|---|---|
| | Circulation design allows bins to be easily maneuvered between storage and collection points | ✓ | | Noted, adopted in the design of the project. Please refer to Construction and Operational Waste Management Plans for further information |
| | 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<br>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<br>Building design detail provides protection from weathering | ✓ | | |
| Design Guidance | A number of the following design solutions are used:<br>• Roof overhangs to protect walls<br>• Hoods over windows and doors to protect openings<br>• Detailing horizontal edges with drip lines to avoid staining of surfaces<br>• Methods to eliminate or reduce planter box leaching<br>• 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<br>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. |
| | 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 | ✓ | | 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. |
| | 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 | ✓ | | |