LOUCAS
ARCHITECTS

# State Environmental Planning Policy No. 65
# Design Quality of Residential Apartment Development

**15-17 Lupin Ave. & 82 Belmore St, Fairfield**

Project No
Pn_21020

**FOR**
Design Verification Statement
Design Quality Principles
Apartment Design Guide

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Registered Architect: Jim Apostolou, 7490

# State Environmental Planning Policy No 65 - Design Verification Statement

**PROPOSED DEVELOPMENT:**

Demolition of the existing structures and construction of a six (6) storeys residential development consisting of thirty-nine (39) residential apartments and two (2) levels of basement carparking.

(Project Number: Pn-21020)

Pursuant to the provisions of *State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development*, I hereby confirm that I am a qualified designer within the meaning of clause 3 of the *Environmental Planning & Assessment Regulation 2000*.

and,

In accordance with clause 50 (1A) of the *Environmental Planning & Assessment Regulation 2000* I verify that:

(a) I directed the design of the residential apartment development described above,

(b) the design quality principles set out in Schedule 1 of *State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development* are achieved for the above residential apartment development, and

(c) the objectives in Parts 3 and 4 of the Apartment Design Guide have been achieved.

FULL NAME OF ARCHITECT: Jim Apostolou
REGISTRATION NUMBER: 7490
QUALIFICATIONS: Bachelor of Architecture
ADDRESS OF DESIGNER: Suite 309, Level 3, 7-9 Gibbons Street, Redfern, NSW 2016
BUSINESS TELEPHONE No: 02 8052 9600
NAME OF EMPLOYER: Loucas Architects

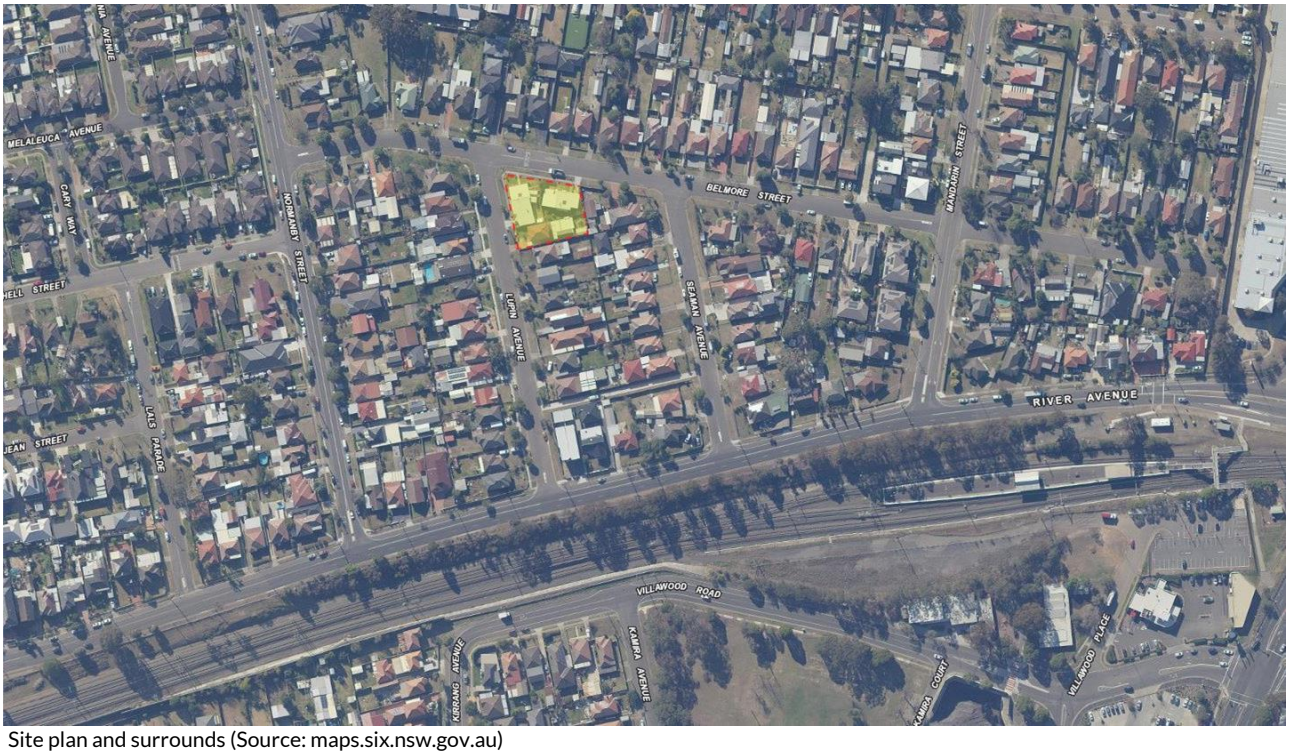
Jim Apostolou
25 May 2023

# Introduction

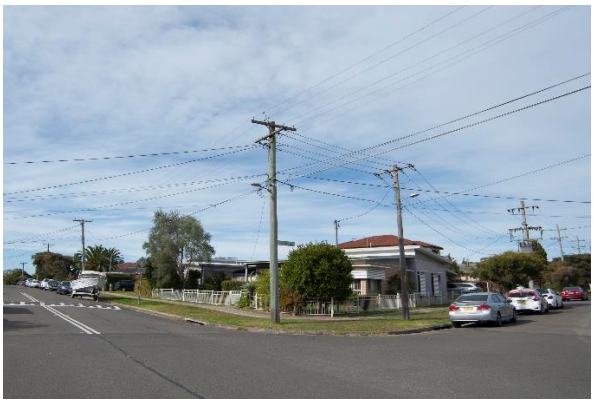
This Statement has been prepared having regard to the provisions of State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development, the Apartment Design Guide and accompanies the Development Application for the:
*Demolition of the existing structures and construction of a six (6) storey residential development consisting of thirty-nine (39) residential apartments and two (2) levels of basement carparking.*

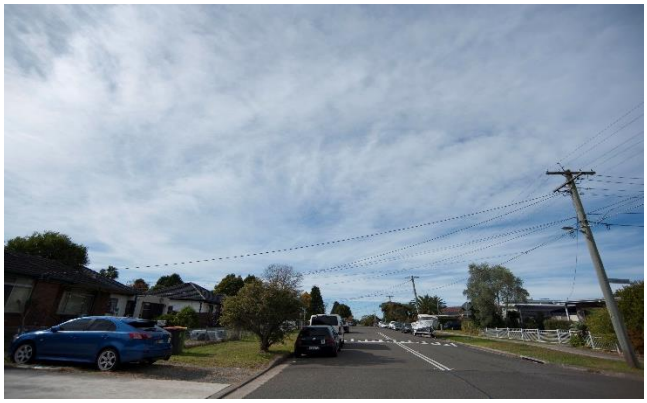
## The Site

The property is known as Nos 15 -17 Lupin Ave & 82 Belmore St, Fairfield and consists of three (3) lots having a legal description of lot 1, lot 2 DP 1154467 and lot 185 DP 15560 with total area of 1414 sqm. On its Eastern boundary the site has common property boundary with No. 16 Belmore Street and on its Southern boundary the site has common property boundary with No. 13 Lupin Avenue.
The site is located on the corner of Belmore Street and Lupin Avenue. The site has a Northern frontage to Belmore Street of 41.29m and a western frontage to Lupin Avenue of 41.55m, the site has a gradual slope towards the corner of Belmore street & Lupin Avenue.



Site plan and surrounds (Source: maps.six.nsw.gov.au)

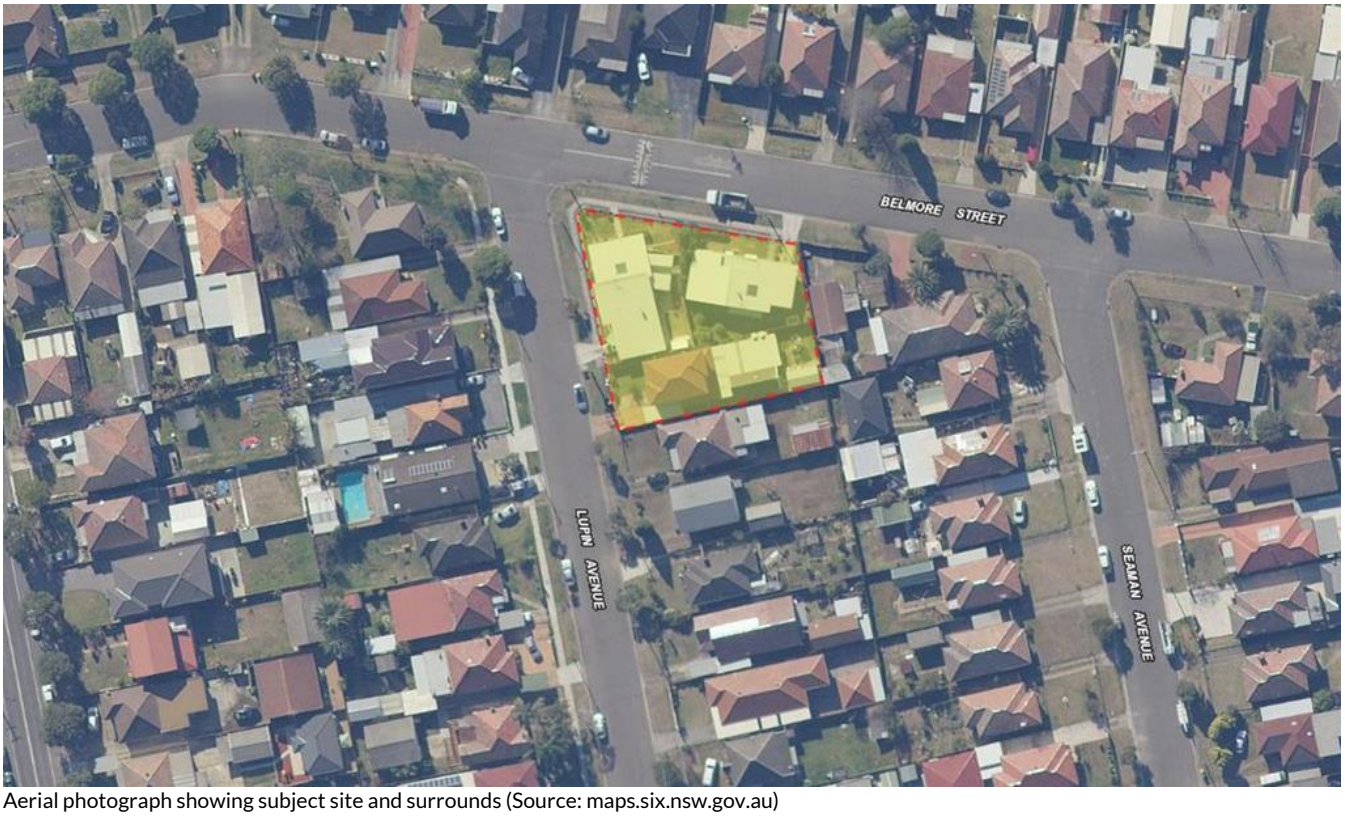

View of subject site at corner of Belmore St & Lupin Ave


View of subject site at Belmore Street looking East

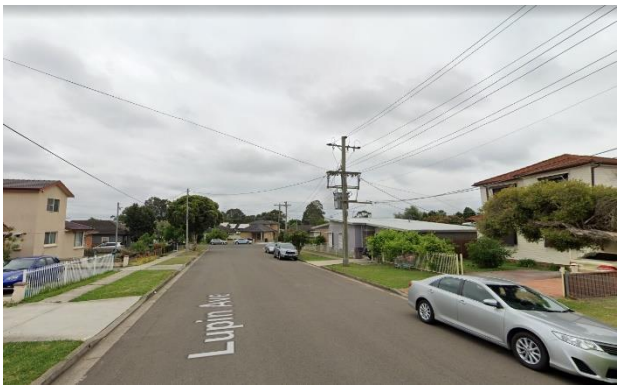
## The Locality

The site is located on southern side of Belmore Street and the locality consists of residential uses. It is located approximately 115m east of the intersection of Belmore Street and Normanby Street. The site is currently occupied by two single storey dwellings and one two storeys dwelling . The site comprises lot 1, lot 2 DP 1154467 and lot 185 DP 15560. It is known as 15-17 Lupin Avenue & 82 Belmore Street, Fairfield and has a total area of 1414 square meters.

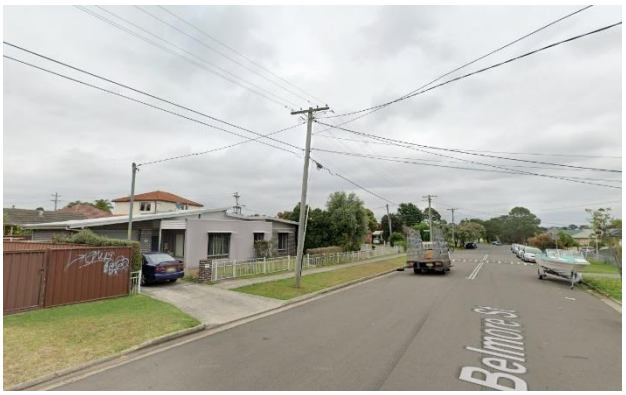
The locality around the site contains an eclectic mix of single and double storey dwellings. The locality is well serviced by public transport, being within close proximity Villawood railway station which is located 600m walking distance south-east of the subject site. Finally, the site is within close proximity of community services including Villawood north public School (300m) and Church of God Villawood (220m).



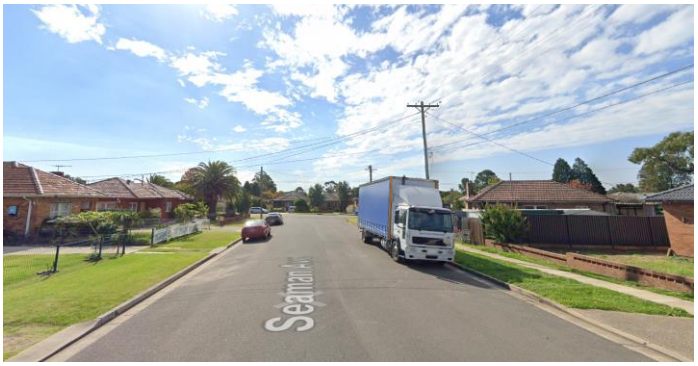
Aerial photograph showing subject site and surrounds (Source: maps.six.nsw.gov.au)



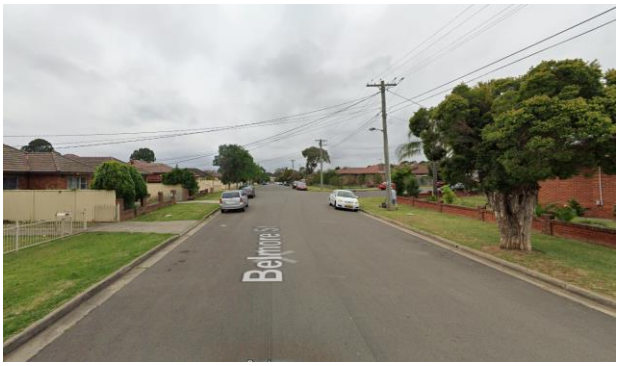
View from Lupin Ave looking North towards Belmore St.
(Oct 2020)



View from Belmore St. looking West towards Lupin Ave.
(June 2020)



View from Seaman Ave. looking North towards Belmore St.
(April 2021)



View from Belmore St Looking East towards Seaman Ave.
(Oct 2020)

## Development Summary

The development consists of the demolition of the existing structures and construction of a six (6) storey residential development consisting of thirty-nine (39) residential apartments and two (2) levels of basement carparking.

The proposal provides a communal open space on the rooftop. Two (2) level of basement carparking for 30 residential vehicles and ten (10) visitor car parking has been provided with access from Lupin Avenue.

| Apartment Type | Number | Mix | Apartment Size |
|---|---|---|---|
| 1 Bedroom | 6 | 15% | 50-51 sqm |
| 2 Bedroom | 30 | 77% | 75-77 sqm |
| 3 Bedroom | 3 | 8% | 95-99 sqm |

# State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development

## Design Quality Principles

| | |
|---|---|
| *Context and neighbourhood character*<br>*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.*<br><br>*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.*<br><br>*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 within a locality that consists of a mix of residential developments and neighbourhood shops while detached and semi-detached dwellings are dominant.<br><br>The site is located some 600m to Villawood Railway station, recreational and educational facilities are in close proximity to the site.<br><br>The proposed development for a 6-storey residential building will be in line with the desired future character of the area and is built with complying setbacks which is the current pattern of development and also the desired future character of the street.<br><br>The proposed development has been designed having regard to the scale of development anticipated by the height and FSR standards contained within FLEP 2013. |
| *Built form and scale*<br>*Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.*<br><br>*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.*<br><br>*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 development consists of a single building that has a height of six (6) storeys accommodating main entry lobby, communal open space & six residential apartments on the ground floor. Vehicular access to the site for servicing and the basement carpark is from Lupin Avenue. It will provide an improved and high-quality streetscape frontage that will make a positive contribution to the locality.<br><br>The building setbacks are generally in accordance with Fairfield Council's DCP requirements and allow for sufficient articulation and the use of materials ensure that the development reads as having a strong base upon which sits a lighter & modulated building consistent with the form established by the adjoining developments to the east.<br><br>The articulation created by the geometric shapes of the balconies and the use of a variety of materials ensures the development provides a visually interesting presence that integrates appropriately with the existing streetscape.<br><br>The development generally complies with the allowable Height of 20m specified within Fairfield Council.<br><br>The proposed scheme is of a scale that consistent within the future character of the locality anticipated by the FSR & height standard. |

Photomontage of Proposed Development viewed from east. (Source: Loucas Architects)

| | |
|---|---|
| ***Density***<br>*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 slightly exceeds the allowable FSR of 2.0 specified within FLEP 2013 as it contains affordable component. The development has an FSR of 2.19 which complies with the bonus FSR for the affordable component. The development is consistent with future planning strategies for the locality and the site is considered both suitable and capable of sustaining the density of the proposed. |
| ***Sustainability***<br>*Good design combines positive environmental, social and economic outcomes.*<br><br>*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 proposed development is sustainable through the use of simple passive strategies that also offer excellent amenity to future residents and includes:<br><br>• The apartments are oriented to provide a good level of solar access in mid-winter, providing passive heating and improved daylight penetration in the winter months<br>• The apartments have good natural ventilation reducing energy demand for heating and cooling.<br>• Material selection is intentionally robust reducing future and ongoing maintenance.<br>• The proposal complies with the requirements of the BASIX Certificate which addresses energy efficiency and water savings.<br>• A deep soil zone has been provided at the rear and the sides of the site that will allow for appropriate canopy tree planting and water infiltration. |

***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 useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long-term management*

The proposed development provides two (2) area of communal open space in which the primary open space is located on the rooftop (371sqm) and the secondary is located at the ground level facing the South and east of the site (200sqm).
Communal space is accessible from the main entry lobby for use of residents and visitors.

The rooftop communal space incorporates BBQ facilities, landscaping, seating & covered spaces. These spaces are both accessible to all residents providing an opportunity for social interaction and contributing to the amenity for residents & visitors of the development.

A deep soil zone has been provided at the rear and the sides of the site which allows for appropriate canopy tree planting that softens the appearance of the development from the properties to the south and water infiltration.

Trees are proposed to be planted along the front setback to Council requirements.

***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 orientation of the site allows for the development to achieve a good level of amenity to the majority of apartments.

- All apartments have good solar access (77%) to living areas and balconies and allow for natural cross ventilation (62%).
- The proposal will offer considerable internal amenity with adequate space, storage, and room sizes to meet the needs of occupants.
- Private outdoor spaces in the form of balconies and terraces have been provided to each apartment to meet residents' recreational needs and these generally exceed the area requirements of the ADG.
- Lift access from the basement to all levels will give easy access for all residents and visitors.
- Substantial communal open space areas have been provided with appropriate facilities at the rooftop and ground floor level that are accessible from the lift and the main lobby.

***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.*

The proposed development has been designed to ensure adequate safety & security within the development are in accordance with CPTED principles:

- Private open space and living areas are located along the street frontage above the street to provide activated spaces that allow good surveillance of the street and surrounds.
- Residential entry points and circulation areas are located at Belmore street, it is clearly separated from public areas without compromising passive surveillance at the same time it is physically and visually secure.
- A secure entry system at residential entry points linked to the apartments allows access through the external security point upon confirmation from inside.
- High quality public domain and architectural lighting throughout the development will assist in securing the area at night.

- Building entries and access ways are clearly identifiable elements of the proposal and provide residents with a direct connection to streets and public areas

| | |
|---|---|
| ***Housing diversity and social interaction***<br>*Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.*<br><br>*Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.*<br><br>*Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.* | The proposal provides apartment type that is needed in the area, configurations, and sizes to cater for different household types, requirements, and levels of affordability.<br><br>The proposal includes:<br><br>6 x 1 bedrooms (50 – 51 sqm)<br>30 x 2 bedrooms (75-77 sqm)<br>3 x 3 bedrooms (95-99 sqm)<br><br>Four (4) adaptable apartments have been provided in accordance with Council requirements (10%).<br><br>The proximity to bus services and rail, retail outlets, employment, educational, recreational, and medical facilities provide the future residents with equitable access and choice. |
| ***Aesthetics***<br>*Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.* | The proposal incorporates a variety of architectural elements, materials and colours that responds to the street and setting. Architectural elements such as entries, balconies, screens, and shading devices provide interest that allows the building to contribute positively to the streetscape.<br><br>The proposal is a high-quality development that will contribute to the desired future character of the locality and will enhance the existing surrounding streetscapes. |

# Apartment Design Guide
# Compliance with Design Criteria

| **Part 3**<br>**Siting the development**<br>*This part provides guidance on the design and configuration of apartment development at a site scale. Objectives, design criteria and design guidance outline how to relate to the immediate context, consider the interface to neighbours and the public domain, achieve quality open spaces and maximise residential amenity. It is to be used during the design process and in the preparation and assessment of development applications* | | | |
|---|---|---|---|
| **Section** | **Objectives** | | **Compliance** |
| 3A Site Analysis | Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context | | Yes |
| 3B Orientation | Building types and layouts respond to the streetscape and site while optimising solar access within the development<br><br>Overshadowing of neighbouring properties is minimized during mid-winter | | Yes |
| 3C Public domain interface | Transition between private and public domain is achieved without compromising safety and security<br><br>Amenity of the public domain is retained and enhanced | | Proposal has been prepared having regard to the required street setback of Council's DCP and this facilitates an appropriate relationship between the development and public domain.<br><br>The planting of street trees can be achieved to create the desired streetscape. |
| 3D Communal and public open space | An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping<br><br>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting<br><br>Communal open space is designed to maximise safety<br><br>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood | ***Design Criteria***<br>*Communal open space has a minimum area equal to 25% of the site*<br><br>*Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter* | The proposed development provides two (2) area of communal open space in which the primary open space is located on the rooftop (371sqm) and the secondary is located at the ground level facing the South and east of the site (200sqm) which exceeds the required area. The proposed communal open space will be receiving sun for the full day achieving the 50% being in direct sunlight.<br><br>Communal space is accessible to all residents providing an opportunity for social interaction and contributing to the amenity for residents & visitors of the development. |

<table>
<tr>
<td>3E<br>Deep soil zones</td>
<td>Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality</td>
<td><u>Design Criteria</u><br>Deep soil zones are to meet the following:<br><br>
<table>
<tr><th>Site Area</th><th>Min dimension</th><th>Deep soil zone (% of site area)</th></tr>
<tr><td>< 650m2</td><td>-</td><td rowspan="4">7%</td></tr>
<tr><td>650m2 – 1500m2</td><td>3m</td></tr>
<tr><td>> 1500m2</td><td>6m</td></tr>
<tr><td>> 1500m2 with significant existing tree cover</td><td>6m</td></tr>
</table>
</td>
<td>The proposed development provides 433sqm (31%) of deep soil zones across the rear and the sides of the site which complies.</td>
</tr>
<tr>
<td>3F<br>Visual Privacy</td>
<td>Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy<br><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</td>
<td><u>Design Criteria</u><br>Minimum required separation distances from buildings to the side and rear boundaries are as follows:<br><br>
<table>
<tr><th>Building Height</th><th>Habitable rooms & balconies</th><th>Non-habitable rooms</th></tr>
<tr><td>Up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr>
<tr><td>Up to 25m (5 – 8 storeys)</td><td>9m</td><td>4.5m</td></tr>
<tr><td>Over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr>
</table>
<br>Separation distances between buildings on the same site should combine required building separations depending on the type of room.</td>
<td>Up to 25m (5 storeys)<br><br>Belmore street frontage (Northern Boundary)<br>A 14.5m separation distance to the centerline of street. A 4.5m to the property boundary is provided to the first 4-storeys & 5.65m is provided to the top 2-storeys.<br><br>Lupin avenue frontage (Western Boundary)<br>A 16m separation distance to the centerline of street. A 6m separation to the property boundary is provided to all floors.<br><br>Southern boundary<br>A 4.5m separation distance to the boundary line is provided to all floors with blank wall condition.<br><br>Eastern boundary<br>A 6m separation to the property boundary is provided to the first 4-storeys & 9.0m separation distance to the boundary line is provided to the top 2-storeys in front of openings.</td>
</tr>
<tr>
<td>3G<br>Pedestrian access and entries</td>
<td colspan="2">Building entries and pedestrian access connects to and addresses the public domain<br><br>Access, entries and pathways are accessible and easy to identify<br><br>Large sites provide pedestrian links for access to streets and connection to destinations</td>
<td>The proposal provides pedestrian access to the residential component from Belmore street.<br><br>The residential entry is clear and easily identifiable which defines the public/private domain.</td>
</tr>
<tr>
<td>3H<br>Vehicle access</td>
<td colspan="2">Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</td>
<td>Access to the basement carparking is from Lupin Avenue and is located at the south western corner of the site to minimise vehicular and pedestrian conflicts and provide a contiguous street frontage. Visitor car parking is located on basement floor.</td>
</tr>
</table>

<table>
<tr>
<td>3J Bicycle and carparking</td>
<td>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas<br><br>Parking and facilities are provided for other modes of Transport<br><br>Car park design and access is safe and secure<br><br>Visual and environmental impacts of underground car parking are minimized<br><br>Visual and environmental impacts of above ground enclosed car parking are minimized<br><br>Visual and environmental impacts of on-grade car parking are minimized</td>
<td><u>Design Criteria</u><br>For development in the following locations:<br><br>• on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or<br><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.<br><br>the minimum car parking requirement for residents and visitors is set out in the <u>Guide to Traffic Generating Developments</u>, or the car parking requirement prescribed by the relevant council, whichever is less<br><br>The car parking needs for a development must be provided off street</td>
<td>Fairfield Local Environmental Plan 2013 (FLEP2013) to promote sustainable transport, reduce car use and increase use of public transport, walking and cycling.<br><br>The proposed development contains 39 affordable units, accordingly the provisions of Affordable housing SEPP 2021 are applicable<br><br>
<table>
<tr><td></td><td>Required</td></tr>
<tr><td>0.4 car space per 1 bedroom unit (6 units)</td><td>2.4 spaces (3 spaces)</td></tr>
<tr><td>0.5 car space per 2 bedroom unit (30 units)</td><td>15 spaces</td></tr>
<tr><td>1 car space per 3 bedroom unit (3 units)</td><td>3 spaces</td></tr>
<tr><td>Residents</td><td>21 spaces</td></tr>
<tr><td>1 space per 4 units (visitor) FDCP 2013</td><td>9.75 spaces (10 spaces)</td></tr>
<tr><td>Total</td><td>31 spaces</td></tr>
</table>
<br>The proposed development provides 40 residential car spaces on basement floors including 10 visitor spaces which comply with the applicable of FDCP standard.<br><br>Four (4) bicycle spaces for residents are provided within the basement parking.</td>
</tr>
</table>

**Part 4**
**Designing the building**
*This part addresses the design of apartment buildings in more detail. It focuses on building form, layout, functionality, landscape design, environmental performance and residential amenity. It is to be used during the design process and in the preparation and assessment of development applications*

<table>
<tr><th>Section</th><th colspan="2">Objectives</th><th>Compliance</th></tr>
<tr>
<td>4A Solar and daylight access</td>
<td>To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space<br><br>Daylight access is maximised where sunlight is limited</td>
<td><u>Design Criteria</u><br>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.<br><br>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.</td>
<td>The proposed development provides 77% (30) apartments with a minimum of 2 hours direct sunlight between 9.00am and 3.00pm (mid-winter).</td>
</tr>
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<table>
<tr><td></td><td>Design incorporates shading and glare control, particularly for warmer months</td><td>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter</td><td></td></tr>
<tr><td>4B<br>Natural ventilation</td><td>All habitable rooms are naturally ventilated<br><br>The layout and design of single aspect apartments maximises natural ventilation<br><br>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</td><td><u>Design Criteria</u><br>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.<br>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<br><br>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</td><td>The proposed development provides 62% (24) apartments are naturally ventilated.</td></tr>
<tr><td>4C<br>Ceiling heights</td><td>Ceiling height achieves sufficient natural ventilation and daylight access<br><br>Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms.<br><br>Ceiling heights contribute to the flexibility of building use over the life of the building.</td><td><u>Design Criteria</u><br>Minimum ceiling heights are:<br><br><table><tr><td colspan="2">Minimum ceiling heights</td></tr><tr><td>Habitable room</td><td>2.7m</td></tr><tr><td>Non-habitable</td><td>2.4m</td></tr><tr><td>Two (2) storey apartment</td><td>2.7m for main living area<br>2.4m for 2nd floor where its area does not exceed 50% of apartment area</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room with a 30degree ceiling slope</td></tr><tr><td>If located in mixed use area</td><td>3.3m for ground and first floor to promote flexibility of use.</td></tr></table></td><td>The ceiling height of all the residential floors are 2.7m which is compliant.</td></tr>
</table>

<table>
<tr>
<td rowspan="3">4D Apartment size & layout</td>
<td>The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</td>
<td><u>Design Criteria</u><br>Apartments are required to have the following minimum internal areas:<br><br>
<table>
<tr><th>Apartment Type</th><th>Minimum internal area</th></tr>
<tr><td>Studio</td><td>35m2</td></tr>
<tr><td>1 bedroom</td><td>50m2</td></tr>
<tr><td>2 bedrooms</td><td>70m2</td></tr>
<tr><td>3 bedrooms</td><td>90m2</td></tr>
</table>
<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 12m2 each<br><br>Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms</td>
<td>The proposed development provides well-organised and functional apartments of varying sizes which satisfy the requirements of the ADG:<br><br>
<table>
<tr><th>Apartment Type</th><th>Minimum internal area</th></tr>
<tr><td>1 Bedroom</td><td>50 - 51 sqm</td></tr>
<tr><td>2 bedrooms</td><td>75 - 77 sqm</td></tr>
<tr><td>3 bedrooms</td><td>95 - 99 sqm</td></tr>
</table>
<br>All habitable rooms have windows at least the equivalent of 10% of the floor area of that room.</td>
</tr>
<tr>
<td>Environmental performance of the apartment is maximised</td>
<td><u>Design Criteria</u><br>Habitable room depths are limited to a maximum of 2.5 x the ceiling height<br><br>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</td>
<td>With 2.7m ceiling heights to all habitable rooms the depth of all rooms is compliant.<br><br>All apartments adopt an open plan layout incorporating living, dining & kitchen as a single room. These rooms have depths no greater than 8.0m.</td>
</tr>
<tr>
<td>Apartment layouts are designed to accommodate a variety of household activities and needs</td>
<td><u>Design Criteria</u><br>Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)<br><br>Bedrooms have a minimum dimension of 3m (excluding wardrobe space)<br><br>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<br><br>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layout.</td>
<td>The design of the apartments complies with the minimum widths and area requirements specified.</td>
</tr>
</table>

<table>
<tr>
<td>4E<br>Private open space and balconies</td>
<td>Apartments provide appropriately sized private open space and balconies to enhance residential amenity<br><br>Primary private open space and balconies are appropriately located to enhance liveability for residents<br><br>Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building<br><br>Private open space and balcony design maximises safety</td>
<td><u>Design Criteria</u><br>All apartments are required to have primary balconies as follows:<br><br>
<table>
<tr><th>Apartment Type</th><th>Minimum area</th><th>Minimum depth</th></tr>
<tr><td>Studio</td><td>4m2</td><td>-</td></tr>
<tr><td>1 bedroom</td><td>8m2</td><td>2m</td></tr>
<tr><td>2 bedrooms</td><td>10m2</td><td>2m</td></tr>
<tr><td>3+ bedroom</td><td>12m2</td><td>2.4m</td></tr>
</table>
The minimum balcony depth to be counted as contributing to the balcony area is 1m.<br><br>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>The proposed development provides private open space & balconies of varying sizes which satisfy the requirements of the ADG:<br><br>
<table>
<tr><th>Apartment Type</th><th>Balcony</th></tr>
<tr><td>1 bedroom</td><td>8 – 10 sqm</td></tr>
<tr><td>2 bedrooms</td><td>10 – 13 sqm</td></tr>
<tr><td>3 bedrooms</td><td>12 – 32 sqm</td></tr>
</table>
All the apartments have access to the balconies off living areas & bedrooms which further enhances the private open space provision for the apartments.</td>
</tr>
<tr>
<td>4F<br>Common circulation & spaces</td>
<td>Common circulation spaces achieve good amenity and properly service the number of apartments<br><br>Common circulation spaces promote safety and provide for social interaction between residents</td>
<td><u>Design Criteria</u><br>The maximum number of apartments off a circulation core on a single level is eight<br><br>For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</td>
<td>The proposed development is serviced by a single circulation core, one (1) lift and the required fire stairs serving (1) apartment on a level.<br><br>The circulation core throughout the development provides a substantial lobby on the ground floor, wide corridors, and access to natural light. These elements allow for the provision of seating, pot plants and social interaction.</td>
</tr>
</table>

<table>
<tr>
<td>4G<br>Storage</td>
<td>Adequate, well designed storage is provided in each apartment<br><br>Additional storage is conveniently located, accessible and nominated for individual apartments</td>
<td><u>Design Criteria</u><br>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:<br><br>
<table>
<tr><th>Apartment Type</th><th>Storage size volume</th></tr>
<tr><td>Studio</td><td>4m3</td></tr>
<tr><td>1 bedroom</td><td>6m3</td></tr>
<tr><td>2 bedroom</td><td>8m3</td></tr>
<tr><td>3+ bedroom</td><td>10m3</td></tr>
</table>
<br>At least 50% of the required storage is to be located within the apartment</td>
<td>Storage areas are provided within the apartments and separate storage cages within the basement and ground floor in accordance with the ADG requirements.</td>
</tr>
<tr>
<td>4H<br>Acoustic privacy</td>
<td colspan="2">Noise transfer is minimised through the siting of buildings and building layout<br><br>Noise impacts are mitigated within apartments through layout and acoustic treatments</td>
<td>The proposed development shall be constructed to achieve the required standards to minimize noise transfer and mitigate noise impacts.</td>
</tr>
<tr>
<td>4J<br>Noise and pollution</td>
<td colspan="2">In noisy or hostile environments, the impacts of external noise and pollution are minimised through the careful siting and layout of buildings<br><br>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</td>
<td>The proposed development shall be constructed to achieve the required standards in accordance with NCC and Australian standards.</td>
</tr>
<tr>
<td>4L<br>Ground floor apartments</td>
<td colspan="2">Street frontage activity is maximised where ground floor apartments are located<br><br>Design of ground floor apartments delivers amenity and safety for residents</td>
<td>Private open spaces of ground floor apartments are located along the street frontages providing an active street frontage. Amenity, privacy, and safety is provided on ground floor apartments.</td>
</tr>
<tr>
<td>4M<br>Facades</td>
<td colspan="2">Building facades provide visual interest along the street while respecting the character of the local area<br><br>Building functions are expressed by the facade</td>
<td>The proposal incorporates articulation, materials and colours that provide visual interest along the street frontage.<br><br>Building functions are clearly expressed through the use of architectural elements and variations in materials/colours.</td>
</tr>
<tr>
<td>4N<br>Roof design</td>
<td colspan="2">Roof treatments are integrated into the building design and positively respond to the street<br><br>Opportunities to use roof space for residential accommodation and open space are maximised<br><br>Roof design incorporates sustainability features</td>
<td>Roof design to the upper floor is fairly setback to help articulating the façade, reduce any apparent bulk and provide better amenity to the occupants.</td>
</tr>
<tr>
<td>4O<br>Landscape design</td>
<td colspan="2">Landscape design is viable and sustainable<br><br>Landscape design contributes to the streetscape and amenity</td>
<td>A detailed landscape plan has been prepared for the development and the objectives are achieved.</td>
</tr>
</table>

| | | |
|---|---|---|
| 4P Planting on structures | Appropriate soil profiles are provided<br><br>Plant growth is optimised with appropriate selection and maintenance<br><br>Planting on structures contributes to the quality and amenity of communal and public open spaces | A detailed landscape plan has been prepared for the development and demonstrates compliance with the objectives. |
| 4R Adaptive reuse | New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.<br><br>Adapted buildings provide residential amenity while not precluding future adaptive reuse | N/A |
| 4S Mixed use | Mixed use developments are provided in appropriate locations and provide active street frontages that encourage<br>pedestrian movement<br><br>Residential levels of the building are integrated within the development, and safety and amenity are maximised for residents | The proposal facilitates an appropriate relationship between the development and public domain creating an active street frontage that encourages pedestrian movement. |
| 4T Awnings and signage | Awnings are well located and complement and integrate with the building design<br><br>Signage responds to the context and desired streetscape character | An appropriate entry awning has been provided and integrate into the design of the building. |
| 4U Energy Efficiency | Development incorporates passive environmental design<br><br>Development incorporates passive solar design to optimize heat storage in winter and reduce heat transfer in summer<br><br>Adequate natural ventilation minimises the need for mechanical ventilation | The proposal achieves the requirement for ventilation and solar access which reduces the need for mechanical ventilation.<br><br>A BASIX Certificate accompanies the Development Application which complies with the water and energy ratings required. |
| 4V Water management and conservation | Potable water use is minimised<br><br>Urban stormwater is treated on site before being discharged to receiving waters<br><br>Flood management systems are integrated into site design | As required by the BASIX Certificate appropriate water saving devices shall be installed within all apartments.<br><br>An appropriate stormwater management plans and reports have been provided with the Development Application. |
| 4W Waste management | Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents<br><br>Domestic waste is minimised by providing safe and convenient source separation and recycling | Waste storage area for the residential apartments has been provided on the ground level. |
| 4X Building maintenance | Building design detail provides protection from weathering<br><br>Systems and access enable ease of maintenance<br><br>Material selection reduces ongoing maintenance costs | Materials used promote longevity of building life and ease of maintenance.<br><br>Windows are generally able to be maintained and cleaned from the balconies.<br><br>Landscaping involves the use of low maintenance plants and materials. |