

**rothelowman**

26/02/2020

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Dear Adam

**Re: 2 Delmar Parade, Dee Why – Development Application**

I, Ben Pomroy confirm that I have guided the Rothelowman design team for the project located at 2 Delmar Parade, Dee Why, 2099.

This team is familiar with, and has worked to achieve, the Design Quality Principles set out in Part 2 of *State Environmental Planning Policy No 65- Design for Quality of Residential Flat Development* in regard to the Development Application.

I verify that the proposed development achieves the Design Quality Principles.

Yours sincerely,

Ben Pomroy  
Principal

Nominated Architect (NSW): Ben Pomroy  
Registration Number: 7918

Encl. Sepp65 Statement  
ADG Objectives Review  
CC. Aaron Sutherland  
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Rothe Lowman Property Pty Ltd  
ABN 76 005 783 997

# SEPP 65 Design Quality Principles Statement

2 Delmar Parade

Dee Why, NSW 2099

Project no. / **219132**      Status / **S4.55**      Rev / **A**      Date / **26/02/2020**

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## Principle 1: Context & 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.*

Comment:

The subject property comprises of one allotment addressing Delmar Parade and Pittwater Road in the suburb of Dee Why. The allotment is currently occupied by a two storey commercial development and ancillary car parks.

An approved DA on the subject site was based on the additional height and FSR anticipated for the area. This proposal seeks to modify and improve the approved scheme. The proposed development responds to the existing context and recognises that the locality is undergoing a transition towards higher densities and heights, as enabled by the planning controls which have been developed to encourage development and promote a liveable city.

The new building will contribute to the identity of the area with the incorporation of ground level retail and street front activation and articulated built form, whilst at the same time will not dominate or be overbearing upon its adjoining neighbours or the streetscape blending in with the future form.

## Principle 2: Built Form & Scale

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

*Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.*

*Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.*

Comment:

The built form of the proposed development is appropriate in the Delmar Parade and Pittwater Road streetscapes and achieves the objectives of the relevant built form controls. The refined podium and tower forms adhere to the street setbacks to hold the corner of Delmar Parade and Pittwater Road.

Three architectural treatments are given to distinguish the ground floor retail, residential podium and residential tower. The articulated street wall forms of the podium and tower creates a significant acoustic barrier for the central courtyard that is carved out for communal open space.

The building facades have been articulated and setback to provide an appropriate level of visual bulk when viewed from surrounding areas and will achieve the desired future character of the area.

## 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.*

Comment:

The proposed development density is appropriate for the site and existing context.

The site's allowable total FSR is 3.2:1 and a height limit of 24m. The proposal achieves a total FSR of 2.99:1 a total area of 6155 m<sup>2</sup> which is within the allowable 3.2:1 FSR

The development comprises retail, commercial, and residential apartments. The retail spaces are located on the ground level and have a total area of 208 m<sup>2</sup>. The commercial spaces are also located on the ground level and have a total area of 340 m<sup>2</sup>, while the 71 residential apartments are located on the first level to the sixth level and have a total area of 5262 m<sup>2</sup>.

## **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.*

Comment:

The design makes efficient use of natural resources, energy and water throughout its full cycle, including construction.

Energy efficient building response is developed through passive design and sun control elements. The building design is characterised by exceptional and dynamic qualities of space, natural light, air flow and solar access to achieve high personal comfort and low energy consumption.

The living areas of the apartments have been orientated to maximise sunlight, daylight and natural ventilation. The apartments are accessed from a single lift lobby, eliminating internal double loaded corridors; the living areas of the apartments are all orientated to the North to achieve excellent solar access and district views. Overall the project has 100% (71) Residential apartments with 2 hours' solar access between 9.00am and 3.00 pm, and 93% (66) Residential apartments are cross-ventilated, by either cross or corner air flow. All the units have been designed to maximise natural ventilation, through the provision of dual aspect units and kitchens within 8 metres of windows. The development will not be reliant upon automatic climate control to provide appropriate amenity for residents.

The carbon footprint is further reduced by energy efficient appliances; fittings and services such as water reduction showerheads; dual flush toilets; gas cook tops; microwave ovens; and energy efficient hot water systems.

Waste minimisation and recycling strategies have been incorporated into the development.

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

Comment:

The existing site does not provide any areas of high-quality landscaping. The proposed development provides landscaped areas at the south side of the ground level adjoining the car park, with a total deep soil area of 108m<sup>2</sup> promoting the healthy growth of large trees. Additional formal landscape area is

provided on the east side and centre of the first level adjoining the communal open space areas. The landscaping provided will contribute to the enjoyment of these areas.

## **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 wellbeing.*

*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.*

Comment:

The architectural design provides enhanced amenity through the physical, spatial and environmental qualities of the development. The development comprises 71 residential apartments with a mix of 29 x 1 beds (31%), 37 x 2 beds (55.5%), 5 x 3 beds (14.5%) and includes 7 adaptable apartments (10%).

A total of 110 car spaces are provided on ground and through out two levels of basements with secure parking comprising 79 residential apartments' car spaces, 17 retail car spaces and 14 visitor car spaces including parking for the accessible and adaptable apartments. Each apartment is provided a storage cage in the basement with a minimum volume of 4m<sup>3</sup> in addition to storage provided within the apartment.

The apartments have been designed to achieve solar access, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor open space, diverse layouts, service areas, outlook and ease of access and mobility for all ages.

The internal sizes of each apartment room is at or above the minimums set out in the Apartment Design Guide, with the internal layouts focused on generous living area, and high levels of access to natural light.

## **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.*

Comment:

The design of the development optimises safety and security, both internal to the development and to the public domain. Safety and security have also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management.

The pedestrian entry point is highly visible from both the internal area of the development and the public domain which will allow safe access and egress from and to the building. The development has been designed to avoid hidden corners or concealment points with secure gates provided to any deep recesses within the building form. The apartment and corridor layouts encourage passive surveillance over the street and communal open spaces.

Controlled vehicular access to the building is provided by secure car park access from Delmar Parade, with direct access from the car park to the lift lobbies for residents, the audio intercom system at the main entry lobby, car park entry to communicate with residents and key card access for residents.

## **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 and providing opportunities for social interaction among residents.*

Comment:

All residential units and basement parking areas are accessible by lift and close regard has been made in the design to ensure that an appropriate number of units could be adopted to suit the needs of people with disabilities or the elderly.

The apartments facing Pittwater Rd have been designed to benefit from a breezeway typology, locating bedrooms away from Pittwater Rd. The spatial arrangement includes a 'back yard' space adjoining the circulation breezeway and balcony to the 'front'. This allows apartments to address both the street and internal courtyard, opening vistas to views and the streetscape.

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

Comment:

An appropriate composition of building elements, material textures and colours have been utilized to reflect the positive elements of the existing neighbourhood.

The design is composed of predominantly glazed ground floor walls to encourage and maximise street activation to retail and commercial spaces. The bulk and mass of the podium is emphasised by the brick balustrade walls and dark cement rendered external walls, both of which help the form to hold the street corner. The upper levels are composed of white cement render and Hebel Power Panels or similar diminish the effective height of the tower form whilst providing contrast to the podium.

The building has been designed to promote visual interests and avoid blank unarticulated walls. The front façade is composed in bay elements with strong horizontality and material change to provide a visual segmentation of the building.

The development will positively contribute to the desired future character of the area. The design responds well to the present and future character of the surrounding area through the use of rich but simple material selections, proportions and simple building forms.

# Apartment Design Guide Objectives – Part 3 & 4

2 Delmar Parade  
Dee Why, NSW 2099

Project no. / **219132**    Status / **S4.55**    Rev / **A**    Date / **26/02/2020**

Revision	Date	Notes – Revisions are noted in bold italics
A	26/02/2020	S4.55 Submission

	Objective	Design Criteria	Objective Achieved	Comment
<b>Part 3 Siting the Development</b>				
Site Analysis	<i>Objective 3A-1 Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context</i>		Yes	An extensive site analysis, site concept and masterplan has been completed based on a multi-layer urban design and context study.
Orientation	<i>Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development</i>		Yes	The proposed building is aligned to the street grid and creates a block-defining urban form. The building is primarily oriented in a north-south axis. This north-south axis maximises equitable solar access to the apartments. All apartments resultantly receive two hours solar access via either the east or west.
	<i>Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter</i>		Yes	The subject site is separated from neighbouring properties to the east and south, with roads at the north and west interfaces, providing appropriate separation to reduce overshadowing. The proposed built form has a narrow southern frontage to assist solar access to 816-818 Pittwater Rd.
Public Domain Interface	<i>Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security</i>		Yes	Access from the public street to the building entries are straight, clear and legible, providing safe access to the proposed development.  Pedestrian paths are activated with commercial frontages, and private terraces and entries, providing passive surveillance of all areas.
	<i>Objective 3C-2 Amenity of the public domain is retained and enhanced</i>		Yes	The public domain of all adjacent streets is enhanced with active commercial frontages on the ground floor. The building entries are legible and all services, loading and car parking, where possible, are located in secure zones behind screening.
	<i>Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and</i>	<i>Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)</i>	Yes	The communal open space exceeds the 25% minimum as identified in the communal open space drawings. The communal open space will include high quality landscaping

	Objective	Design Criteria	Objective Achieved	Comment		
Communal and Public Open Space	<i>to provide opportunities for landscaping</i>	<i>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)</i>		and place making features such as plantings, bench seating and terraces promoting high amenity and useability of the space. 50% of the principal useable parts of the communal open space achieve a minimum of 2 hours direct sunlight between 9:00 am and 3:00pm		
	<i>Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</i>		Yes	Communal open spaces provide a selection of sub-spaces with varying uses, to allow for simultaneous use by multiple groups. The Architectural and landscape drawings articulate the open space and landscaping strategy.		
	<i>Objective 3D-3 Communal open space is designed to maximise safety</i>		Yes	Communal open spaces are clearly defined and legible with open areas. They are overlooked by private terraces and upper level apartments, promoting passive surveillance.		
	<i>Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood</i>		N/A	Publicly-owned open space is not provided in the proposed development.		
Deep Soil Zones	<i>Objective 3E-1 Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality</i>	<i>Deep soil zones are to meet the following minimum requirements:</i>	No	The deep soil area equals 5% of the site area, which does not meet the required minimum, however is a substantial increase relative to the existing approval. The dimensions of the deep soil zones meet the minimum 6m dimension. The deep soil zones will host significant tree plantings along with other planting on structures in other parts of the site.		
		Site Area			Min Dimensions	Deep Soil Zone (% of Site Area)
		Less than 650m <sup>2</sup>			-	7%
		650m <sup>2</sup> -1500m <sup>2</sup>			3m	
		Greater than 1500m <sup>2</sup>			6m	
Greater than 1500m <sup>2</sup> with significant tree cover	6m					
Visual Privacy	<i>Objective 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy</i> <i>Note: Separation distances between buildings on the same site should combine required building</i>	<i>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:</i>	Yes	The separation distances comply with the minimum dimensions. Guidelines to the adjacent sites to the south and to the east. The internal separation distances throughout the site meet or exceed the distances suggested in the Apartment Design Guide.		
		Building Height			Habitable rooms and balconies	Non-habitable rooms

	Objective	Design Criteria	Objective Achieved	Comment	
	<i>separations depending on the type of room</i>	<i>Up to 12m (4 storeys)</i>	<i>6m</i>	<i>3m</i>	
		<i>Up to 25m (5-8 storeys)</i>	<i>9m</i>	<i>4.5m</i>	
		<i>Over 25m (9+ storeys)</i>	<i>12m</i>	<i>6m</i>	
	<i>Objective 3F-2 Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space</i>		Yes	The comprehensive solar and view analysis has allowed for buildings to be sited, and heights modulated, to take advantage of key views and solar access. Privacy between apartments has been considered in the building separation and internal space planning.	
Pedestrian Access and Entries	<i>Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain</i>		Yes	The apartment lobby clearly addresses Delmar Parade. Care has been taken to create legible and permeable access for pedestrians throughout the development.	
	<i>Objective 3G-2 Access, entries and pathways are accessible and easy to identify</i>		Yes	Where possible, high ceiling entry spaces have been provided to create access points visible from the public domain	
	<i>Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations</i>		N/A		
Vehicle Access	<i>Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</i>		Yes	Car park and loading access points are consolidated to minimise interruption to street frontages. The vehicle access points are clear and legible, and separated from pedestrian entries to separate the movements of each.	
Bicycle and Car Parking	<i>Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</i>	<i>For development in the following locations: on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre  the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less  The car parking needs for a development must be provided off street.</i>	Yes	Car parking has been provided in exceedance of the rates provided in the Amended Warringah DCP 2011 for developments with the Dee Why Town Centre.	

	Objective	Design Criteria	Objective Achieved	Comment
	<i>Objective 3J-2 Parking and facilities are provided for other modes of transport</i>		Yes	Secure bicycle parking is provided in the basements which exceeds Councils' minimum requirements. In addition, storage cages in the basements are large enough to accommodate bicycles.
	<i>Objective 3J-3 Car park design and access is safe and secure</i>		Yes	The car parks are secured with electronic, automated doors triggered by residents. The aisles are clear and unobstructed with clear lines of site to fire stairs and to lift entrances.
	<i>Objective 3J-4 Visual and environmental impacts of underground car parking are minimised</i>		Yes	
	<i>Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised</i>		Yes	The majority of car parking is located within basements. Any on-grade parking is screened behind commercial or retail spaces and roofed with landscaped areas.
	<i>Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised</i>		N/A	
Solar and Daylight Access	<i>Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</i>	<i>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</i>	Yes	All apartments achieve two hours of solar access between 9am and 3pm in midwinter. Please refer to a breakdown of solar access per unit in the architectural drawings.
		<i>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</i>	N/A	
		<i>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter</i>	Yes	There are no south facing apartments, and no apartments receive no sun in mid-winter.
	<i>Objective 4A-2 Daylight access is maximised where sunlight is limited</i>		N/A	
	<i>Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months</i>		Yes	The articulated facades are designed for summer shading with deep balconies.
Natural Ventilation	<i>Objective 4B-1 All habitable rooms are naturally ventilated</i>			Openable windows are proposed for all habitable rooms.
	<i>Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation</i>			Openable windows are proposed for all habitable rooms.
	<i>Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</i>	<i>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</i>	Yes	Most apartments (93%) are naturally cross ventilated. Single-aspect apartments have been designed with open-plan layouts and dual frontages to both streetscape and internal courtyard to maximise any available natural ventilation.

	Objective	Design Criteria	Objective Achieved	Comment										
		<p><i>enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed</i></p> <p><i>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</i></p>												
Ceiling Height	<i>Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access</i>	<p><i>Measured from finished floor level to finished ceiling level, minimum ceiling heights for apartment and mixed-use buildings are:</i></p> <table border="1"> <tr> <td><i>Habitable Rooms</i></td> <td><i>2.7m</i></td> </tr> <tr> <td><i>Non-Habitable</i></td> <td><i>2.4m</i></td> </tr> <tr> <td><i>For 2 Storey Apartments</i></td> <td><i>2.7m for main living area floor</i> <i>2.4m for second floor, where its area does not exceed 50% of the apartment area</i></td> </tr> <tr> <td><i>Attic Spaces</i></td> <td><i>1.8m at edge of room with a 30-degree minimum ceiling slope</i></td> </tr> <tr> <td><i>If located in mixed use areas</i></td> <td><i>3.3m for ground and first floor to promote future flexibility of use</i></td> </tr> </table>	<i>Habitable Rooms</i>	<i>2.7m</i>	<i>Non-Habitable</i>	<i>2.4m</i>	<i>For 2 Storey Apartments</i>	<i>2.7m for main living area floor</i> <i>2.4m for second floor, where its area does not exceed 50% of the apartment area</i>	<i>Attic Spaces</i>	<i>1.8m at edge of room with a 30-degree minimum ceiling slope</i>	<i>If located in mixed use areas</i>	<i>3.3m for ground and first floor to promote future flexibility of use</i>	Yes	<p>The floor-to-floor height on the ground floor enables a 3600mm ceiling to the retail and commercial tenancies.</p> <p>The floor-to-floor heights of the residential levels allow 2700mm ceilings to all living areas and bedrooms.</p>
<i>Habitable Rooms</i>	<i>2.7m</i>													
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<i>If located in mixed use areas</i>	<i>3.3m for ground and first floor to promote future flexibility of use</i>													
	<i>Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms</i>		Yes	Bulkheads are to be minimised as much as possible with flat ceilings in living areas and bedrooms.										
	<i>Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building</i>		Yes	Ceiling heights of the retail and commercial spaces on ground are maximised to allow for a variety of uses.										
Apartment Size and Layout	<i>Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</i>	<p><i>Apartments are required to have the following minimum internal areas:</i></p> <table border="1"> <tr> <td><i>Apartment Types</i></td> <td><i>Minimum Internal Area</i></td> </tr> <tr> <td><i>Studio</i></td> <td><i>35m<sup>2</sup></i></td> </tr> <tr> <td><i>1 Bedroom</i></td> <td><i>50m<sup>2</sup></i></td> </tr> <tr> <td><i>2 Bedroom</i></td> <td><i>70m<sup>2</sup></i></td> </tr> <tr> <td><i>3 Bedroom</i></td> <td><i>90m<sup>2</sup></i></td> </tr> </table>	<i>Apartment Types</i>	<i>Minimum Internal Area</i>	<i>Studio</i>	<i>35m<sup>2</sup></i>	<i>1 Bedroom</i>	<i>50m<sup>2</sup></i>	<i>2 Bedroom</i>	<i>70m<sup>2</sup></i>	<i>3 Bedroom</i>	<i>90m<sup>2</sup></i>	Yes	Please refer to a per-unit schedule of apartment sizes in the architectural drawings.
<i>Apartment Types</i>	<i>Minimum Internal Area</i>													
<i>Studio</i>	<i>35m<sup>2</sup></i>													
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Objective	Design Criteria	Objective Achieved	Comment
	<p><i>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m<sup>2</sup> each.</i></p> <p><i>A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m<sup>2</sup> each</i></p> <p><i>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</i></p>		
<p><i>Objective 4D-2 Environmental performance of the apartment is maximised</i></p>	<p><i>Habitable room depths are limited to a maximum of 2.5 x the ceiling height</i></p>	Yes	
	<p><i>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</i></p>	Yes	
<p><i>Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs</i></p>	<p><i>Master bedrooms have a minimum area of 10m<sup>2</sup> and other bedrooms 9m<sup>2</sup> (excluding wardrobe space)</i></p>	Yes	
	<p><i>Bedrooms have a minimum dimension of 3m (excluding wardrobe space)</i></p>	Yes	
	<p><i>Living rooms or combined living/dining rooms have a minimum width of:</i></p> <p><i>3.6m for studio and 1-bedroom apartments</i></p> <p><i>4m for 2- and 3-bedroom apartments</i></p>	Yes	
	<p><i>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</i></p>	Yes	
<p><i>Objective 4E-1 Apartments provide appropriately sized private open</i></p>	<p><i>All apartments are required to have primary balconies as follows:</i></p>	Yes	<p>Please refer to a per-unit schedule of balcony sizes at architectural drawings.</p>

	Objective	Design Criteria	Objective Achieved	Comment	
Private Open Space and Balconies	space and balconies to enhance residential amenity	<i>Dwelling type</i>	<i>Minimum Area</i>	<i>Minimum Depth</i>	
		<i>Studio</i>	4m <sup>3</sup>	-	
		<i>1 bedroom</i>	8m <sup>3</sup>	2m	
		<i>2 bedrooms</i>	10m <sup>3</sup>	2m	
		<i>3+ bedrooms</i>	12m <sup>3</sup>	2.4m	
		<i>The minimum balcony depth to be counted as contributing to the balcony area is 1m</i>			
		<i>For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m<sup>2</sup> and a minimum depth of 3m.</i>	Yes	As above	
	<i>Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents</i>		Yes	All primary balconies and terraces are located adjacent to a living space.	
	<i>Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</i>		Yes	The balconies form an integral part of the building design.	
	<i>Objective 4E-4 Private open space and balcony design maximises safety</i>		Yes	All balconies can meet the minimum safety provisions	
Common Circulation and Spaces	<i>Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments</i>	<i>The maximum number of apartments off a circulation core on a single level is eight</i>	Part	The maximum number of units off a single core on any level is fourteen. Where the number of units per core exceeds eight, natural light and ventilation to the lobby has been pursued.	
		<i>For buildings of 10-storeys and over, the maximum number of apartments sharing a single lift is 40</i>	N/A	An additional lift is also provided in these cases such that the maximum number of apartments served per lift is 40.	
	<i>Objective 4F-2 Common circulation spaces promote safety and provide for social interaction between residents</i>		Yes	The ground floor lobby has been designed to allow a direct, clear and legible access from the street.	
Storage	<i>Objective 4G-1 Adequate, well designed storage is provided in each apartment</i>	<i>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</i>		Yes	All apartment storage meets or exceeds the minimum standard. Most units have more than 50% of the storage internal to the unit. Each apartment also has been a basement storage cage. Please refer to a per-unit schedule of internal storage sizes in the architectural drawings.
		<i>Dwelling Type</i>	<i>Storage size volume</i>		
		<i>Studio</i>	4m <sup>3</sup>		
		<i>1 bedroom</i>	6m <sup>3</sup>		
		<i>2 bedrooms</i>	8m <sup>3</sup>		
		<i>3+ bedrooms</i>	10m <sup>3</sup>		

	Objective	Design Criteria	Objective Achieved	Comment
		<i>At least 50% of the required storage is to be located within the apartment</i>		
	<i>Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments</i>		Yes	Secure basement storage is clearly and accessibly located in the car park.
Acoustic Privacy	<i>Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout</i>		Yes	Care has been taken to avoid major acoustic clashes and limiting windows onto narrow spaces. Secondary terraces are provided and orientated away from Pittwater Road to mitigate road noise impacts.
	<i>Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments</i>		Yes	Care has been taken to co-locate similar room types where possible and to use buffers, such as wardrobes, between different spaces.
Noise and Pollution	<i>Objective 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</i>		Yes	Apartments facing Pittwater Road are provided with secondary terraces are provided and orientated away from Pittwater Road to mitigate road noise and pollution.
	<i>Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</i>		N/A	This item will be addressed in Construction Certificate stage.
Apartment Mix	<i>Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future</i>		Yes	The building provides a mix of 1, 2, and 3 bedroom apartments to meet market needs. Breezeway apartments are provided to further diversify housing choice within the development.
	<i>Objective 4K-2 - The apartment mix is distributed to suitable locations within the building</i>		Yes	Apartment types are mixed throughout the building.
Ground Floor Apartments	<i>Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located</i>		N/A	
	<i>Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents</i>		N/A	
Facades	<i>Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area</i>		Yes	Care has been taken to ensure proportionally-balanced-buildings which fit within the surrounding future context. A diverse mix of façade typologies has been developed for this project to give each form a unique presence.
	<i>Objective 4M-2 Building functions are expressed by the facade</i>		Yes	Each façade confidently addresses its specific function through varying materials and forms, with high proportions of glazing expressing retail and commercial functions in contrast to the more solid residential component.
Roof Design	<i>Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street</i>		Yes	The roof has been carefully integrated into the overall aesthetic of the facades and neighbouring context.
	<i>Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised</i>		Yes	A large communal space is provided on top of the podium.
	<i>Objective 4N-3 Roof design incorporates sustainability features</i>		Yes	Roof areas will be intensively thermally insulated to maximise passive thermal comfort in the upper-most apartments.

	Objective	Design Criteria	Objective Achieved	Comment
Landscape Design	<i>Objective 4O-1 Landscape design is viable and sustainable</i>		Yes	The landscape design has a focus on amenity with the inclusion of key place making elements such as seating and terraces. Simple design elements, high quality materiality of hardscaping along with an appropriate mix of native and introduced plant species will be a long lasting, easy to maintain landscape which can be adapted to suit a variety of uses over time.
	<i>Objective 4O-2 Landscape design contributes to the streetscape and amenity</i>		Yes	The landscape design maximises the amenity of the communal open space by balancing planted areas with areas for residents to relax or interact.
Planting on Structures	<i>Objective 4P-1 Appropriate soil profiles are provided</i>		Yes	The landscape has been designed with lower planting zones and shrubs in appropriately sized bases.
	<i>Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance</i>		Yes	The landscape has been designed with a diverse range of native and exotic species appropriate to the various areas and planting opportunities.
	<i>Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces</i>		Yes	Landscape design includes a variety of plantings to soften the communal open space areas.
Universal Design	<i>Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members</i>		Yes	At least 20% of apartments are capable of achieving the Liveable Housing Guidelines silver level. Please refer to a per-unit schedule of LHA compliance in the architectural drawings.
	<i>Objective 4Q-2 A variety of apartments with adaptable designs are provided</i>		Yes	10% of the units are adaptable with accessible car space. There are a mix of adaptable apartment types
	<i>Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs</i>		Yes	The design offers a diverse range of apartment types
Adaptive Reuse	<i>Objective 4R-1 New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</i>		N/A	
	<i>Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse</i>		N/A	
Mixed Use	<i>Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement</i>		Yes	Active frontages are maximised throughout the entire mixed-use precinct. Great care has been taken to ensure that commercial uses activate the ground plane with permeable pedestrian networks throughout the whole site.
	<i>Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity are maximised for residents</i>		Yes	Each commercial space has a separate entrance. Residential entries are integrated within the podium design and fit within the commercial and retail ground floor uses. Residential apartments above take on a more domestic character in their architecture.

	Objective	Design Criteria	Objective Achieved	Comment
Awnings and Signage	<i>Objective 4T-1 Awnings are well located and complement and integrate with the building design</i>		Yes	Arcade and awnings are provided to the retail and commercial frontages along Pittwater Road and Delmar Parade. These are carefully integrated into the gently curved podium.
	<i>Objective 4T-2 Signage responds to the context and desired streetscape character</i>		Yes	Building identification signage will be located the building entry, adjacent to the proposed letterboxes. Any retail or commercial signage will be integrated into the shopfront design.
Energy Efficiency	<i>Objective 4U-1 Development incorporates passive environmental design</i>		Yes	Passive environmental design features are provided including large tree planting and water elements in the landscape for reduction of temperature
	<i>Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer</i>		Yes	The general orientation of buildings in a north-south axis assists with solar access and shading for all of the apartments. The articulated building façade and balconies to each apartment provide shading in summer and solar access in winter.
	<i>Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation</i>		Yes	Refer to BASIX assessment
Water Management and Conservation	<i>Objective 4V-1 Potable water use is minimised</i>		Yes	Refer to BASIX assessment
	<i>Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters</i>			Refer to civil engineer's details
	<i>Objective 4V-3 Flood management systems are integrated into site design</i>		N/A	
Waste Management	<i>Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</i>		Yes	Waste management is handled entirely within the building envelope to minimise impact on the streetscape.
	<i>Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling</i>		Yes	Separate recycling facilities and rooms for each apartment are provided. Refer to Waste Management Report
Building Maintenance	<i>Objective 4X-1 Building design detail provides protection from weathering</i>		Yes	Robust finishes have been selected for maintenance and high-durability
	<i>Objective 4X-2 Systems and access enable ease of maintenance</i>		Yes	Stair access is provided to all rooftop plant and equipment. Other services areas are located on the ground floor or within the basements.
	<i>Objective 4X-3 Material selection reduces ongoing maintenance costs</i>		Yes	Where possible, high- durability, pre-finished, untreated or natural-finish materials are proposed for building facades.