DESIGN VERIFICATION STATEMENT
PROPOSED SHOP-TOP HOUSING DEVELOPMENT AT 231 WHALE BEACH ROAD, WHALE BEACH

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CONTENTS

1. INTRODUCTION

1.1. PURPOSE

This report should be read in conjunction with the Architectural Drawings provided in the amended development application. It is a response to SEPP 65 and the Apartment Design Guide.

1.2. DESIGN VERIFICATION

I, Richard Cole of Richard Cole Architecture, verify that I contributed to the design of this shop-top housing development, and that the design quality principles set out in SEPP No. 65 and the Apartment Design Guide are achieved for the new apartments in the redevelopment of 231 Whale Beach Road, Whale Beach.

Yours faithfully,

Richard Cole
RICHARD COLE ARCHITECTURE
Registration No: 6538
B.Sc(Arch) Hons 1 B.Arch Hons 1

2. SEPP 65 COMPLIANCE ANALYSIS

2.1. COMPLIANCE ANALYSIS

The following section outlines Apartment Design Guide recommendations, how each of the minimum standards of the Guide are applied to new shop-top housing apartments in the proposed development, and how each of the standards are achieved in relation to the design objectives of the Guide.

PART 1	IDENTIFYING THE CONTEXT	RESPONSE / COMPLIANCE	COMPLIANCE
1A	Apartment building types		
	Shop top apartments are mixed use residential buildings often located in established centres, along main streets or close to public transport hubs. They can be small infill or larger developments where the ground floor is occupied by retail or commercial uses. Shop top apartments typically range between two and six storeys and are best used when: • increased residential uses are desired in established retail and commercial areas • the context is a traditional main street • zero setbacks to side boundary walls are possible or desired • active frontages such as retail tenancies are desired at street level • pedestrian activity on the street is desired • rear lane access is available.	The development conforms to this description of building type. The proposal provides active commercial frontage at ground level to both Whale Beach Road and Surf Road. The proposal is five storeys high and provides appropriate facilities for the only neighbourhood centre zoning in the precinct. Appropriate side setbacks to residential premises are established.	
1B	Local character and context		
	Suburban neighbourhoods Suburban neighbourhoods are typically characterised by detached housing in a landscaped setting. Considerations for residential apartment development in suburban neighbourhood settings include relationships and interface with existing houses, appropriateness of apartment buildings compared	The proposal responds appropriately as a residential apartment building in a suburban landscaped setting. The design maintains privacy to neighbouring properties and is compatible in scale with the existing apartment building on the site and neighbouring buildings such as the surf club. The form terraces down the hillside, preserving views and responding to the topography.	

	to other forms of medium density housing (such as terraces or townhouses), landscape setting, existing significant trees and the pattern of front and rear gardens.		
	The range of scales Apartment development needs to consider a range of scales. The Wider scale includes the urban structure, landscape setting and broader land use patterns of the wider context. The Neighbourhood scale outlines the urban structure including streets and open spaces. The Street scale deals with the character of the street addressing its spatial enclosure by buildings or landscape elements. The Site scale involves detailed consideration of the development relative to neighbouring properties, buildings across the street and the public domain.	The proposed development is appropriate when considered against the range of scales. On the wider scale the development addresses and complements the focal point of the beach and surf club precinct. The proposed development will provide a positive addition to the streetscape, with appropriate scale, setbacks, pedestrian access, awnings, vehicle driveways and attractive areas for public access. While considerably larger by nature than the adjacent residential properties, the development responds to the site scale, presenting a two storey façade to Whale Beach Road and appropriate form stepping down the hillside and maintaining both planted side setbacks and cascading planter beds to all levels. Detailed solar access, privacy and view preservation strategies have been adopted in the design. The site incorporates significant challenges in terms of slope, the extent of excavations required and stormwater management, which have all been addressed.	
1C	Precincts and Individual Sites		
	Individual sites An individual site is a single lot or an amalgamation of several lots that can support individual or groups of residential flat buildings. The size, shape and orientation of individual sites directly inform the possible building types and development capacity.	The site is an individual site. The proposal replaces and improves both the design quality, amenity and infrastructure of the existing usage. The desired future character of the area is not expected to change. The proposal is sympathetic and appropriate to this character.	

PART 2	DEVELOPING THE CONTROLS	RESPONSE / COMPLIANCE	COMPLIANCE
2A	Primary Controls		
	Primary development controls are the key planning tool used to manage the scale of development so that it relates to the context and desired future character of an area and manages impacts on surrounding development.	The primary development controls of the development are discussed in detailed below. The proposed development is suited to the location and provides a high-quality design outcome.	
2B	Building Envelope		
	A building envelope is a three dimensional volume that defines the outermost part of a site that the building can occupy. Building envelopes set the appropriate scale of future development in terms of bulk and height relative to the streetscape, public and private open spaces, and block and lot sizes in a particular location.	A building envelope is established by the required height limit and boundary setbacks. The development complies with these controls and provides an appropriate building form for the subject site.	
2C	Building Height		
	Building height helps shape the desired future character of a place relative to its setting and topography. It defines the proportion and scale of streets and public spaces and has a relationship to the physical and visual amenity of both the public and private realms.	The proposal complies with the 8.5m building height control of the PLEP. Due to the steep slope, this results in a form that terraces down the site. The form is appropriate in scale and facilitates view retention, solar access and privacy. The stepped height provides appropriate scaled facades at the street frontages.	
2D	Floor space Ratio		
	Floor space ratio (FSR) is the relationship of the total gross floor area (GFA) of a building relative to the total site area it is built on. It indicates the intended density. FSR is a widely used method for estimating the development potential of a site.	There are no applicable floor space ratio controls on the site relating to bulk and scale. The proposal complies with the required ratio between commercial and residential floor area.	
2E	Building Depth		
	Building depth is an important tool for determining the development capacity of a site. It is the overall cross section dimension of a building envelope. Building depth dimensions typically include articulation such as projecting balconies, gallery access, eaves, overhangs, sun hoods, blades and other architectural features.	Building depth was an important consideration for the form of the building. Significant articulation of the building form has ensued, including a deep vertical recess to the building. This not only breaks down the bulk of the building, but opens the centre of the building to daylighting and natural ventilation	

	Use a range of appropriate maximum apartment depths of 12-18 metres.	and an apartment depth of approximately 9m.	
2F	Building Separation		
	Building separation is the distance measured between building envelopes or buildings. Separation between buildings contributes to the urban form of an area and the amenity within apartments and open space areas. Design and test building separation controls in plan and section. Test building separation controls for sunlight and daylight access to buildings and open spaces. Minimum separation distances for buildings are: Up to 4 storeys approximately 6-12m Up to 8 storeys approximately 9-18m 9 storeys and above approximately 12-24m Demonstrate that daylight access, urban form and visual and acoustic privacy are satisfactorily achieved.	The wedged shape of the site, steep slope and isolated neighbourhood centre zoning give rise to the building separation controls being less applicable to this site. The primary issue of building separation is between the development and neighbouring residential dwellings. The development is adequately separated, being 1m greater than the required DCP control, with measures to ameliorate impacts to amenity, such as angled screens, planter beds and landscaped screening. Appropriate amenity including visual and acoustic privacy, natural ventilation, sunlight and daylight access and outlook are retained.	
2G	Street Setbacks		
	Street setbacks establish the alignment of buildings along the street frontage, spatially defining the width of the street. Combined with building height and road reservation, street setbacks define the proportion and scale of the street and contribute to the character of the public domain.	The proposed development maintains the required 6.5m setback to Whale Beach Road. A zero setback is proposed to Surf Road to the first-floor landscaped terrace, which provides an appropriate integration with the levels of the adjacent topography. The ground floor walls and higher terraces are set back to the required front setback on this boundary. The street setbacks provide improved public areas and amenity to both roads.	
2H	Side and Rear Setbacks		
	Side and rear setbacks govern the distance of a building from the side and rear site boundaries and are related to the height of the building. They are important tools for achieving amenity for new development and buildings on adjacent sites	The proposed side setbacks exceed the PDCP controls and result in good amenity for both occupants and neighbours in terms of access to light, air and outlook, privacy, access to external spaces and landscaped areas.	

PART 3	SITING THE DEVELOPMENT	RESPONSE / COMPLIANCE	COMPLIANCE
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 Each element in the Site Analysis Checklist should be addressed.		
	Site location	Provided	✓
	Aerial photograph	Provided	✓
	Local context plan	Provided	✓
	Site context and survey plan	Provided	✓
	Streetscape elevations and sections	Provided	✓
	Analysis	Provided	✓
Objective 3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development		
	Design guidance		
	Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	The proposed building faces street with direct access to both Whale Beach Road and Surf Road.	✓
	Where the street frontage is to the east or west, rear buildings should be orientated to the north	Street frontages are to the east and west. There are no rear buildings.	✓
	Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	Not Applicable	✓
Objective 3B-2	Overshadowing of neighbouring properties is minimised during mid winter		
	Design guidance		
	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	Communal open space receives good solar access. Living areas and private open space complies with 4A.	✓
	Solar access to living rooms, balconies and private open spaces of neighbours should be considered	Only affected neighbour is 229 Whale Beach Road which receives complying periods of solar access	✓

		to living rooms, balconies and private open space.	
	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%	Not applicable.	✓
	If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy	Not applicable	✓
	Overshadowing should be minimised to the south or down hill by increased upper level setbacks	Upper levels are set back in line with the topography.	✓
	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	Not applicable	✓
Objective 3C-1	Transition between private and public domain is achieved without compromising safety and security		
	Design guidance		
	Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	Due to the site slope and commercial street frontages, direct street entry to apartments, courtyards or balconies is not appropriate for this site.	✓
	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)	Private terrraces overlook streets providing surveillance and improve visual privacy for ground level dwellings.	✓
	Upper level balconies and windows should overlook the public domain	Upper level balconies and windows 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	There are no front fences to street frontages proposed. Walls and balustrades are limited to 1m and permeable where appropriate.	✓
	Length of solid walls should be limited along street frontages	The length of solid walls is 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	Seating is provided adjacent to the letterbox in the public domain and adjacent to the ground floor café/retail space.	✓

	letter boxes and in private courtyards adjacent to streets		
	In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: • architectural detailing • changes in materials • plant species • colours	The building entries to the central stairway are clearly differentiated and visually identified.	✓
	Opportunities for people to be concealed should be minimised	Concealment opportunities are minimized.	✓
	Terraces, balconies and courtyard apartments should have direct street entry, where appropriate	Direct street entry is not appropriate due to the site slope and commercial street fronts.	✓
Objective 3C-2	Amenity of the public domain is retained and enhanced		
	Design guidance		
	Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	Planters are provided on balconies.	✓
	Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided	The mailbox is located adjacent to the main building entrance in an appropriate location.	✓
	The visual prominence of underground car park vents should be minimised and located at a low level where possible	Vents are concealed. Due to site restraints they are required to be located on the rooftop.	✓
	Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	The substation is located adjacent to Whale Beach Road, but at a lower level concealed by landscaping. Pump rooms and other service requirements are located in the basement. Garbage areas are located in accordance with Northern Beaches Council requirements.	✓
	Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels	Ramping for accessibility is avoided to the ground floor. To Level 3 is it required but located in a discreet location that does not detract from the active engagement of the street front.	✓
	Durable, graffiti resistant and easily cleanable materials should be used	Materials are proposed which are graffiti resistant and easily cleanable.	✓
	Where development adjoins public parks, open space or bushland, the design positively addresses this interface and	Interaction with public park meets these criteria.	✓

	uses a number of the following design solutions: • street access, pedestrian paths and building entries which are clearly defined • paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space • minimal use of blank walls, fences and ground level parking		
	On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	Car parking is all concealed underground.	✓
Objective 3D-1	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping		
	Design criteria		
1	Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)	Communal open space is provided to Whale Beach road and Surf Road. These areas area accessible to residents and the public.	✓
2	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)	Solar access to communal open space areas meets this requirement.	✓
	Design guidance		✓
	Communal open space should be consolidated into a well designed, easily identified and usable area	Communal open space is easily identified adjacent to street frontages.	✓
	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	The communal open space areas have a minimum dimension of 3m.	✓
	Communal open space should be co-located with deep soil areas	Deep soil areas are located adjacent to communal open space.	✓
	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	Direct, equitable access is provided to communal open space areas from common circulation areas, entries and lobbies.	✓
	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	Communal open space is provided at ground level.	✓
	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:	The communal open space provided meets the design criteria. Proximity to public open space and facilities is evident by the beachfront location and adjacent council reserve.	✓

	• provide communal spaces elsewhere such as a landscaped roof top terrace or a common room • provide larger balconies or increased private open space for apartments • demonstrate good proximity to public open space and facilities and/or provide contributions to public open space	Apartments have large balconies and generous private open space.	
Objective 3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting		
	Design guidance		
	Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: • seating for individuals or groups • barbecue areas • play equipment or play areas • swimming pools, gyms, tennis courts or common rooms	Communal open space areas are provided with appropriate facilities for the size of the development.	✓
	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	Facilities are appropriately located.	✓
	Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	Visual impacts of services are minimized.	✓
Objective 3D-3	Communal open space is designed to maximise safety		
	Design guidance		
	Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: • bay windows • corner windows • balconies	Appropriate passive surveillance is provided.	✓
	Communal open space should be well lit	Communal open spaces are well lit.	✓
	Where communal open space/facilities are provided for children and young people they are safe and contained	Not applicable.	✓
Objective 3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood		

<table>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>The public open space should be well connected with public streets along at least one edge</td><td>Public open space is connected to public streets to the east and west.</td><td>✓</td></tr>
<tr><td></td><td>The public open space should be connected with nearby parks and other landscape elements</td><td>Public open space connects to the council reserve to the east.</td><td>✓</td></tr>
<tr><td></td><td>Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid</td><td>Public open space on both frontages is linked to the street.</td><td>✓</td></tr>
<tr><td></td><td>Solar access should be provided year round along with protection from strong winds</td><td>Solar access is provided to public open space on both frontages. Surf Road will receive good morning sun and Whale Beach Road good afternoon sun. Wind protection is provided.</td><td>✓</td></tr>
<tr><td></td><td>Opportunities for a range of recreational activities should be provided for people of all ages</td><td>Not applicable.</td><td>✓</td></tr>
<tr><td></td><td>A positive address and active frontages should be provided adjacent to public open space</td><td>Active frontages are provided to both streets.</td><td>✓</td></tr>
<tr><td></td><td>Boundaries should be clearly defined between public open space and private areas</td><td>Public and private areas are clearly separated by levels, landscaping and dividing walls or fences.</td><td>✓</td></tr>
<tr><td>Objective 3E-1</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></td><td></td></tr>
<tr><td></td><td>Design criteria</td><td></td><td></td></tr>
<tr><td>1</td><td>Deep soil zones are to meet the following minimum requirements:
<table>
<tr><th>Site area</th><th>Minimum dimensions</th><th>Deep Soil Zone</th></tr>
<tr><td>less than 650m2</td><td>N/A</td><td></td></tr>
<tr><td>650m2 - 1,500m2</td><td>3m</td><td>7.00%</td></tr>
<tr><td>greater than 1,500m2</td><td>6m</td><td></td></tr>
<tr><td>greater than 1,500m2 with significant existing tree cover</td><td>6m</td><td></td></tr>
</table></td><td>Deep soil areas provided with a minimum dimension of 3m are 84.3 sqm which is 10.0% of the site area.</td><td>✓</td></tr>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:</td><td>Significantly more deep soil area is provided, particularly down the side setbacks, however some of this area</td><td>✓</td></tr>
</table>

<table>
<tr><td></td><td>• 10% of the site as deep soil on sites with an area of 650m2 - 1,500m2
• 15% of the site as deep soil on sites greater than 1,500m2</td><td>does not have a minimum dimension of 3m.</td><td></td></tr>
<tr><td></td><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:
• basement and sub basement car park design that is consolidated beneath building footprints
• use of increased front and side setbacks
• adequate clearance around trees to ensure long term health
• co-location with other deep soil areas on adjacent sites to
create larger contiguous areas of deep soil</td><td>There are no significant trees to retain on the site. Deep soil locations are provided primarily down side setbacks and fronting Whale Beach Rd to enhance screen planting between buildings and provide retention of neigbouring and street trees. The basement car park is located beneath the building footprint. Existing street and neighbouring trees T1 to T8 are retained.</td><td>✓</td></tr>
<tr><td></td><td>Achieving the design criteria may not be possible on some sites including where:
• the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres)
• there is 100% site coverage or non-residential uses at ground floor level.
Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure</td><td>Supplementary planting has been provided to balconies and terraces.</td><td>✓</td></tr>
<tr><td>Objective 3F-1</td><td>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></tr>
<tr><td>1</td><td>Design criteria</td><td></td><td></td></tr>
<tr><td></td><td>1. 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:
<table><tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr><tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr></table></td><td>Due to the site constraints, slope and shape of the site it is not possible to comply with a 6m setback to both sides. A 4m setback is proposed which exceeds the Pittwater DCP requirements by 1m to each side. External and internal visual privacy is provided by means of spatial separation, screen planting, balcony planter beds and external angled louvres which provide access to views while</td><td>X</td></tr>
</table>

	<table><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> Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties	excluding overlooking to neighbouring dwellings.	
	Design guidance		
	Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance	Steps to side boundaries are not required under the criteria. Steps to the northern and southern walls of the top level have been provided.	✓
	For residential buildings next to commercial buildings, separation distances should be measured as follows: • for retail, office spaces and commercial balconies use the habitable room distances • for service and plant areas use the non-habitable room distances	Not applicable.	✓
	New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: • site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) • on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)	New development is located and oriented to maximise visual privacy, with living areas and terraces oriented to the east. Bedrooms and are oriented to side setbacks and provided with screens to provide access to views while restricting overlooking.	✓
	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)	As the site width varies between 19.830 and 29.360m, a side setback of 9m to each side would result in no area for development. A 4m setback is proposed which exceeds the Pittwater DCP control by 1m to each side.	X
	Direct lines of sight should be avoided for windows and balconies across corners	Direct lines of sight are avoided at corners.	✓

	No separation is required between blank walls	Not applicable	✓
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		
	Design guidance		
	Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: • setbacks • solid or partially solid balustrades to balconies at lower levels • fencing and/or trees and vegetation to separate spaces • screening devices • bay windows or pop out windows to provide privacy in one direction and outlook in another • raising apartments/private open space above the public domain or communal open space • planter boxes incorporated into walls and balustrades to increase visual separation • pergolas or shading devices to limit overlooking of lower apartments or private open space • on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies	Private open space and windows to apartments are separated from common areas, public areas and access paths by means of the noted design solutions.	✓
	Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas	Bedrooms, living spaces and other habitable rooms are separated from gallery access.	✓
	Balconies and private terraces should be located in front of living rooms to increase internal privacy	Balconies are located in front of living areas.	✓
	Windows should be offset from the windows of adjacent buildings	Windows are offset from the windows of adjacent buildings.	✓
	Recessed balconies and/or vertical fins should be used between adjacent balconies	Recessed balconies and vertical fins are utilised between adjacent balconies and to side balconies.	✓
Objective 3G-1	Building entries and pedestrian access connects to and addresses the public domain		

	Design guidance		
	Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge	Multiple entries are provided.	✓
	Entry locations relate to the street and subdivision pattern and the existing pedestrian network	Entry locations relate to the street and enhance the existing pedestrian network.	✓
	Building entries should be clearly identifiable and communal. Entries should be clearly distinguishable from private entries.	Building entries are clearly identifiable and are communal, fronting public space. They are distinguished from private entries.	✓
	Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries	Not applicable	✓
Objective 3G-2	Access, entries and pathways are accessible and easy to identify		
	Design guidance		
	Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces	Building access areas are clearly visible from the public domain.	✓
	The design of ground floors and underground car parks minimise level changes along pathways and entries	The ground floor is level with access to Surf Road. A level change is unavoidable to Whale Beach Road due to the height limitations.	✓
	Steps and ramps should be integrated into the overall building and landscape design	Steps and ramps are integrated into the landscape design.	✓
	For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)	Not Applicable	✓
	For large developments electronic access and audio/video intercom should be provided to manage access	Electronic access and audio/video intercom will be provided.	✓
Objective 3G-3	Large sites provide pedestrian links for access to streets and connection to destinations		
	Design guidance		
	Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	The site is not a large site.	✓
	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	Not applicable	✓

Objective 3H-1	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes		
	Design guidance		
	Car park access should be integrated with the building's overall facade. Design solutions may include: • the materials and colour palette to 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	Carpark access is integrated with the building's overall façade. Access has security doors to parking areas	✓
	Car park entries should be located behind the building line	Car park entries are located behind the building line	✓
	Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	Vehicle entries are located on the lowest point of the site.	✓
	Car park entry and access should be located on secondary streets or lanes where available	The car park entry is located on Surf Road, leaving the Whale Beach Road frontage free of driveway access.	✓
	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	Vehicle standing areas are avoided.	✓
	Access point locations should avoid headlight glare to habitable rooms	Apartments are separated from access points.	✓
	Adequate separation distances should be provided between vehicle entries and street intersections	Access points are separated from intersections.	✓
	The width and number of vehicle access points should be limited to the minimum	Access points are limited to one.	✓
	Visual impact of long driveways should be minimised through changing alignments and screen planting	Long driveways are avoided.	✓
	The need for large vehicles to enter or turn around within the site should be avoided	There is no access for large vehicles.	✓
	Garbage collection, loading and servicing areas are screened	Garbage areas are screened.	✓
	Clear sight lines should be provided at pedestrian and vehicle crossings	Clear sight lines are provided.	✓
	Traffic calming devices such as changes in paving material or textures should be used where appropriate	Changes in paving material will be provided where appropriate.	✓

	Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: • changes in surface materials • level changes • the use of landscaping for separation	Pedestrian and vehicle access is separated.	✓
Objective 3J-1	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: • 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	The site is not within 800m of a railway station and is not on land zoned or within 400m of land zoned B3, B4 or equivalent. 18 parking spaces are provided off street.	✓
	Design guidance		
	Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	Car share spaces on site are not applicable, but could be provided at the Beach carpark in consultation with Council.	✓
	Where less car parking is provided in a development, council should not provide on street resident parking permits	The proposal increases the carparking on site from 2 to 18 with no change of usage. Resident parking permits should be provided.	✓
Objective 3J-2	Parking and facilities are provided for other modes of transport		
	Design guidance		
	Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	Parking is provided for motorbikes and scooters	✓
	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	Secure undercover parking is provided for 6 bicycles.	✓
	Conveniently located charging stations are provided for electric vehicles, where desirable	Electric charging stations will be provided to residential and retail spaces.	✓
Objective 3J-3	Car park design and access is safe and secure		
	Design guidance		

	Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	These facilities can be accessed without crossing carparking spaces.	✓
	Direct, clearly visible and well lit access should be provided into common circulation areas	This is provided.	✓
	A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	Carpark lobbies are provided.	✓
Objective 3J-4	Visual and environmental impacts of underground car parking are minimised		
	Design guidance		
	Excavation should be minimised through efficient car park layouts and ramp design	Carparks are as efficient as possible given the site constraints.	✓
	Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles	Car parking uses double loaded aisles in an efficient arrangement.	✓
	Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	The carpark does not protrude above ground level.	✓
	Natural ventilation should be provided to basement and sub basement car parking areas	Natural ventilation is provided to car parks, supplemented by mechanical extraction.	✓
Objective 3J-5	Visual and environmental impacts of on-grade car parking are minimised		
	Design guidance		
	On-grade car parking should be avoided	There is no on-grade parking	✓
	Where on-grade car parking is unavoidable, the following design solutions are used: • parking is located on the side or rear of the lot away from the primary street frontage • cars are screened from view of streets, buildings, communal and private open space areas • safe and direct access to building entry points is provided • parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space • stormwater run-off is managed appropriately from car parking surfaces • bio-swales, rain gardens or on site detention tanks are provided, where appropriate	Not applicable	✓

	• 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		
Objective 3J-6	Visual and environmental impacts of above ground enclosed car parking are minimised		
	Design guidance		
	Exposed parking should not be located along primary street frontages	There is no exposed on-site parking.	✓
	Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: • car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) • car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9)	There is no on-grade parking	✓
	Positive street address and active frontages should be provided at ground level	Active street frontages are provided to both Whale Beach Road and Surf Road.	✓
PART 4	DESIGNING THE BUILDING	RESPONSE / COMPLIANCE	COMPLIANCE
Objective 4A-1	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space		
	Design criteria		
1.	1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	100% of living areas and private open spaces receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter.	✓
2	In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours	Not applicable	✓

	direct sunlight between 9 am and 3 pm at mid winter		
3	A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter	No apartments receive no direct sunlight between 9 am and 3 pm at mid-winter	✓
	Design guidance		
	The design maximises north aspect and the number of single aspect south facing apartments is minimised	The primary orientation of the building is to the east due to the site orientation and view, but all apartments have a dual orientation and some access to the northern aspect.	✓
	Single aspect, single storey apartments should have a northerly or easterly aspect	There are no single access apartments. All apartments have at least an easterly aspect.	✓
	Living areas are best located to the north and service areas to the south and west of apartments	Living areas are located to the north where possible, or have access to the north-eastern aspect.	✓
	To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: • dual aspect apartments • shallow apartment layouts • two storey and mezzanine level apartments • bay windows	All apartments are dual aspect with a shallow depth. One apartment uses a two-storey layout. Bay windows are incorporated.	✓
	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	This is achieved as demonstrated on the solar studies.	✓
	Achieving the design criteria may not be possible on some sites. This includes: • where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source • on south facing sloping sites • where significant views are oriented away from the desired aspect for direct sunlight Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective	Not applicable.	✓
Objective 4A-2	Daylight access is maximised 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	There are no internal courtyards.	✓
	Where courtyards are used : • use is restricted to kitchens, bathrooms and service areas • building services are concealed with appropriate detailing and materials to visible walls • courtyards are fully open to the sky • access is provided to the light well from a communal area for cleaning and maintenance • acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved Opportunities for reflected light into apartments are optimised through: • reflective exterior surfaces on buildings opposite south facing windows • positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light • integrating light shelves into the design • light coloured internal finishes	Not applicable	✓
Objective 4A-3	Design incorporates shading and glare control, particularly for warmer months		
	Design guidance		
	A number of the following design features are used: • balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas • shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting • horizontal shading to north facing windows • vertical shading to east and particularly west facing windows • operable shading to allow adjustment and choice • high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)	Balconies and sun shading to exclude summer sun and permit winter sun, shading devices, horizontal shading to north facing windows and vertical shading to east and west facing openings are all utilised in the design.	✓
Objective 4B-1	All habitable rooms are naturally ventilated		
	Design guidance		

	The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms	The building has a north and easterly orientation, capturing the prevailing north easterly breezes.	✓
	Depths of habitable rooms support natural ventilation	Apartment depths and the central breezeway support natural ventilation.	✓
	The area of unobstructed window openings should be equal to at least 5% of the floor area served	This is achieved for all habitable rooms.	✓
	Light wells are not the primary air source for habitable rooms	There are no internal light wells	✓
	Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: • adjustable windows with large effective openable areas • a variety of window types that provide safety and flexibility such as awnings and louvres • windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors	Stacking doors, louvres and highlight operable windows facilitate and maximise occupant control of natural ventilation.	✓
Objective 4B-2	The layout and design of single aspect apartments maximises natural ventilation		
	Design guidance		✓
	Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	Apartment depths are limited.	✓
	Natural ventilation to single aspect apartments is achieved with the following design solutions: • primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) • stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries • courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells	There are no single aspect apartments.	✓
Objective 4B-3	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents		
	Design criteria		

<table>
<tr><td>1</td><td>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</td><td>100% of apartments are cross ventilated.</td><td>✓</td></tr>
<tr><td>2</td><td>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</td><td>No apartment depths exceed 18m.</td><td>✓</td></tr>
<tr><td></td><td>Design guidance</td><td></td><td>✓</td></tr>
<tr><td></td><td>The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths</td><td>All apartments are dual aspect or corner apartments.</td><td>✓</td></tr>
<tr><td></td><td>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)</td><td>Opening sizes are approximately equal on different sides of apartments.</td><td>✓</td></tr>
<tr><td></td><td>Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow</td><td>Apartments have clear ventilation pathways.</td><td>✓</td></tr>
<tr><td></td><td>Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow</td><td>Apartment depths and ceiling heights maximise cross ventilation and airflow.</td><td>✓</td></tr>
<tr><td>Objective 4C-1</td><td>Ceiling height achieves sufficient natural ventilation and daylight access</td><td></td><td></td></tr>
<tr><td></td><td>Design criteria</td><td></td><td></td></tr>
<tr><td></td><td>1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:
<table>
<tr><th>Minimum ceiling height for apartment and mixed use buildings</th><th></th></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
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 degree minimum ceiling slope</td></tr>
<tr><td>If located in mixed used 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>All habitable rooms have a minimum ceiling height of 2.7m. All non-habitable rooms have a minimum ceiling height of 2.4m. All ground floor commercial or mixed use areas have a minimum ceiling height of 3.3m.</td><td>✓</td></tr>
</table>

<table>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>Ceiling height can accommodate use of ceiling fans for cooling and heat distribution</td><td>Ceiling fans will be provided.</td><td>✓</td></tr>
<tr><td>Objective 4C-2</td><td>Ceiling height increases the sense of space in apartments and provides for well proportioned rooms</td><td></td><td></td></tr>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>A number of the following design solutions can be used:
• the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces
• well proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings
• ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist</td><td>Ceiling heights are maximised and a height hierarchy is used.</td><td>✓</td></tr>
<tr><td>Objective 4C-3</td><td>Ceiling heights contribute to the flexibility of building use over the life of the building</td><td></td><td></td></tr>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>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)</td><td>Not applicable.</td><td>✓</td></tr>
<tr><td>Objective 4D-1</td><td>The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</td><td></td><td></td></tr>
<tr><td></td><td>Design criteria</td><td></td><td></td></tr>
<tr><td>1</td><td>Apartments are required to have the following minimum internal areas:
<table>
<tr><th>Apartment type</th><th>Minimum internal area</th></tr>
<tr><td>Studio</td><td>35m2</td></tr>
<tr><td>1 bedroom</td><td>50m2</td></tr>
<tr><td>2 bedroom</td><td>70m2</td></tr>
<tr><td>3 bedroom</td><td>90m2</td></tr>
</table>
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each.</td><td>Proposed apartment areas exceed the minimum.
<table>
<tr><th>Apartment No.</th><th>Beds/ Bath</th><th>Min Area</th><th>Area Proposed</th></tr>
<tr><td>Apartment 1</td><td>3 bed 3 bath</td><td>100</td><td>175</td></tr>
<tr><td>Apartment 2</td><td>4 bed 4 bath</td><td>117</td><td>219</td></tr>
<tr><td>Apartment 3</td><td>3 bed 3 bath</td><td>100</td><td>167</td></tr>
<tr><td>Apartment 4</td><td>2 bed 2 bath</td><td>75</td><td>151</td></tr>
<tr><td>Apartment 5</td><td>3 bed 3 bath</td><td>100</td><td>207</td></tr>
</table></td><td>✓</td></tr>
</table>

	A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each		
2	Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	All habitable rooms have windows which comply with this criteria.	✓
	Design guidance		
	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)	Kitchens are separated from entry spaces.	✓
	A window should be visible from any point in a habitable room	Windows are visible from any point in habitable rooms.	✓
	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	Minimum areas and room dimensions are met.	✓
Objective 4D-2	Environmental performance of the apartment is maximised		
	Design criteria		
	1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height	Habitable room ceiling heights are 2.7 to 3m high, requiring maximum depths of 6.75 to 7.5m. Room depths comply with this control.	✓
	2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	Maximum habitable room depths are less than 8m.	✓
	Design guidance		
	Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	Room depths comply	✓
	All living areas and bedrooms should be located on the external face of the building	All living areas and bedrooms are located on the external face of the building.	✓
	Where possible: • bathrooms and laundries should have an external openable window • main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	Main living spaces are oriented toward the primary outlook and away from noise sources. Bathrooms and laundries have openable windows where possible.	✓

Objective 4D-3	Apartment layouts are designed to accommodate a variety of household activities and needs		
	Design criteria		
1	Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)	Master bedrooms exceed 10sqm and other bedrooms exceed 9sqm.	✓
2	Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	All bedrooms exceed this width.	✓
3	Living rooms or combined living/dining rooms have a minimum width of: • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments	All living rooms exceed this width.	✓
4	The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	There are no cross-over or cross-through apartments.	✓
	Design guidance		✓
	Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	Access to bedrooms, bathrooms and laundries is separated from living areas.	✓
	All bedrooms allow a minimum length of 1.5m for robes	All bedrooms have a minimum length of 1.5m for robes	✓
	The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	All main bedroom have larger wardrobes than nominated.	✓
	Apartment layouts allow flexibility over time, design solutions may include: • dimensions that facilitate a variety of furniture arrangements and removal • spaces for a range of activities and privacy levels between different spaces within the apartment • dual master apartments • dual key apartments Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments • room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1)) • efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms	Apartment designs allow for flexibility over time.	✓

<table>
<tr><td>Objective 4E-1</td><td>Apartments provide appropriately sized private open space and balconies to enhance residential amenity</td><td></td><td></td></tr>
<tr><td></td><td>Design criteria
1. All apartments are required to have primary balconies as follows:
<table><tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr><tr><td>Studio apartments</td><td>4m2</td><td>-</td></tr><tr><td>1 bedroom apartments</td><td>8m2</td><td>2m</td></tr><tr><td>2 bedroom apartments</td><td>10m2</td><td>2m</td></tr><tr><td>3+ bedroom apartments</td><td>12m2</td><td>2.4m</td></tr></table>The minimum balcony depth to be counted as contributing to the balcony area is 1m</td><td>Terrace areas and minimum depths significantly exceed the minimum areas.
<table><tr><th>Apartment No.</th><th>Bed</th><th>Min Area</th><th>Area Proposed</th></tr><tr><td>Apartment 1</td><td>3</td><td>15</td><td>43</td></tr><tr><td>Apartment 2</td><td>4</td><td>15</td><td>23</td></tr><tr><td>Apartment 3</td><td>3</td><td>12</td><td>29</td></tr><tr><td>Apartment 4</td><td>2</td><td>10</td><td>29</td></tr><tr><td>Apartment 5</td><td>3</td><td>12</td><td>65</td></tr></table></td><td>✓</td></tr>
<tr><td></td><td>2. 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></tr>
<tr><td></td><td>Design guidance</td><td></td><td>✓</td></tr>
<tr><td></td><td>Increased communal open space should be provided where the number or size of balconies are reduced</td><td>Not applicable.</td><td>✓</td></tr>
<tr><td></td><td>Storage areas on balconies is additional to the minimum balcony size</td><td>Storage areas are not included/</td><td>✓</td></tr>
<tr><td></td><td>Balcony use may be limited in some proposals by:
• consistently high wind speeds at 10 storeys and above
• close proximity to road, rail or other noise sources
• exposure to significant levels of aircraft noise
• heritage and adaptive reuse of existing buildings
In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated</td><td>Not applicable.</td><td>✓</td></tr>
<tr><td>Objective 4E-2</td><td>Primary private open space and balconies are appropriately located to enhance liveability for residents</td><td></td><td></td></tr>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
</table>

	Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space	Primary open space and balconies are located adjacent to the living areas.	✓
	Private open spaces and balconies predominantly face north, east or west	Private open spaces and balconies predominantly face north or east	✓
	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	Primary open space and balconies are orientated with the longer side facing outwards	✓
Objective 4E-3	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	Balustrades are generally solid or partially solid.	✓
	Full width full height glass balustrades alone are generally not desirable	Full height glass balustrades are not proposed.	✓
	Projecting balconies should be integrated into the building design and the design of soffits considered	Projecting balconies are integrated into the building design. Soffits are considered, timber lined and integrated with the design.	✓
	Operable screens, shutters, hoods and pergolas are used to control sunlight and wind	Operable sunshades are proposed to some apartments	✓
	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	Balustrades are set back with planter beds to provide privacy from overlooking.	✓
	Downpipes and balcony drainage are integrated with the overall facade and building design	Downpipes and balcony drainage are integrated.	✓
	Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	Air conditioning units are fully integrated into the building design.	✓
	Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	Clothes drying areas are screened and are fully integrated into the building design.	✓
	Ceilings of apartments below terraces should be insulated to avoid heat loss	Ceilings below terraces will be insulated.	✓

	Water and gas outlets should be provided for primary balconies and private open space	Water and gas outlets will be provided for primary balconies and private open space	✓
Objective 4E-4	Private open space and balcony design maximises safety		
	Design guidance		
	Changes in ground levels or landscaping are minimised	Private open space and balconies have level access to living areas.	✓
	Design and detailing of balconies avoids opportunities for climbing and falls	Balconies do not provide opportunities for climbing and falls	✓
Objective 4F-1	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	There are only 5 apartments	✓
	For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	Not applicable.	✓
	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	Corridor widths are greater than minimum required.	✓
	Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	Daylight and natural ventilation are provided to all common circulation spaces	✓
	Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	Windows are provided to common circulation spaces and are adjacent to the stair and lift.	✓
	Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: • a series of foyer areas with windows and spaces for seating • wider areas at apartment entry doors and varied ceiling heights	There are no corridors greater than 12m	✓
	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	The central common circulation spaces permit dual aspect apartments to every level.	✓
	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	Not Applicable	✓

	common lobbies, corridors and apartments should be demonstrated, including: • sunlight and natural cross ventilation in apartments • access to ample daylight and natural ventilation in common circulation spaces • common areas for seating and gathering • generous corridors with greater than minimum ceiling heights • other innovative design solutions that provide high levels of amenity		
	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	Not Applicable	✓
	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	Primary living room or bedroom windows do not open directly onto common circulation spaces.	✓
Objective 4F-2	Common circulation spaces promote safety and provide for social interaction between residents		
	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	Apartment entries open directly from the central circulation space.	✓
	Tight corners and spaces are avoided	These are avoided	✓
	Circulation spaces should be well lit at night	Good lighting to circulation spaces will be provided.	✓
	Legible signage should be provided for apartment numbers, common areas and general wayfinding	Legible signage will be provided for apartment numbers	✓
	Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided	Incidental spaces are provided	✓
	In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space	Not applicable	✓
	Where external galleries are provided, they are more open than closed above the balustrade along their length	External galleries are not provided.	✓
Objective 4G-1	Adequate, well designed storage is provided in each apartment		

<table>
<tr><td></td><td>Design criteria</td><td></td><td></td></tr>
<tr><td>1</td><td>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:
<table>
<tr><th>Dwelling type</th><th>Storage size volume</th></tr>
<tr><td>Studio apartments</td><td>4m3</td></tr>
<tr><td>1 bedroom apartments</td><td>6m3</td></tr>
<tr><td>2 bedroom apartments</td><td>8m3</td></tr>
<tr><td>3+ bedroom apartments</td><td>10m3</td></tr>
</table>
At least 50% of the required storage is to be located within the apartment</td><td>The proposed development provides significantly more than the required storage area within each apartment. Additional storage is located in a dedicated store area in the basement car parking level. All apartments comply with the minimum storage volumes.</td><td>✓</td></tr>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>Storage is accessible from either circulation or living areas</td><td>Storage is accessible from either circulation or living areas</td><td>✓</td></tr>
<tr><td></td><td>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</td><td>Integrated storage is provided to each balcony</td><td>✓</td></tr>
<tr><td></td><td>Left over space such as under stairs is used for storage</td><td>Additional spaces are utilised for storage.</td><td>✓</td></tr>
<tr><td>Objective 4G-2</td><td>Additional storage is conveniently located, accessible and nominated for individual apartments</td><td></td><td></td></tr>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>Storage not located in apartments is secure and clearly allocated to specific apartments</td><td>Basement storage will be allocated to specific apartments and secured.</td><td>✓</td></tr>
<tr><td></td><td>Storage is provided for larger and less frequently accessed items</td><td>Additional basement storage is provided for boats / trailers.</td><td>✓</td></tr>
<tr><td></td><td>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</td><td>Storage will be provided at the rear of parking spaces where practicable.</td><td>✓</td></tr>
<tr><td></td><td>If communal storage rooms are provided they should be accessible from common circulation areas of the building</td><td>Communal storage is provided in the basement and is accessible from communal areas.</td><td>✓</td></tr>
<tr><td>Objective 4H-1</td><td>Noise transfer is minimised through the siting of buildings and building layout</td><td></td><td></td></tr>
<tr><td></td><td>Design guidance</td><td></td><td></td></tr>
<tr><td></td><td>Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy)</td><td>Adequate separation is provided between buildings to ensure privacy and noise transmission.</td><td>✓</td></tr>
<tr><td></td><td>Window and door openings are generally orientated away from noise sources</td><td>Bedrooms are located adjacent to side setbacks, away from noise sources.</td><td>✓</td></tr>
</table>

	Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas	Building entries and circulation areas are separated from quiet areas such as bedrooms.	✓
	Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources	Internal corridors and storage are located adjacent to common circulation areas.	✓
	The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	The number of party walls is limited.	✓
	Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms	These areas are located more than 3m away from bedrooms.	✓
Objective 4H-2	Noise impacts are mitigated within apartments through layout and acoustic treatments		
	Design guidance		
	Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: • rooms with similar noise requirements are grouped together • doors separate different use zones • wardrobes in bedrooms are co-located to act as sound buffers	Internal apartment layout separates noisy spaces from quiet spaces.	✓
	Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: • double or acoustic glazing • acoustic seals • use of materials with low noise penetration properties • continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements	Not Applicable	✓
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		✓
	Design guidance		✓
	To minimise impacts the following design solutions may be used: • physical separation between buildings and the noise or pollution source • residential uses are located perpendicular to the noise source and where possible buffered by other uses	The environment is generally quiet. The loudest noises are predominantly natural such as the surf and wind. Consideration has been given to separation between the proposed retail and residential areas of the building, with noise	✓

	• non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces • non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources • buildings should respond to both solar access and noise. Where solar access is away from the noise source, non- habitable rooms can provide a buffer • where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) • landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	shielding occurring using terraces, plinths and location of quiet areas. Trading hours are also likely to limit the potential for high impact noises from retail areas.	
	Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: • solar and daylight access • private open space and balconies • natural cross ventilation	Not applicable.	✓
Objective 4J-2	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission		
	Design guidance		
	Design solutions to mitigate noise include: • limiting the number and size of openings facing noise sources • providing seals to prevent noise transfer through gaps • using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) • using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits	The design limits the number and size of openings facing noise sources. Acoustic seals, double glazing, solid balconies and external screens are incorporated in the building.	✓

Objective 4K-1	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	The apartment types range from 2 bedroom to 4 bedroom in various configurations.	✓
	The apartment mix is appropriate, taking into consideration: • the distance to public transport, employment and education centres • the current market demands and projected future demographic trends • the demand for social and affordable housing • different cultural and socioeconomic groups	The apartment mix is appropriate to the area.	✓
	Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	Flexible apartment configurations are provided including a separable two storey apartment, an apartment abutting a small retail / office space, and larger apartments with potential for live in care.	✓
Objective 4K-2	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 optimise solar access (see figure 4K.3)	Different apartment types are used to modulate the façade (ie the 2 level apartment).	✓
	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	The largest apartment is located on the roof level.	✓
Objective 4L-1	Street frontage activity is maximised where ground floor apartments are located		
	Design guidance		
	Direct street access should be provided to ground floor apartments	Direct street access is not feasible due to the slope of the site and commercial usage required at ground levels.	X
	Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: • both street, foyer and other common internal circulation entrances to ground floor apartments • private open space is next to the street	Street, foyer and internal circulation are combined. Private open space overlooks Surf Road.	✓

	• doors and windows face the street		
	Retail or home office spaces should be located along street frontages	Retail spaces are located along the street frontages.	✓
	Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion	Apartment 4 supports integration with Retail 2 or 3 for future conversion. It has higher floor to ceiling heights of 3.3m.	✓
Objective 4L-2	Design of ground floor apartments delivers amenity and safety for residents		
	Design guidance		
	Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include: • elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4) • landscaping and private courtyards • window sill heights that minimise sight lines into apartments • integrating balustrades, safety bars or screens with the exterior design	Private open spaces and terraces are elevated above street level with semi solid balustrades to provide casual surveillance while maintaining privacy.	✓
	Solar access should be maximised through: • high ceilings and tall windows • trees and shrubs that allow solar access in winter and shade in summer	Full height windows and doors are provided to eastern and northern facades. Windows are limited in size to southern and western facades. Landscaping is appropriate for solar access.	✓
Objective 4M-1	Building facades provide visual interest along the street while respecting the character of the local area		
	Design guidance		
	Design solutions for front building facades may include: • a composition of varied building elements • a defined base, middle and top of buildings • revealing and concealing certain elements • changes in texture, material, detail and colour to modify the prominence of elements	Design solutions include a composition of varied building elements, a defined plinth relating to the landscape levels on Surf Road, a central void to break down the form, changes in texture, material detail and colour. The proposed building is richly modelled and sculptural in form.	✓
	Building services should be integrated within the overall facade	Building services are integrated in the façade.	✓
	Building facades should be well resolved with an appropriate scale and proportion to	The building form is carefully composed. Horizontality is	✓

	the streetscape and human scale. Design solutions may include: • well composed horizontal and vertical elements • variation in floor heights to enhance the human scale • elements that are proportional and arranged in patterns • public artwork or treatments to exterior blank walls • grouping of floors or elements such as balconies and windows on taller buildings	expressed by the exposed floor slabs, modelled shading devices and cantilevered balconies. Floor heights are varied and elements are proportioned to the human scale.	
	Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	Not applicable. No consistent streetscape is established to provide key datum lines.	✓
	Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals	The design is highly articulated using cantilevered and deep set balconies, projecting shading devices and a central recess.	✓
Objective 4M-2	Building functions are expressed by the facade		
	Design guidance		
	Building entries should be clearly defined	The entries to both streets are clearly defined by façade changes.	✓
	Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	The corners of the building are articulated.	✓
	The apartment layout should be expressed externally through facade features such as party walls and floor slabs	Floor slabs are exposed and bedrooms and living spaces clearly differentiated.	✓
Objective 4N-1	Roof treatments are integrated into the building design and positively respond to the street		
	Design guidance		
	Roof design relates to the street. Design solutions may include: • special roof features and strong corners • use of skillion or very low pitch hipped roofs • breaking down the massing of the roof by using smaller elements to avoid bulk • using materials or a pitched form complementary to adjacent buildings	The roof design is primarily flat but incorporates roof features such as a low pitched projecting roof over the vertical element of the lift overrun.	✓
	Roof treatments should be integrated with the building design. Design solutions may include: • roof design proportionate to the overall building size, scale and form	Roof treatments are integrated with the design.	✓

	• roof materials compliment the building • service elements are integrated		
Objective 4N-2	Opportunities to use roof space for residential accommodation and open space are maximised		
	Design guidance		
	Habitable roof space should be provided with good levels of amenity. Design solutions may include: • penthouse apartments • dormer or clerestory windows • openable skylights	Habitable roof space is not permitted under the Pittwater DCP.	✓
	Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	Habitable roof space is not permitted under the Pittwater DCP, however access is provided for servicing and maintenance.	✓
Objective 4N-3	Roof design incorporates sustainability features		
	Design guidance		
	Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: • the roof lifts to the north • eaves and overhangs shade walls and windows from summer sun	The roof does not have large eaves in order to minimised bulk and scale however sun shading is provided by awning and sunshade devices.	✓
	Skylights and ventilation systems should be integrated into the roof design	Skylights and ventilation are integrated.	✓
Objective 4O-1	Landscape design is viable and sustainable		
	Design guidance		
	Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: • diverse and appropriate planting • bio-filtration gardens • appropriately planted shading trees • areas for residents to plant vegetables and herbs • composting • green roofs or walls	Plant selection is limited by the exposed and proximate coastal conditions. Appropriate planting has been carefully selected and planter beds incorporated into each apartment with the opportunity for composting and cultivation of herbs and vegetables.	✓
	Ongoing maintenance plans should be prepared	Ongoing maintenance plans will be developed.	✓
	Microclimate is enhanced by: • appropriately scaled trees near the eastern and western elevations for shade • a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter	Trees are appropriately scaled to provide screening down side setbacks and shading to the western streetscape. Awnings and shade structures are provided to terraces.	✓

	• shade structures such as pergolas for balconies and courtyards		
	Tree and shrub selection considers size at maturity and the potential for roots to compete (see Table 4)	Trees and shrubs are appropriately sized.	✓
Objective 4O-2	Landscape design contributes to the streetscape and amenity		
	Design guidance		
	Landscape design responds to the existing site conditions including: • changes of levels • views • significant landscape features including trees and rock outcrops	The landscape design will significantly enhance the current site conditions whilst preserving views.	✓
	Significant landscape features should be protected by: • tree protection zones (see figure 4O.5) • appropriate signage and fencing during construction	Significant landscape features are preserved where appropriate. Existing street trees are preserved.	✓
	Plants selected should be endemic to the region and reflect the local ecology	Plant species are selected from Northern Beaches Council website recommended list. Shrub and foliage plants have been selected to provide stimulating variety of seasonal colour and flower and include hardy salt and wind tolerant species.	✓
Objective 4P-1	Appropriate soil profiles are provided		
	Design guidance		
	Structures are reinforced for additional saturated soil weight	Structures will be engineered to support saturated soil weight.	✓
	Soil volume is appropriate for plant growth, considerations include: • modifying depths and widths according to the planting mix and irrigation frequency • free draining and long soil life span • tree anchorage	The landscape design has taken into account appropriate soil volumes and exposure for plant selection.	✓
	Minimum soil standards for plant sizes should be provided in accordance with Table 5	The proposed planting schedule is in accordance with the table.	✓
Objective 4P-2	Plant growth is optimised with appropriate selection and maintenance		
	Design guidance		
	Plants are suited to site conditions, considerations include: • drought and wind tolerance • seasonal changes in solar access	Plant species selection has taken into account the exposed coastal location	✓

	• modified substrate depths for a diverse range of plants • plant longevity		
	A landscape maintenance plan is prepared	A landscape maintenance plan will be prepared.	✓
	Irrigation and drainage systems respond to: • changing site conditions • soil profile and the planting regime • whether rainwater, stormwater or recycled grey water is used	An integrated and responsive irrigation system will be provided.	✓
Objective 4P-3	Planting on structures contributes to the quality and amenity of communal and public open spaces		
	Design guidance		
	Building design incorporates opportunities for planting on structures. Design solutions may include: • green walls with specialised lighting for indoor green walls • wall design that incorporates planting • green roofs, particularly where roofs are visible from the public domain • planter boxes Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time	Planter boxes are provided to the majority of apartments. Excavated sandstone walls, where appropriate, will be left exposed and incorporate opportunities for pocket planting.	✓
Objective 4Q-1	Planting on structures contributes to the quality and amenity of communal and public open spaces		
	Design guidance		
	Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features	All apartments will comply with the Livable Housing Guideline's silver level universal design features	✓
Objective 4Q-2	A variety of apartments with adaptable designs are provided		
	Design guidance		
	Adaptable housing should be provided in accordance with the relevant council policy	Apartment 5 and the lower level of Apartment 2 are adaptable, which exceeds Council's requirements.	✓
	Design solutions for adaptable apartments include: • convenient access to communal and public areas • high level of solar access • minimal structural change and residential amenity loss when adapted	These features are incorporated into the design.	✓

	• larger car parking spaces for accessibility • parking titled separately from apartments or shared car parking arrangements		
Objective 4Q-3	Apartment layouts are flexible and accommodate a range of lifestyle needs		
	Design guidance		
	Apartment design incorporates flexible design solutions which may include: • rooms with multiple functions • dual master bedroom apartments with separate bathrooms • larger apartments with various living space options • open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom	Apartment design incorporates flexible solutions including rooms that may be used as bedrooms or studies, storage areas that may incorporate desks or appliances, and apartments with various living spaces.	✓
Objective 4R-1	New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place		
	Design guidance		
	Design solutions may include: • new elements to align with the existing building • additions that complement the existing character, siting, scale, proportion, pattern, form and detailing • use of contemporary and complementary materials, finishes, textures and colours	Not applicable	✓
	Additions to heritage items should be clearly identifiable from the original building	Not applicable	✓
	New additions allow for the interpretation and future evolution of the building	Not applicable	✓
Objective 4R-2	Adapted buildings provide residential amenity while not precluding future adaptive reuse		
	Design guidance		
	Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: • generously sized voids in deeper buildings • alternative apartment types when orientation is poor	Not applicable	✓

	• using additions to expand the existing building envelope		
	Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: • where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) • alternatives to providing deep soil where less than the minimum requirement is currently available on the site • building and visual separation – subject to demonstrating alternative design approaches to achieving privacy • common circulation • car parking • alternative approaches to private open space and balconies	Not applicable	✓
Objective 4S-1	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement		
	Design guidance		
	Mixed use development should be concentrated around public transport and centres	The usage of the site is only proposed for Shop Top Housing	✓
	Mixed use developments positively contribute to the public domain. Design solutions may include: • development addresses the street • active frontages are provided • diverse activities and uses • avoiding blank walls at the ground level • live/work apartments on the ground floor level, rather than commercial	Not applicable	✓
Objective 4S-2	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents		✓
	Design guidance		✓
	Residential circulation areas should be clearly defined.	Residential entries are separated from commercial entries. Secure	✓

	Design solutions may include: • residential entries are separated from commercial entries and directly accessible from the street • commercial service areas are separated from residential components • residential car parking and communal facilities are separated or secured • security at entries and safe pedestrian routes are provided • concealment opportunities are avoided	entries and safe pedestrian routes are provided and concealment opportunities are avoided.	
	Landscaped communal open space should be provided at podium or roof levels	Communal open space is provided at ground levels with appropriate landscaping.	✓
Objective 4T-1	Awnings are well located and complement and integrate with the building design		
	Design guidance		
	Awnings should be located along streets with high pedestrian activity and active frontages	Awning or cantilevered terraces are provided to both street frontages.	✓
	A number of the following design solutions are used: • continuous awnings are maintained and provided in areas with an existing pattern • height, depth, material and form complements the existing street character • protection from the sun and rain is provided • awnings are wrapped around the secondary frontages of corner sites • awnings are retractable in areas without an established pattern	Awnings are integrated with the building design and wrap around corners where appropriate. Protection from the sun and rain is provided. There is no pattern of awnings in the streetscape.	✓
	Awnings should be located over building entries for building address and public domain amenity	Awnings or cover is provided over building entries.	✓
	Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure	Awnings are compatible with the streetscape features.	✓
	Gutters and down pipes should be integrated and concealed	Gutters and downpipes are integrated with the façade.	✓
	Lighting under awnings should be provided for pedestrian safety	Lighting will be provided below the awnings.	✓
Objective 4T-2	Signage responds to the context and desired streetscape character		
	Design guidance		
	Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	Signage for the commercial spaces is integrated with the design and appropriate in scale and detailing.	✓

	Legible and discrete way finding should be provided for larger developments	Required wayfinding signage will be provided.	✓
	Signage is limited to being on and below awnings and a single facade sign on the primary street frontage	Signage is limited and singular to each frontage.	✓
Objective 4U-1	Development incorporates passive environmental design		✓
	Design guidance		✓
	Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)	Adequate natural light is provided	✓
	Well located, screened outdoor areas should be provided for clothes drying	Screened outdoor spaces are provided for clothes drying.	✓
Objective 4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer		
	Design guidance		
	A number of the following design solutions are used: • the use of smart glass or other technologies on north and west elevations • thermal mass in the floors and walls of north facing rooms is maximised • polished concrete floors, tiles or timber rather than carpet • insulated roofs, walls and floors and seals on window and door openings • overhangs and shading devices such as awnings, blinds and screens	Fixed sun shading is proposed to north and western facades. Thermal mass is incorporated with stone tiles floors. Roofs, walls and floors will be insulated and windows and door openings sealed. Awnings blinds and screens are provided.	✓
	Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	Consolidated heating and cooling infrastructure is located in the basement.	✓
Objective 4U-3	Adequate natural ventilation minimises the need for mechanical ventilation		
	Design guidance		
	A number of the following design solutions are used: • rooms with similar usage are grouped together • natural cross ventilation for apartments is optimised • natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	Rooms with similar usage are grouped together (ie bedrooms), cross ventilation is optimised and natural ventilation is provided to all required habitable rooms.	✓
Objective 4V-1	Potable water use is minimised		
	Design guidance		

	Water efficient fittings, appliances and wastewater reuse should be incorporated	Water efficient fittings and appliances will be incorporated.	✓
	Apartments should be individually metered	Apartments will be individually metered.	✓
	Rainwater should be collected, stored and reused on site	Rainwater will be harvested and reused. A 15,000l tank is proposed.	✓
	Drought tolerant, low water use plants should be used within landscaped areas	Drought tolerant, low water use plant species have been selected and specified.	✓
Objective 4V-2	Urban stormwater is treated on site before being discharged to receiving waters		
	Design guidance		
	Water sensitive urban design systems are designed by a suitably qualified professional	Hydraulic engineers have designed the water sensitive urban design systems	✓
	A number of the following design solutions are used: • runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation • porous and open paving materials is maximised • on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	Rainwater runoff is collected from roofs and balconies in water tanks and plumbed into irrigation systems, porous and open paving materials are maximised and on site stormwater and infiltration, including bio-retention systems such as rain gardens are incorporated.	✓
Objective 4V-3	Flood management systems are integrated into site design		
	Design guidance		
	Detention tanks should be located under paved areas, driveways or in basement car parks	Detention tanks are located below a landscaped area due to levels across the steeply sloping site.	X
	On large sites parks or open spaces are designed to provide temporary on site detention basins	Not applicable	✓
Objective 4W-1	Waste storage facilities 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	Required garbage storage areas are provided to the ground floor and to the Whale Beach Road frontage in accordance with Council requirements.	✓
	Waste and recycling storage areas should be well ventilated	Waste and storage areas will be ventilated.	✓
	Circulation design allows bins to be easily manoeuvred between storage and collection points	Waste location areas allow easy manoeuvring to collection points.	✓

	Temporary storage should be provided for large bulk items such as mattresses	A bulk storage facility is provided.	✓
	A waste management plan should be prepared	A waste management plan is provided with this application.	✓
Objective 4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling		
	Design guidance		
	All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days worth of waste and recycling	All dwellings have capacity for a waste and recycling cupboard.	✓
	Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	Communal waste and recycling rooms are conveniently located and accessible.	✓
	For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses	Commercial and residential waste collection areas are separated.	✓
	Alternative waste disposal methods such as composting should be provided	The majority of apartments have planter beds and external areas sufficient to facilitate composting.	✓
Objective 4X-1	Building design detail provides protection from weathering		
	Design guidance		
	A number of the following design solutions are used: • roof overhangs to protect walls • hoods over windows and doors to protect openings • detailing horizontal edges with drip lines to avoid staining of surfaces • methods to eliminate or reduce planter box leaching • appropriate design and material selection for hostile locations	Awnings, hoods over windows and drip grooves are provided to prevent weathering. Planter beds will be constructed to avoid leaching. Material selection is appropriate to the exposed coastal location with no maintenance materials such as waterstruck bricks, off form concrete, copper cladding and roofing and clear anodised window and door frames.	✓
Objective 4X-2	Systems and access enable ease of maintenance		
	Design guidance		
	Window design enables cleaning from the inside of the building	Windows are generally accessible from terraces or cleanable from the inside.	✓
	Building maintenance systems should be incorporated and integrated into the design of the building form, roof and facade	All aspects of the building will be accessible for maintenance.	✓
	Design solutions do not require external scaffolding for maintenance access	No maintenance external materials have been provided to eliminate scaffolding for maintenance.	✓

	Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems	No mechanically operated external systems are proposed.	✓
	Centralised maintenance, services and storage should be provided for communal open space areas within the building	Basement areas are provided for building maintenance, services and storage.	✓
Objective 4X-3	Material selection reduces ongoing maintenance costs		✓
	Design guidance		✓
	A number of the following design solutions are used: • sensors to control artificial lighting in common circulation and spaces • natural materials that weather well and improve with time such as face brickwork • easily cleaned surfaces that are graffiti resistant • robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors	Sensors will be provided to control artificial lighting in common circulation and spaces. Natural materials that weather well and improve with time such as face brickwork, copper and off form concrete are proposed. Easily cleaned and durable materials such as face brickwork, stone and concrete are proposed for common circulation areas.	✓

3. DESIGN QUALITY PRINCIPLES

3.1. 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.

3.1.1. Statement of Compliance

The proposal has been designed to provide a high quality shop top housing development that responds to the context within the Whale Beach locality. The proposal responds to Principal 1 by providing an appropriately scaled building with basement car parking, of a similar height and scale as the existing building on the site and adjacent surf club. The proposed building is suitable in scale for its zoning and intention as a neighbourhood centre. The building complies with height and setback controls. The building form steps down the slope in line with the topography. The building form is highly articulated including a stepped form, projecting balconies, screens, a curvilinear form and a central recess which breaks down the bulk of the building vertically. The proposal provides active street frontages to both Whale Beach Road and Surf Road.

3.2. 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.

3.2.1. Statement of Compliance

The proposal is appropriate to the desired future character of the Whale Beach locality. The design responds to, reinforces and sensitively relates to the special characteristics of the existing built and natural environments. As the only commercially zoned lot in the precinct the site provides a focal point, and the form and scale is appropriate for this usage. The proposal activates the streetscapes including Surf Road immediately opposite the beachfront reserve, which will improve the amenity for the general public. The form is softened by landscaping and planting, with extensive planter beds and screen planting to side setbacks. The proposal presents a two story façade to Whale Beach Road and the landscaped plinth and setback of the building mass to Surf Road provides an appropriate human scale. Textures, materials, the arrangements of windows, modulation, spatial separation and landscaping are all compatible with the locality. The form is highly modulated, articulated and sculptural with cantilevered terraces, deeply recessed verandahs, awnings and tectonic shading devices contributing to the reduction of bulk.

3.3. 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.

3.3.1. Statement of Compliance

The proposed density is unchanged from the existing usage of the site, with five apartments and three commercial / retail units. The density is appropriate and in keeping with the envisioned zoning of a neighbourhood centre. The proposal provides a variety of commercial spaces and apartment types, allowing for flexibility and adaptability into the future.

3.4. 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.

3.4.1. Statement of Compliance

The proposal provides a development that incorporates the principles of sustainable design.

The building is designed to be solar passive, have good natural and cross ventilation, minimise potable water usage, harvest and recycle rainwater, utilise low energy fittings, appliances and water efficient fixtures. The building utilizes high quality materials that minimise maintenance and will weather well in the harsh coastal environment. The design incorporates an efficient heating and cooling system which is designed to be unnecessary for the majority of the time. Solar access, outlook privacy and amenity to all apartments is excellent. Water sensitive urban design systems have been incorporated in the design and appropriate and endemic plant species selected.

From an economic point of view, the proposed development will attract short-term employment opportunities during construction and potential long-term employment opportunities within the retail and commercial spaces. From a sociological aspect, the development provides a new substantially upgraded neighbourhood centre with significantly improved amenity for Whale Beach and transforms a neglected eyesore that has been deserving of attention for many years.

In light of the above the proposed development should be characterised as contributing to the locality both environmentally, socially and economically.

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

3.5.1. Statement of Compliance

The design of the landscaping is integral with the architecture. Extensive planter beds to terraces are designed to soften the building, provide the opportunity for individual owners to grow food and herbs and recycle as well as providing a continuity to soft landscaping over and around the building. Landscaping to side setbacks is designed to provide privacy and building separation while maintaining views and outlook as well as creating habitat. Landscaping to the north and west provides shade to outdoor areas. Street trees and landscaped areas of street frontages are selected to improve the precinct in the long term. Species selection has been carefully specified from endemic plants that will thrive in the hash coastal conditions. Landscaped areas will be supported and maintained by irrigation systems using harvested rainwater. The landscape design provides a beautiful, appropriate and sustainable setting that will continue to enhance the immediate environment over time.

3.6. 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.

3.6.1. Statement of Compliance

The site presents a challenging set of parameters and outstanding opportunities. The resolved design addresses the numerous site constraints and results in a design that achieves a high level of amenity for residential and commercial occupants, the public users of the building and neighbouring properties with minimal compromises. The building has an extremely limited impact on views from neighbouring properties, both to the sides and behind the site. Solar access, visual and acoustic privacy is preserved to adjacent properties. Despite significant excavation required to maintain height limits and accommodate the required floor space to make the project viable and provide the required parking, excellent levels of residential dwelling spaces are provided, each with a spectacular outlook and access to sunlight, natural ventilation, landscaping, ease of access, security, adaptable and variable spaces, seamless indoor to outdoor living, storage and services.

3.7. 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.

3.7.1. Statement of Compliance

Commercial and residential spaces are clearly separated and carefully defined to maintain privacy while enabling casual surveillance and active streetscapes. The locality is generally affluent and quiet with a low level of crime, so safety is not historically a significant issue. The building will respond to daytime commercial trading hours with public access to the retail areas adjacent to Whale Beach Road and Surf Road. Communal areas will be secure and well lit. Terrace configurations maintain privacy while providing casual surveillance opportunities.

3.8. 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 and providing opportunities for social interaction among residents.

3.8.1. Statement of Compliance

Apartment sizes range significantly in size and configuration, from three bedroom to four bedrooms, from single storey to two storey and penthouse layouts. Rooms are adaptable and of variable dimensions. One apartment has the ability to combine or configure with adjacent commercial space, providing flexibility into the future. All apartments provide accessible level access and exceed the Liveable Housing Guideline's silver level universal design features. Commercial and retail spaces are similarly varied and adaptable.

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

3.9.1. Statement of Compliance

The precinct lacks a defined street pattern and due to current zoning is unlikely to change in the near future. The building responds primarily to the landscape and topography. The proposed form is a well proportioned and articulated composition. It is sculptural and varied, responding to the different orientations and specific issues of that part of the site in different ways, which is appropriate for the context. The steep slope, largely suburban context, unusual lot shape, spectacular beachside location and unique zoning call for a singular design. The proposal responds accordingly.