Attachment 7 – Apartment Design Guidance Compliance Table

Apartment Design Compliance Table				
	Objective	**Design Criteria**	**Proposed**	**Council Comments**
Apartment Building Types	Objective 1A	Courtyard apartments provide a centralised open space area, generally range between three and six storeys in height and are suitable in both urban and suburban settings. Their configuration depends on the context and site orientation. Courtyard apartments are a highly adaptable building type and are best used when: • located on corner sites or sites with two or more public frontages • located on sloping sites • a landscaped street character is desired (by orienting the courtyard to the street) • an urban character to the street is desired (by creating a street wall edge and orienting the courtyard to the rear) • there is a predominant aspect or outlook.	116 residential apartments split between two buildings with centralised communal open space. Maximum height of building is six storeys. Predominant aspect or outlook is the water.	The proposal is located within precinct B2 of the Shell Cove master planned development. The development will be a gateway development in a prominent position when viewed from the water and from the land. The apartments have been orientated to maximise the predominant aspect of the ocean and waterfront views and solar access. The site provides street activation from all sides with garden apartments on all three sides of the development including resident pedestrian access to the street and palisade fencing which allows some passive surveillance as well as privacy and security. Vehicle access is from the secondary road to the south of the development. The site is considered suitable for this type of apartment.

Local Character and Context	Objective 1B	Good design responds and contributes to its context. Context is everything that has a bearing on an area and comprises its key natural and built features. Context also includes social, economic and environmental factors.		The development is guided by the Concept Approval in terms of form, use, height and number of storeys. The design is in keeping with this Approval. Further to the Concept Approval the proposal has responded well to the Design Review Panel process. Overall the proposal responds well to the coastal context of the site and surrounding future development.
	Objective 1C Precincts and Individual Site	Precincts are characterised by large land parcels or a group of larger sites undergoing extensive change. These sites often need to be restructured to support a change of land use mix, building height and density. Precinct plans typically incorporate new streets and infrastructure, through-site links and public open spaces that relate in scale, location and character to the local context.		The development forms part of Precinct B2 which is subject of a land subdivision Development Application approved in January 2020 (DA0287/2018). The proposal complies with the Design Guidelines created for this precinct as required by the Concept Approval.
	Objective 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.	Concept Approval provides primary development controls for this site. Use – Apartments Height – Maximum 22 metres Number of Storeys – 6. Yield for Precinct - Maximum 150.	The proposal complies with the primary development controls as provided by the Concept Approval.
	Objective 2B Building Envelopes	A building envelope is a three-dimensional volume that defines the outermost part of a site that the		The primary controls pertaining to this development are

		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.		enshrined in the Concept Approval.
	Objective 2C Building Height	Height controls should be informed by decisions about daylight and solar access, roof design and use, wind protection, residential amenity and in response to landform and heritage.	Height control determined by Concept Approval – maximum height of 22 metres for this site.	Development will not exceed the height limit set by the Concept Approval.
	Objective 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.	The Concept Approval does not include controls for FSR as height, number of storeys and yield is provided in its place.	Not applicable to land included in the Concept Approval.
	Objective 2E Building Depth	Use a range of appropriate maximum apartment depths of 12-18m from glass line to glass line when precinct planning and testing development controls. This will ensure that apartments receive adequate daylight and natural ventilation and optimise natural cross ventilation. Coordinate building height and building depth: • buildings that have smaller depths over a greater height deliver better residential amenity than those with greater depth and a lower height • greater building depths may be possible where higher ceiling heights	No control for building depth in measurement provided by Design Guidelines or Concept Approval.	The development complies with the controls included within the Concept Approval. Whilst the building depth is not specified in terms of measurement the development complies with height, number of storeys, and dwelling yield for the precinct. The solar impact of the development internally within the development and to the surrounding sites is satisfactory and therefore it is considered that the building depth is suitable.

		are provided, for example adaptive reuse of an existing building.		
	Objective 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. Minimum separation distances for buildings are: Up to four storeys (approximately 12m): • 12m between habitable rooms/balconies • 9m between habitable and non-habitable rooms • 6m between non-habitable rooms Five to eight storeys (approximately 25m): • 18m between habitable rooms/balconies • 12m between habitable and non-habitable rooms • 9m between non-habitable rooms	Building A is 6 storeys high. Building B is 4 storeys high. Minimum distance between these two buildings will be 7 metres between blank walls.	The proposed building separation complies with the ADGs. The building separation within the site is considered to provide acceptable privacy within the development, suitable solar access to the central courtyard of the development and the apartments that address the central courtyard. The development will be separated from surrounding future residential development by roads on each side of the site.
	Objective 2G-Setbacks	Determine street setback controls relative to the desired streetscape and building forms, for example: • define a future streetscape with the front building line • match existing development • step back from special buildings	Setbacks proposed: Articulation zone – 1 metres Primary setback (The Promontory Drive) – 3 metres. Secondary Street (Aquatic Drive) – 2 metres.	The primary controls pertaining to this development are enshrined in the Concept Approval.

		• retain significant trees • in centres the street setback may need to be consistent to reinforce the street edge • consider articulation zones accommodating balconies, landscaping etc. within the street setback • use a setback range where the desired character is for variation within overall consistency, or where subdivision is at an angle to the street • manage corner sites and secondary road frontages Align street setbacks with building use. For example in mixed use buildings a zero street setback is appropriate Consider nominating a maximum percentage of development that may be built to the front build-to line, where one is set, to ensure modulated frontages along the length of buildings Identify the quality, type and use of open spaces and landscaped areas facing the street so setbacks can accommodate landscaping and private open space In conjunction with height controls, consider secondary upper level setbacks to: • reinforce the desired scale of buildings at the street frontage		

		• minimise overshadowing of the street and other buildings To improve passive surveillance, promote setbacks which ensure a person on a balcony or at a window can easily see the street Consider increased setbacks where street or footpath widening is desired		
Part 3 Siting the Development		**Control**	**Justification provided by applicant**	**Council Comments**
Site Analysis	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	The site analysis notes the key potential opportunities and constraints of the site which inform the design, resulting in: • A façade line which is pulled back from the site boundary to provide a deep soil zone, allowing a soft planting transition to the streetscape. • A building which integrates a communal landscaped courtyard giving view amenity to both aspects of the building. • A uniform, ordered and classically proportioned facade oriented towards the Marina and the Ocean. • An extensive system of horizontal blades to control sun, and manage privacy to bedrooms whilst not having negative impacts on views. • Layouts that maximise access to views of the marina or the ocean. • Ground floor gardens with a strong relationship to the street and urban context.	Design decisions detailed in the supporting documentation are considered to be suitably reflective of the site conditions. The development is considered to be a bespoke design which reacts to the benefits and the obstacles of the site. Suitably complies.

Orientation	Objective 3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	The centre line of the mirrored building form faces very close to due north giving good access to solar. The semi circular shape of the site allows the East facing apartments to have views of the sunrise and the ocean, whilst the West facing apartments will watch the sun set over the Marina. A cut through the building form allows increased solar access to the central communal garden and the North facing Building B apartments. Further communal open space has been located on top of Building B as a roof garden which receives optimal solar. (Please refer to the detailed shadow diagrams provided for additional information.) Building B is shorter than Building A to respect an appropriate scale relationship to its adjacent context and to reduce the impact of overshadowing on neighbours. The façade is sculpted to draw winter sunlight into interior living spaces whilst controlling insolation in summer. The integrated solar control devices located around the envelope have been carefully analysed to ensure that they maximise benefits to interiors, reducing energy use without impact on surrounding buildings. The Buildings relationship to the streetscape is considered in both the form and the placement of the Building. The gentle curve to the façade means the	

			building is less encroaching on the public domain than a vertical façade. The placement of the building is pulled back between 1.42m and 3.1m from the site boundary to provide a deep soil zone, allowing a soft planting transition to the streetscape. This strategy encourages the root growth of the adjacent public domain trees which in turn provide shading for some of the lower level apartments.	
	Objective 3B-2	Overshadowing of neighbouring properties is minimised during mid winter	The building envelope has been shaped to ensure sunlight reaches neighbours properties in winter. Shadow diagrams provided demonstrate that there are no unreasonable shadow impacts on neighbouring properties.	Shadow diagrams have been included as **attachment 11.** The development is the first within precinct B2 and C2 however as the surrounding lots have been approved as part of DA0287/2018 and heights of these future developments are known as this is specified in the Concept Approval, it is possible to evaluate any potential impact of the proposed apartment building on future development. It is considered that the solar impact on the neighbouring properties will not be significant and will not require increased setbacks or decreased height of the proposed apartment buildings.
Public Domain Interface	Objective 3C-1	Transition between private and public domain is achieved without compromising safety and security	The transition between public and private spaces is managed through perimeter gardens to the ground floor apartments	The interface between the public areas surrounding the development and the private

			with secure street access via gates. The transition on the boundary line is low level soft planting. On the south façade the breaks between the buildings serve as access routes. The South Eastern break has the car park entry set back from the street to maximise view access for vehicles entering and leaving the site. The South West break has a small pocket garden and stepped access to the secure raised communal garden. Building entries are clearly defined and have level access form the street. Ground floor levels are raised internally which also helps control flooding. The public domain is overlooked by wide balconies for almost the full perimeter of the site.	areas within the development is considered suitable. The use of combined masonry walls and metal palisade fencing above provides security and some passive surveillance. This style of fencing has been used throughout the Shell Cove Urban Release Area and is considered successful. The interface between the Communal Open Space Areas within the development and the private spaces belonging to ground floor apartments which face into the central courtyard has been managed by using planting beds and metal palisade fencing. The planting beds will soften the fencing and ensure people cannot walk directly up to the fencing, whilst the fencing ensures security. This is considered a suitable design feature that addresses both safety and security.
	Objective 3C-2	Amenity of the public domain is retained and enhanced	The amenity of the public domain will be significantly enhanced through: • Deep soil around the perimeter to promote root growth to trees within the public domain.	The design of the proposed development is considered to enhance the surrounding public domain by inclusion of mature trees around the development bordering the public footpath which runs around the site.

				• An emphasis on well-considered and high quality landscaping in and around the precinct. • Integrated mailbox/intercom/building branding and landscaping. • Provision of level access.	These trees will also add to the planting and amenity for the public boardwalk along the water which is sited on the other side of The Promontory Drive. The design of the building is curved on the elevation of Building A as well as being curved in shape, this design feature increases the setback of the building from the public footpath which will reduce the bulk and scale impact of the building on the public footpath.
Communal and Public Open Space	Objective 3D-1	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	1. Communal open space has a minimum area equal to 25% of the site 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)	The proposal incorporates common open space split over two key areas. • A raised courtyard garden at level one • A rooftop garden to Building B The raised courtyard garden includes a pool with paved area for lounges and two shading cabanas. This paved area is surrounded with a semi circular landscaped zone full of dense rich planting and trees. The landscaped zone is conceived of as a beautiful green space to look out onto, both from within apartments and at ground level. The curved form of the central planter provides a strong identity for this space in keeping with the architecture, whilst serving the practical purpose of providing sufficient soil depth for sizeable trees to grow. Secure access to the private courtyard	Solar access plans provided by applicant show that at least 50% of the Communal Open Space will receive a minimum of 2 hours of direct sunlight between 9am and 3pm mid winter. Solar access plans have been included as **Attachment 11**.
	Objective 3D-2	Communal open space is			Communal open space provided will provide a

		designed to allow for a range of activities, respond to site conditions and be attractive and inviting		garden is provided via the level 1 residents lobbies and also swipe key gated street access from the South. The roof garden on Building B has been located to maximise solar access and provides raised views over the courtyard garden. The total communal open space is 2170sqm which is 38% of the site (5755sqm) and the principle open space receives greater than 2 hours sunlight on the winter solstice.	swimming pool, seating areas, yoga platform and gym. There is also significant planting. Considered to be attractive and inviting.
	Objective 3D-3	Communal Open space is designed to maximise safety.			The Communal Open Space is accessed by swipe key only and fenced on all sides. Roof area will be restricted by a swipe key.
	Objective 3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood		Not applicable	No public open space is provided as part of this development. The design is considered to enhance and support the public open space which is provided within Precinct B.
Deep Soil Zones	Objective 3E-1 - Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and	Deep soil zones are to meet the following minimum requirements: Site Area: Greater than 1500sqm Minimum dimensions: 6m Percentage of site area: 7%		The proposal includes 7% of the site area as deep soil zones. This has been considered and located around the perimeter of the building to promote and support healthy plant and tree growth to not only the ground floor apartment gardens but also to encourage root growth for the perimeter public domain trees. In addition to the perimeter deep soil the raised courtyard garden has a large planter bed which occupies 445sqm (8% of the site) and has sufficient soil depth to allow	The deep soil zone included within the development does not meet the minimum dimensions required by the ADGs. This is addressed in detail in section 8. v (e) of the Assessment Report. In conclusion the proposed deep soil will promote and support the healthy plant and tree growth to not only the ground floor apartment gardens

	promote management of water and air quality		large trees to be planted with the courtyard garden space.	but also to encourage the root growth of the street trees in the public domain. The deep soil provision included is considered acceptable for the site.
Visual Privacy	Objective 3F-2 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy Note: Separation distances between buildings on the same site should combine required building separations	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: Building height: Up to 25 m (5-8 Storeys). Habitable rooms and balconies: 9 metres Non-habitable rooms: 4.5 metres.	Separation distances between buildings is achieved, blade walls and vertical fins help to mitigate any potential overviewing.	Separation distances within the development comply with the control. The site is suitably separated from other sites within the precinct and will allow satisfactory separation from future development.

	depending on the type of room			
	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.	Privacy at ground level is achieved on this site through a combination of level changes, setbacks, solid and open fences and landscaping. Great access to light and air is available to all levels, without compromising privacy, through sculpting the façades, horizontal blades and overhangs and through the arrangement of fenestration above solid spandrels for bedrooms. These low-level spandrels to bedrooms prevent direct viewing and sightlines into bedrooms from ground/street level.	The variety of design techniques described by the applicant has provided suitable privacy for residents internally and also from the public domain. The ground floor apartments will have suitable boundary treatment to provide privacy and also some passive surveillance to the public domain adjacent to the site.
Pedestrian Access and Entries	Objective 3G-1	Building entries and pedestrian access connects to and addresses the public domain.	Each building is designed with a well-defined pedestrian entrance. Signage integrated with the building's architecture clearly mark these entries. Level access is achieved to all building lobbies.	Building A will have five pedestrian entrances, spread throughout the building. Building B has one pedestrian entrance. Each of these entrances address each side of the site and suitably addresses the public domain. All entrances are level and accessible for all.
	Objective 3G-2	Access, entries and pathways are accessible and easy to identify.	Each building access point is clearly visible from the public domain. Signage integrated with the building's architecture clearly mark these entries.	Suitably complies for each building. Building A has pedestrian entrances spread evenly around the building.

					Building B pedestrian entrance is in the centre of the building.
Vehicle Access	Objective 3H-1	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscape		Vehicle access is proposed on the south east of the site, the breaks between the buildings serve as the access route. The car park entry is set back from the street to maximise visibility for vehicles entering and leaving the site and increase pedestrian safety. The vehicle entry is clearly identifiable to pedestrians, whilst designed to be subtly integrated into the façade.	The vehicle access point for this development will be off Quayside Avenue to the west of the site. This access point will be for all vehicles and service vehicles/deliveries etc. The vehicle access point will be completely separate from the pedestrian entrances. Suitably complies.
Bicycle and car parking	Objective 3J-1	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	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	Carparking levels are in keeping with the masterplan and local government requirements. All parking is off street, including designated visitor parking.	The Council endorsed Design Guidelines required by the Concept Approval for Precinct B2 and C2 call up the Shellharbour Development Control Plan requirements for parking. This is addressed in detail in **Attachment 10.** The car parking provided complies with the Council requirements.

			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.		
	Objective 3J-2	Parking and facilities are provided for other modes of transport. Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas Conveniently located charging stations are provided for electric vehicles, where desirable		Secure storage, sized to accommodate a bicycle, is also provided. The basement is designed to be able to cater for future electric vehicle charge points, able to be installed by residents when required.	No specific bicycle storage or scooter or motorbike storage is provided. Individual storage cages provide in basement for each apartment which are suitable size to securely store a bicycle.
	Objective 3J-3	Car park design and access is safe and secure		Facilities within the carpark are accessible from common space, without travelling	The design of the basement car park areas is considered

				through car spaces. Circulation within the carpark is considered and well lit. Lift lobbies are defined and incorporate suitable quality finishes, walls are painted and signage will be designed to suit the interiors concept.	suitable with access points accessible, safe and secure. Finishes, internal signage and materials are not specified and will be subject to condition. This is a satisfactory outcome.
	Objective 3J-4	Visual and environmental impacts of underground car parking are minimised.		Carparking is designed to be as efficient as possible with double loaded aisles, efficient structural layouts minimising transfer and minimum footprints.	Suitably complies
	Objective 3J-6	Visual and environmental impacts of above ground enclosed car parking are minimised		The above ground parking is sleeved with apartments for the full perimeter and only the vehicle access is visible at ground level. The roof of the ground level parking provides a deep void immediately above for the soil zone of the level 1 courtyard garden.	Suitably complies
Solar and Daylight Access.	Objective 4A-1	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	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 direct sunlight between 9 am and 3 pm at mid winter	52% of apartments receive a minimum of 3 hours solar access between 9am and 3pm on June 21.	The percentage of apartments that receive a minimum of 3 hours of solar access between 9am and 3pm mid winter is below the required 70%. Broken down this means 60 apartments (rounded up) receive a minimum of 3 hours solar access, where as the control requires 82 apartments. This variation is addressed within the Assessment Report at section 8. v. f). The variation is considered acceptable by virtue of the additional design features of

					the building and the desire to maximise the water views from the apartments.
			3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	14% of apartments receive no direct sunlight between 9 am and 3 pm at mid winter.	Suitably complies.
	Objective 4A-2	Daylight access is maximised where sunlight is limited.		High levels of controlled daylight are provided directly through generous windows. In certain areas, additional sun and/or light is provided by clerestory's and skylights. The orientation of the site means that whilst the apartments on the East and the West fall outside of the 9-3pm window they still receive either morning or afternoon sun. Between 8-4pm on June 21 66% of apartments receive a minimum of 3 hours solar access. The centre line of the mirrored building form faces very close to due north giving good access to solar. The semi circular shape of the site allows the East facing apartments to have views of the sunrise and the ocean, whilst the West facing apartments will watch the sun set over the Marina.	The design of the development is considered to have suitably taken advantage of the location of the site, in terms of views. The floor to ceiling glazing for windows and balcony doors are considered to maximise daylight, with skylights in level 6 apartments within Building A. Suitably complies.

	Objective 4A-3	Design incorporates shading and glare control, particularly for warmer months		All windows to habitable rooms are provided with blades or overhangs to limit insolation in summer. This approach also provides the proposal with its visual identity	Suitable design features have been included within the development to provide shading and gare control. Communal Open Space suitably includes shaded areas. Suitably complies.
Natural Ventilation	Objective 4B-1	All habitable rooms are naturally ventilated.		All habitable rooms are naturally ventilated.	Suitably complies.
	Objective 4B-2	The layout and design of single aspect apartments maximises natural ventilation		All single aspect apartments are laid out to ensure natural ventilation is maximised, with habitable spaces ranged around balconies at the facades.	All single aspect apartments are to include open plan living areas and include balconies that cover the width of the apartments. This, in addition to coastal breezes, is considered to be sufficient to maximise natural ventilation for single aspect apartments.
	Objective 4B-3	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	1. 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	59.48% of apartments are naturally cross ventilated.	The percentage of apartments that are naturally cross ventilated is below the control of 60% by 0.5%. This variation is considered to be minor and is fully addressed in section 8. v. f) of the assessment report. Considered to be acceptable given the coastal location.

			enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed		
			2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	No apartments exceed 18m.	Suitably complies
Ceiling Heights	Objective 4C-1	Ceiling height achieved sufficient natural ventilation and daylight access	Measured from finished floor level to finished ceiling level, minimum ceiling heights are: Habitable rooms – 2.7m Non-habitable 2.4m	Measured from finished floor level to finished ceiling level, the proposed floor to ceiling heights are no less than: • Habitable rooms: 2.7m • Non-habitable rooms: 2.4m The area is zoned residential and hence there is no requirement for level 1 to be provided with floor to ceiling heights of 3.3m.	Ceiling heights are a minimum of 2.7 metres for habitable rooms and 2.4 for non habitable rooms. The development is not in a centre, land is zoned residential and the Concept Approval requires this site to be residential, and therefore the requirement for higher ceiling heights than the minimum on level 1 to provide for future non residential uses is not relevant.
	Objective 4C-2	Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms		All residential apartments have a minimum ceiling height of 2.7m in habitable rooms and apartment layouts are designed to provide well-proportioned rooms	Suitably complies

	Objective 4C-3	Ceiling heights contribute to the flexibility of building use over the life of the building		As a purely residential building we have not proposed greater ceiling heights at ground floor other than where adjacent ground floor levels are set slightly lower, where flood levels permit. We consider this appropriate to the nature of the area, including into the future.	The development is not in a centre, land is zoned residential and the Concept Approval requires this site to be residential, and therefore the requirement for higher ceiling heights than the minimum on level 1 to provide for future non residential uses is not relevant.
Apartment Size and Layout	Objective 4D-1	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.	Apartments are required to have the following minimum internal areas: 1 bedroom – 50m^3 2 bedroom – 70m^3 3 bedroom – 90m^3 The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m2 each. A fourth bedroom and further additional	All apartments exceed the minimum internal areas specified in the ADG for their types.	Suitably complies

			bedrooms increase the minimum internal area by 12m^{2}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 a window to an external wall with a total minimum glass area greater than 10% of the floor area of the room. No daylight or air is borrowed from other rooms.	Suitably complies

	Objective 4D-2	Environmental performance of the apartment is maximised.	1. Habitable room depths (other than rooms in open plan layouts) are limited to a maximum of 2.5 x the ceiling height	All apartments achieve this requirement	Maximum depth for all habitable rooms not within open plan layout would be 6.75 metres. All apartments 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	A number of cross-through apartments have open plan living spaces deeper than 8m. Although not meeting the design criteria, this is considered acceptable as daylight and natural ventilation is provided to both ends of the apartment. The open plan living spaces have a maximum room depth of 9.1m, measured at the centre line of the room to the front of the rear kitchen joinery. The linear nature of the rooms allows for clearly defined living, dining and kitchen spaces and good circulation between these zones and furniture. Floor to ceiling glazing means that the rooms will be well lit and ventilated.	A total of 33 of the apartments have open plan living areas that will be deeper than 8 metres and therefore do not comply with this control. This variation has been addressed in section 8 v, f) of the assessment report. Suitable design measures have been proposed to maximise light into each of the units and this minor variation can be supported.
	Objective 4D-3	Apartment layouts are designed to accommodate a variety of household activities and needs	1. Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)	All master bedrooms have a minimum area of more than $10m^2$, with generous robe allowances, with other bedrooms typically $9m^2$ or more.	Each apartment suitably complies
			2. Bedrooms have a minimum	Bedrooms have a minimum dimension of 3m	Each apartment suitably complies

			dimension of 3m (excluding wardrobe space)		
			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 1 bedroom apartments have living room widths of 3.6m. The living rooms to 2 and 3 bedroom apartments have living room widths of 4m.	Each apartment suitably complies
			4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	All cross through apartments are typically at least 4m wide.	All cross through apartments have a minimum width of 4 metres.

Private Open Space and Balconies	Objective 4E-1	Apartments provide appropriately sized private open space and balconies to enhance residential amenity	All apartments are required to have a primary balconies as follows: 1 bedroom – 8m^3, minimum depth 2m. 2 bedroom - 10m^3, minimum depth 2m. 3+ bedroom – 12m^{3,} minimum depth 2.4m. The minimum balcony depth to be counted as contributing to the balcony area is 1m	All balconies and open spaces satisfy or improve upon the minimum required areas.	Each apartment has a balcony or private open space area which complies or exceeds the minimum area required. All apartments above the ground floor have balconies that meet the minimum dimension requirement.

			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.	The courtyard gardens to the perimeter of the main building are deep and a minimum of 3m depth. The South facing ground level apartments have private open space that is 1.8m deep but over 15m2. The orientation of these courtyard gardens allows all bedrooms and living rooms access to the external space. These South facing apartments also have direct access to the level 4 roof garden amenity which provides 606sqm of communal open space	The private open space areas for the ground floor apartments within Building B have a minimum dimension of 1.8 metres and therefore do not comply with the minimum dimension required of 3 metres. This variation is addressed in section 8. v, f) of the assessment report and due to the site constraints is considered acceptable.
	Objective 4E-2	Primary private open space and balconies are appropriately located to enhance liveability for residents		Private open space is accessed directly from the living area of each apartment and is typically oriented towards the north west or north east.	All balconies and Private Open Space is directly accessed from the open plan living areas for each apartment. The design of the development and placement of the balconies/private open space maximises the views from the site and over the Communal Open Space. The design is considered to enhance liveability for future residents.

	Objective 4E-3	Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	Balconies are integrated into the overall form of the building and their balustrades designed to reinforce the desired proportions of the proposed massing. The South facing balustrades incorporating vertically proportioned aluminium angles which allow views into tree canopies and over the public realm whilst maintaining a sense of enclosure and privacy. The perimeter balustrades are glass balustrades which read subtly with the building form, these maximise marina and ocean the views. The ground floor balustrade carries on the language of the south facing balustrades whilst sitting over a green plinth that carries the visual weight of the buildings above.	The integrated balconies and boundary treatment included for the ground floor private open space areas are considered to contribute to the architectural form and detail of both buildings.
	Objective 4E-4	Private open space and balcony design maximises safety.	All balconies have safe barriers in accordance with the requirements of the BCA.	Suitably complies

Common Circulation and Spaces	Objective 4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments	1. The maximum number of apartments off a circulation core on a single level is eight	The maximum number of apartments accessed via the single circulation core is 9. Although this greater than the 8 recommended in the design criteria it is less than the 12 recommended in the design guidance.	The maximum number of apartments off a circulation core for Building A is three. The maximum number of apartments off a circulation core for Building B is nine. This is higher than the recommended eight apartments but lower than the maximum 12 apartments. The light, ventilation and size of the circulation core for Building B is considered to be acceptable and will ensure that the core will properly service, with sufficient amenity, each of the apartments it serves. This variation is addressed in section 8 v, f) of the Assessment Report.
	Objective 4F-2	Common circulation spaces promote safety and provide for social interaction between residents		Each building incorporates a secure, residential lobby connected to a stair with glazing to the façade to provide a naturally lit environment. A lift provides equitable and safe access. Each residential lobby on L1 feeds into the common open space, and the upper level lobbies have windows which view out onto this common garden. This environment is suitable for the small number of households which access each core to interact comfortably.	Suitably complies

Storage	Objective 4G-1	Adequate, well designed storage is provided in each apartment.	In addition to storage in kitchens, bathrooms and bedrooms the following storage is provided: 1 bedroom – 6m^3 2 bedroom – 8m^3 3+ bedroom – 10m^3 At least 50% of the required storage is to be located within the apartment.	Suitable area for storage is provided in various configurations within each apartment. A substantial and secure storage facility is provided for each residence in the basement. These areas total to achieve at least the minimum volumes specified in the ADG, with 50% within the apartment. All apartments have additional storage within the basement above the minimum requirements.	Storage plans have been submitted (**attachment 13)** highlighting the internal storage provided for each apartment. This shows compliance with a minimum of 50% of the storage requirement for each apartments. The remaining 50% required has been provided in the basement floors in secure cages. These cages have been shown to exceed 50% of the storage requirements for each apartment and are intended to be used for bicycle storage as well.
	Objective 4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments		A substantial and secure storage facility is provided for each residence in the basement.	Storage areas in basement provided which exceeds requirements.
Acoustic Privacy	Objective 4H-1	Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses.		Building separation within development – minimum of 5.2 metres. Building separation from neighbouring buildings – development is first within precinct, however future lots are known as subdivision is approved. Application site is separated by roads from nearest adjacent development. Minimum distance approximately 10 metres.	Building separation is considered acceptable.

		Window and door openings are generally orientated away from noise sources.	Windows for apartments A01.15, A02.15, A03.14 and A04.14, B03.06 and B02.06 face onto the vehicle access.	Windows and doors are generally sited away from noise sources such as vehicle driveway and plant rooms. The windows that have been noted as facing onto vehicle access are small, secondary windows and are to be suitably treated as per requirements of acoustic report to minimise noise nuisance to the apartments affected.
		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.	Corridors and entries are located above each other throughout the development.	Suitably compliant
		Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.	Throughout all apartments storage, circulation areas and non habitable rooms (bathrooms) are located adjacent to the corridors for the buildings, habitable rooms are on the outside of the building to increase benefits of outlook, light and solar access.	Suitably complies

		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated.	Maximum number of neighbouring apartments each unit will share party walls with is two.	Suitably compliant.
		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.	Proposed swimming poo within centralised communal open space is located a minimum of 7 metres from nearest bedroom. Basement car park roller door is located 9 metres from nearest bedroom.	Suitably compliant.
	Objective 4H-2	Noise impacts are mitigated within apartments through layout and acoustic treatments	Rooms with simular noise requirements (bedrooms) are generally adjacent to each other within apartments. Dining/kitchen/living areas open plan design.	Suitably compliant
Noise and Pollution	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	The development is residential only and within a residential precinct with public domain areas located a suitable distance from the apartments.	The development site is not considered to be a noisy or hostile environment.

Apartment Mix	Objective 4K-1	A range of apartment types and sizes is provided to cater for different household types now and into the future	One bedroom apartments – 17 Two bedroom apartments – 40 Three bedroom apartments - 59	Suitable mix proposed.
	Objective 4K-2	The apartment mix is distributed to suitable locations within the building	The apartments are distributed through each building proposed and on each level.	Suitably complies.
Ground Floor Apartments	Objective 4L-1	Street frontage activity is maximised where ground floor apartments are located.	All ground floor apartments will have independent direct street access as well as access through the building. Private open space is next to the street for all apartments.	Suitably complies
	Objective 4L-2	Design of ground floor apartments delivers amenity and safety for residents	All ground floor apartments will include landscaping, 1.2 metre high masonry walls with palisade fencing above. High ceilings and tall windows also proposed.	Suitably complies

Facades	Objective 4M-1	Building facades provide visual interest along the street while respecting the character of the local area.	Materials and finishes proposed reflect the coastal nature of the site.	Suitably complies as required by Concept Approval.
	Objective 4M-2	Building functions are expressed by the façade.	Building entries are clearly defined throughout the development.	Suitably complies.
Roof Design	Objective 4N-1	Roof treatments are integrated into the building design and positively respond to the street.	Roof design proposed is considered proportionate to the building size and scale. Materials compliment the development and are in keeping with the coastal environment. Services are integrated with overall height under Concept Approval limit (22 metres).	Suitably complies
	Objective 4N-2	Opportunities to use roof space for residential accommodation and open space are maximised	Roof of building B will be utilised as Communal Open Space. Clerestory windows proposed for apartments on fourth floor of Building A.	Suitably complies

	Objective 4N-3	Roof design incorporates sustainability features	Clerestory windows integrated into roof design where proposed.	Suitably complies.
Landscape Design	Objective 4O-1	Landscape design is viable and sustainable	Ground Floor – 100% native plant species Level 1 – 97% are native plant species and 3% are exotic having an average water requirement. Level 3 – 71% are native plant species and 29% are exotic plant species having a low water requirement. Level 4 – 93% are native plant species and 7% are exotic having a low water requirement.	Suitably complies
	Objective 4O-2	Landscape design contributes to the streetscape and amenity	Street trees proposed around the development to enhance streetscape. Landscaping along ground floor apartments boundaries will contribute to adjacent streetscape.	Suitably complies
Planting on Structures	Objective 4P-1	Appropriate soil profiles are provided	Planting within communal open spaces are above basement parking and on roof top of building B.	Suitably conditioned.

	Objective 4P-2	Plant growth is optimised with appropriate selection and maintenance.	Landscape plans show variety of plant species suitable to coastal environment.	Suitably complies subject to condition.
	Objective 4P-3	Planting on structures contributes to the quality and amenity of communal and public open spaces.	Roof top planting proposed both within Communal Open Space areas and private roof gardens.	Suitably complies.
Universal Design	Objective 4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members.	24 apartments proposed incorporate the Liveable Housing Guideline's Silver Level universal design features.	Suitably complies
	Objective 4Q-2	A variety of apartments with adaptable designs are provided	12 apartments proposed with adaptable floor plan designs.	Suitably complies

	Objective 4Q-3	Apartments layouts are flexible and accommodate a range of lifestyle needs	All apartments have open plan living/dining and kitchens – rooms with multiple functions. All apartments exceed the overall size requirements.	Suitably complies
Energy Efficiency	Objective 4U-1	Development incorporates passive environmental design	Adequate natural light is provided to habitable rooms with floor to ceiling glass doors and windows provided.	Suitably complies
	Objective 4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.	Shading devices designed as part of the building elevation to provide shading in summer.	Suitably complies
	Objective 4U-3	Adequate natural ventilation minimises the need for mechanical ventilation.	All apartments will have large glass doors providing natural ventilation.	Suitably complies – cross ventilation discussed in detail in assessment report.

Water management and Conservation	Objective 4V-1	Potable water use is minimised	Suitable plant species proposed with low water requirement. Four star rating for all taps, dishwashers and HW systems proposed.	Suitably complies
Waste Management	Objective 4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Suitably sized waste storage areas proposed including bulky waste storage areas in basement levels.	Suitably complies
	Objective 4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling	All apartments proposed suitable waste storage areas within kitchen. Organic waste storage provided.	Suitably complies
Building maintenance	Objective 4X-1	Building design detail provides protection from weathering	Appropriate materials and finishes proposed to respond to coastal environment.	Suitably complies

	Objective 4X-2	Systems and access enable ease of maintenance.	Main windows will be accessible from balconies and Private Open Space which will ease maintenance and cleaning.	Suitably complies.
	Objective 4X-3	Materials selection reduces ongoing maintenance.	Hard wearing materials chosen and timber avoided to ensure reduced ongoing maintenance in coastal location.	Suitably complies