## **Attachment 7 – Apartment Design Guidance Compliance Table**

Part	Objective	Design Criteria	Proposed	Council Comments
Apartment Building Types	Objective 1A	Different building design types are required depending on their context, in this case being their future built and natural surrounds.	The proposal fits the form of 'Shop top apartments' and 'Perimeter block apartments'  These building types integrate into street blocks with the objective of increasing residential density and providing lower level commercial.	The proposal is considered well designed with an activated streetscape achieved by ground floor commercial / retail / residential with landscaped front courtyards, combined with an interconnecting public domain / plaza extending through the 4 blocks of the development at ground level.  Each of the buildings Building A, Building B and building C, clearly define the street block providing a clear sense of place in context of the area of Shell Cove.
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 proposed development is clearly defined by the approved masterplan and Concept Approval as modified for Shell Cove, which defines the road network and divides the site into 2 separate street blocks and 3 buildings.  The Concept Approval sets key controls for height at 22 metres / 6 storeys, 12 metres/ 3 storeys.	The locality is undergoing transformation with new development characterised by multi storey mixed development / shop top housing being a key element of the future context.  The form of the future context is largely set by the key development controls in accordance with the Concept Approval.  The proposed development is consistent with the controls as set put in the Concept Approval and development type as suitably conditioned.
Precincts and	Objective 1C	Precincts are characterised by large land parcels or a group of larger sites undergoing extensive	The site exists as two lots bound by Harbour Boulevard, Aquatic Drive, and Waterfront	The development forms part of Precinct D which is the subject of a land subdivision Development Application 0143/2016, approved 8 March 2016.

Part	Objective	Design Criteria	Proposed	Council Comments
Individual Site		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.	Promenade, with Civic Avenue dividing the two sites.  The Concept Approval sets objectives of establishing a well connected public domain that clearly links between the new Shell Cove Marina, neighbouring development and the adjacent wetlands.	The proposal has been subject of an assessment against the Design Guidelines created for this precinct as required by the Concept Approval.  The ground level public domain and associated commercial space provide a direct and clear link with the town centre future public open space, consistent with the design objectives of the Concept Approval.
Primary Controls	Objective 2A	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/Townhouse and Residential/Potential mixed use  Height – The Height Plan in the Revised Concept Plan Design Report indicates a maximum of 6 storeys height / 22m for Buildings A and B, and 3 storeys / 12m for Building C.	The proposal complies with the primary development controls as provided by the Concept Approval, specifically:  - Ground floor commercial / retail with a public domain clearly connecting with its surrounds for Building C  - 6 storey for Buildings A & B - 3 storeys for Building C  A detailed compliance assessment against the requirements of the Concept Approval is provided in section 3 of the Assessment Report and Attachment 6.
Building Envelopes	Objective 2B	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	Building envelopes for each of the proposed buildings are predetermined by the street network of three north-south aligned streets which divides the site into two main lots, plus the Concept Approval.	The proposed building envelopes for each of the buildings are considered to suitably control building bulk by dividing the development into four separate buildings.  The scale or height of each envelope is predetermined by the Concept Approval, which set

Part	Objective	Design Criteria	Proposed	Council Comments
		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.	The addition of a ground level east-west pedestrian thoroughfare and communal open space then serves to divide the development into 3 separate building block as defined by their envelopes.	maximum building heights. The proposal complies with the maximum height levels as applied to each building.  Block sizes are pre-determined by the existing street network, with the east-west pedestrian thoroughfare and communal open space serving to achieve the broad objective for building envelopes.
Building Height	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 Buildings A and B and 12 metres for Building C .	Each of the proposed Buildings A, B and C comply with their respective height limits as set by the Concept Approval.
Floor Space Ratio	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.	A Floor Space Ratio control has not been applied to to land included in the Concept Approval. Whilst no control applies, the bulk and scale of the proposal at FSR 2.5:1 is considered compatible with its existing and future built and natural surrounds.
Building depth	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	Building depth is pre-determined by key elements:  - The existing road network, which sets the building block depth	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.

Part	Objective	Design Criteria	Proposed	Council Comments
		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 are provided, for example adaptive reuse of an existing building.	<ul> <li>The provision of a ground level communal open space area which provides separation between buildings</li> <li>Building depths:         <ul> <li>Building A north, Building A south @ 18m</li> </ul> </li> <li>Building B @ 18m</li> <li>Building C @ 12m</li> </ul>	Each building A, B & C have building depths consistent with the recommended range of 12m – 18m.  The solar access of the development internally within the site and to the surrounding sites is satisfactory and therefore it is considered that the building depth is suitable.
Building separation	Objective 2F Building Separation	Minimum separation distances for buildings are:  Five to eight storeys (approximately 25m):  • 18m between habitable rooms/balconies  • 12m between habitable and non-habitable rooms  • 9m between non-habitable rooms	Civic Avenue (existing) provides separation between Building A and Building B, with a separation of @ 27m between the buildings.  Buildings B and C are separated @ 18m by the ground level parking	The proposal achieves building separations consistent with the design criteria.
Street Setbacks	Objective 2G	Determine street setback controls relative to the desired streetscape and building forms, for example:  • define a future streetscape with the front building line	The site of the proposal forms part of the Shell Cove town centre with shop top housing with ground floor commercial / retail being a key element of the Building C.	Proposed commercial / retail has a zero front setback which is appropriate.  The ground floor units each have a landscaped front courtyard providing appropriate setback to the front boundary.

Part	Objective	Design Criteria	Proposed	Council Comments
		<ul> <li>match existing development</li> <li>step back from special buildings</li> <li>retain significant trees</li> <li>in centres the street setback may need to be consistent to reinforce the street edge</li> <li>consider articulation zones accommodating balconies, landscaping etc. within the street setback</li> <li>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</li> <li>Align street setbacks with building use. For example in mixed use buildings a zero street setback is appropriate</li> </ul>	Based on this the ground floor commercial component has a zero front setback to maximise activation to the townscape. Units on the ground floor are setback to provide landscaped front courtyards.	

	Siting the opment	Control	Proposed	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.	Site Analysis demonstrates opportunity to provide direct connectivity at ground level with Shell Cove waterfront to the east	Proposal suitably provides an east – west aligned communal open space corridor linking to the waterfront parklands to the east. This corridor also serves to extend the activated townscape inland from the waterfront area.
Orientation	Objective 3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	Buildings are designed with apartments oriented to maximise number of apartments with direct sunlight at the winter solstice.  Separation between the buildings also provided for solar access to the ground level communal open space areas.	Proposed apartment designs and orientation optimise solar access opportunities.  Sufficient building separation is provided to ensure that solar access is achieved to the ground level public domain.
	Objective 3B-2	Overshadowing of neighbouring properties is minimised during mid winter	Proposal is designed with height stepping down to the southern boundary to minimise overshadowing.	Shadow casts from Building A & Building B are contained within the site and onto the adjoining streets.  Shadows from Building C are contained to within Cove Boulevard and the public carpark of The Waterfront shopping centre opposite to the south.  No shadow casts from the development will affect residential development in the surrounds.
Public Domain Interface	Objective 3C-1	Transition between private and public domain is achieved	The Crime Prevention Through Environmental Design (CPTED)	The recommendations of the CPTED Report are endorsed and should be included as conditions of consent in Council's Notice of Determination.

	iting the opment	Control	Proposed	Council Comments
		without compromising safety and security	Report finds that the proposal is designed to achieve a low risk.  The risk may be reduced following recommendations for clear surveillance, lighting, CCTV, territorial reinforcement, environmental maintenance, security access and clear definition of public and private space boundaries.	
	Objective 3C-2	Amenity of the public domain is retained and enhanced	The proposal creates a new public domain at ground level which is integral to the overall design.	The design of the ground level communal open space has been addressed in detail in the landscape plan, including paving, seating, quite spaces and landscaping which will serve a range of open space use needs for the community.
Communal and Public Open Space	Objective 3D-1	1. Communal open space has a minimum area equal to 25% of the site 2. Developments achieve minimum 50% direct sunlight to principal usable part of communal open space for a minimum of 2 hours between 9am – 3pm 21 June (mid winter)	A total of 2,044m² of outdoor communal open space is provided at ground level and on rooftop terraces on the top level of Buildings A & B.  An additional 384m² of indoor communal open space.  TOTAL 2,428m² COS	Total COS of 2,428m2 = 27% of total site area.  50% of communal space will receive at least 2 hours direct sunlight at winter solstice.
	Objective 3D-2	Communal open space is designed to allow for a range of activities, respond to site	COS provides a mix of spaces and seating options to allow for sunlight or shade, privacy or	Proposed mix of communal open space areas are considered to satisfy the needs of residents and the community.

Part 3 Siting the Development		Control	Proposed	Council Comments
		conditions and be attractive and inviting	activation with passing pedestrian movement.	
	Objective 3D-3	Communal Open space is designed to maximise safety.	Refer to CPTED comments	Conditions of consent are recommended that refer to the recommendations of the CPTED Report.
	Objective 3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	Communal open space complements residential use and neighbouring waterfront park.	The range of communal open space areas will positively serve residents and the community.
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 promote management of water and air quality Deep soil zones are to meet the following minimum requirements:  Site Area: Greater than	301m <sup>2</sup> deep soil / 3.4% proposed, with variation to this requested in the SEE	The proposed landscaping additionally includes 722m² of landscape in planter bed arrangements, which equates to 10% of the site area.  Variation discussed within assessment report under section 4.2.4.2.
		1500sqm Minimum dimensions: 6m Percentage of site area: 7%		
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	Buildings A & B separated by Civic Ave with 25m separation.  Between A-north & A-south = 18m A-south & Building C = 18m Building B and future hotel = minimum 22 metres from balcony - balcony	Separation distances between opposing apartments/hotel rooms/serviced apartments is considered adequate to achieve reasonable levels of privacy and sense of open outlook.

	Siting the opment	Control	Proposed	Council Comments
	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.	Building facing each other have opposing balconies as an initial screen to living areas behind, which may be closed with curtains / blinds for privacy.	Separation between buildings of 18m – 25m is ample and ensures ample space for natural air circulation between buildings  Roof top COS proposed is surrounded on two sides by apartments within Building A and B resulting in windows and small balconies adjoining the COS areas. Where the OCS area adjoins an apartment there are wide landscaped structures proposed which will provide privacy and stop people walking up to the windows. There are also small secondary balconies with privacy screening included which allow the adjoining room to have access to natural daylight and still maintain privacy. The windows that do front onto the COS landscaped areas are either bathroom windows (high level and obscure glazed) or secondary bedroom windows. It is reasonable to assume that these windows will have blinds or shades as the main view and light is from the large glass doors accessing the balcony from the bedroom. These secondary windows will be protected by the proposed raised landscaping beds in addition.
Pedestrian Access and Entries	Objective 3G-1	Building entries and pedestrian access connects to and addresses the public domain.	External entries to buildings face communal open space or the streets. Communal open space areas face street.	Entries and access points at ground level are all clear for access from the public domain. Adopting recommendations of the CPTED report will further enhance recognition of entry points.
	Objective 3G-2	Access, entries and pathways are accessible and easy to identify.	Clear straight passage to building entries is provided for identification.	Entries are clear. Adopting recommendations of the CPTED report will further enhance recognition of entry points.

	Siting the opment	Control Proposed		Council Comments
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.	Access via opposing driveways to open parking, then down to basement parking	Open parking is set behind building line with landscaping at entry to complement streetscape. Opposing driveways are clearly visible to pedestrian pathways for safety.
	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	On street parking bays are retained along Civic Avenue and Waterfront Promenade for clear visibility on the street and convenient access. The reduction in on street parking due to car park access and raised pedestrian crossing areas is substituted by under cover at grade parking within Building A.  Basement parking is accessed from open parking areas and includes accessible parking spaces.  Secure bicycle storage room parking shown in Building A with access via secure lobby.	Parking location and design is consistent with relevant Design Guidelines and is considered acceptable.
	Objective 3J-3	Car park design and access is safe and secure	Basement parking is secure.	Secure access to parking protects residents and their vehicles and property in storage.

	Siting the lopment	Control	Proposed	Council Comments
	Objective 3J-4	Visual and environmental impacts of underground car parking are minimised.	Basement car parking is below ground level and out of view.	Car parking area at grade is behind building line and will have no impact to streetscape. Mechanical ventilation details required for Construction Certificate for ventilation of basement carpark.
Solar and Daylight Access.	Objective 4A-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.	More than 70% of apartments receive at least 3 hours direct sunlight	Most apartments face north, east or west. South facing apartments in Building C have an east or west aspect allowing for some direct sunlight.4  All apartments receive sunlight to varying amounts including south facing apartments which have secondary aspects to east or west.
	Objective 4A-2	Daylight access is maximised where sunlight is limited.	All apartments having living rooms closest to balconies for optimal solar access.	South facing apartments with limited sunlight have living rooms with east or west facing windows to maximise available solar access.
	Objective 4A-3	Design incorporates shading and glare control, particularly for warmer months	Balconies to each apartment are stacked above each other and provide shade to internal living areas.	Satisfactory shading provided to each unit from balcony above. BASIX Certificate accounts for shading.
Natural Ventilation	Objective 4B-1	All habitable rooms are naturally ventilated.	Windows provided to all bedrooms and living rooms.	Satisfactory levels of natural ventilation achieved through balcony door and windows.
	Objective 4B-2	The layout and design of single aspect apartments maximises natural ventilation	Single aspect apartments have openings for windows and door to balcony.	Single aspect apartments are open plan design to optimise natural ventilation.

	Siting the opment	Control	Proposed	Council Comments
	Objective 4B-3	<ol> <li>At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building.</li> <li>Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</li> </ol>	Single aspect apartments (> 60%) have door access to central circulation lobbies, with the lobbies having windows / doors to allow cross ventilation.  Depth varies between buildings with a maximum of 18m	Over 60% of apartments are naturally cross ventilated.  Central lobbies have windows to allow cross ventilation.  Each building A, B & C have building depths consistent with the recommended range of 12m – 18m
Ceiling Heights	Objective 4C-1	Measured from finished floor level to finished ceiling level, minimum ceiling heights are: Habitable rooms – 2.7m Non-habitable 2.4m	Habitable rooms – 2.7m Non-habitable 2.4m	Compliant ceiling heights achieved.
	Objective 4C-2	Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms	2.7m ceiling heights for all habitable rooms	2.7m ceiling height maximises sense of space within all apartments.
	Objective 4C-3	Ceiling heights contribute to the flexibility of building use over the life of the building	2.7m ceiling height is the standard for residential apartments	2.7m ceiling heights will maximise internal amenity for first occupants into the future and is broadly accepted as optimal for light, ventilation, energy efficiency and sense of space.

Part 3 Siting the Development		Control	Proposed	Council Comments
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 <sup>2</sup> 2 bedroom – 70m <sup>2</sup> 3 bedroom – 90m <sup>2</sup>	Architectural Schedule and SEE states compliance achieved for all units with area requirements	Compliance achieved
		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	SEE states compliance achieved for all units with window areas at least 10% of floor area of each room.	Compliance achieved
	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	Living / kitchen / dining areas are open plan.  Bedrooms have depths less than 6.75m	Apartments are designed to achieve satisfactory air flow and solar access throughout.

Part 3 Siting the Development	Control	Proposed	Council Comments
	2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	Maximum depth measured at @ 8m from window to kitchen benches at rear	Kitchens generally located to rear to allow living / dining areas closest to window / door for optimal natural light and ventilation.

Part 3 Siting the Development	Control	Proposed	Council Comments
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)	Architectural Schedule and SEE states min. 10m² and 9m² respectively for master and other bedrooms.	Compliance suitably achieved
	2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	Architectural Schedule and SEE states min. 3m dimensions for bedrooms	
	<ul> <li>3. Living rooms or combined living/dining rooms have a minimum width of:</li> <li>• 3.6m for studio and 1 bedroom apartments</li> <li>• 4m for 2 and 3 bedroom apartments</li> </ul>	Architectural Schedule and SEE states min. 3.6m dimensions for 1 bed unit living areas, 4m for 2 & 3 bed units	
	4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	SEE states cross over apartments all > 4m wide	

	iting the pment	Control	Proposed	Council Comments
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 – 8m³, minimum depth 2m.  2 bedroom – 10m³, minimum depth 2m.  3+ bedroom – 12m³, minimum depth 2.4m.  The minimum balcony depth to be counted as contributing to the balcony area is 1m  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 depth of 3m.	Architecture Schedule and SEE states all apartment POS areas are compliant in area and depth for balconies and ground level courtyards.	Suitable compliance achieved  Some cross flow apartments have 2 balconies which in total achieve compliance with the required POS area.  Ground level courtyards all provide at least 15m2 and 3m depth (varying for corner locations)
	Objective 4E-2	Primary private open space and balconies are appropriately located to enhance liveability for residents	All balconies and terraces face outwards overlooking the street to achieve an open outlook.	Proposed balconies and terraces all appropriately located to optimise outdoor amenity.

Part 3 Siting the Development		Control	Proposed	Council Comments
	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 an integral form of the design of the apartments	Balconies suitably serve to articulate the façade, controlling visual massing while reinforcing the boundary as shop top housing
	Objective 4E-4	Private open space and balcony design maximises safety.	Balconies are designed compliant with the BCA.	Compliance with BCA required.
Common Circulation and Spaces	Objective 4F-1	Common circulation spaces achieve good amenity and properly service the number of apartments  The maximum number of apartments off a circulation core on a single level is eight	The SEE advises that all common circulation areas service a maximum of 8 apartments on each level.	Each level has 2 circulation areas, each servicing up to 8 apartments.
	Objective 4F-2	Common circulation spaces promote safety and provide for social interaction between residents	SEE advises common circulation areas achieve good amenity for residents.	Common circulation areas benefit from natural lighting through at least one window, and are straight to ensure maximum sight distance and surveillance.
Storage	Objective 4G-1	Adequate storage is provided in each apartment. In addition to storage in kitchens, bathrooms and 2 bedroom – 8m³ 3+ bedroom – 10m³ At least 50% of the required storage is to be located within the apartment bedrooms the following storage is provided:	Architectural Schedule and SEE advises that minimum 50% of required storage is provided within each apartment.	Storage areas provided in all apartments in wardrobes and cupboard spaces, plus in secure individual storage lockers in the basement for each basement. All units have a compliant storage area combining these spaces.

Part 3 Siting the Development		Control	Proposed	Council Comments
		1 bedroom – 6m³		
	Objective 4G-2	Additional storage is conveniently located, accessible and nominated for individual apartments	Storage provided in each apartment plus in secure storage lockers in basement parking area.	Satisfactory storage provided for each apartment.
Acoustic Privacy	Objective 4H-1	Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses.	SEE advises that adequate separation provided and shared equitably with neighbouring sites.	Separation between buildings of 18m – 25m is ample and ensures ample space for natural air circulation between buildings.
		Window and door openings are generally orientated away from noise sources.	Plans show window openings oriented to the street.	Noise from traffic, pedestrian movement and business activities at street level is unlikely to affect residents.
		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.	Apartment buildings are designed with vertically aligned common areas for access to each apartment.	Vertically aligned common areas ensure noise transmission is limited.  Within each apartment, bedrooms are located in a row to separate from active living areas.

Part 3 S Develo	iting the	Control	Proposed	Council Comments
		Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources.	SEE advises that adequate well designed storage is provided to each apartment.	Storage in each apartment is appropriately to buffer noise from adjacent rooms.
		The number of party walls (walls shared with other apartments) are limited and are appropriately insulated.	The plans show that each apartment is generally limited to two party walls.	Two party walls is acceptable noting apartments are attached housing
		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.	Plant rooms on residential levels are accessed from common circulation lobbies and separated from bedrooms for acoustic buffering.	A check of each circulation area design confirms that services are located at least 3m from bedrooms, noting bedrooms are located to the outer edge of each unit to have a window.
	Objective 4H-2	Noise impacts are mitigated within apartments through layout and acoustic treatments	The Acoustic Assessment makes recommendations for use of communal open space areas. Apartment layouts designed to separate bedrooms from living areas, with double thickness party walls between apartments.	Apartment layout and acoustic walls are considered to satisfactorily mitigate noise within and between apartments.  Body Corporate bylaws will be required to manage use and times of use of communal open space areas. Condition recommended.
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 location of the site is towards the edge of the Shell Cove Town centre. Noise from street level is expected however not intrusive.	Apartments at ground level are buffered by landscaped private open space courtyards fronting the street. Noise levels will likely be consistent with high density residential areas with no noise generally not excessive.

	iting the opment	Control	Proposed	Council Comments
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	Proposal includes a mix of 1, 2 and 3 bedroom apartments including some dual level apartments and cross-through apartments.	Mix of apartments is considered appropriate for range of affordability and choice.
	Objective 4K-2	The apartment mix is distributed to suitable locations within the building	Each level of the proposed apartment buildings have a mix of at least 2 different unit types – e.g. either 1 and 2 bedroom units, or 2 and 3 bedroom units.	Mix of unit types on each level will encourage interaction between different occupant / demographic groups for social interaction.
Ground Floor Apartments	Objective 4L-1	Street frontage activity is maximised where ground floor apartments are located.	Ground floor units have landscaped private open space areas fronting street.	Private open space areas to ground floor apartments are well designed to encourage occupant use, contributing to casual social interaction at street level.
	Objective 4L-2	Design of ground floor apartments delivers amenity and safety for residents	Ground floor apartment private open space areas include landscaping.	Landscaping enhances amenity of private open space areas while also providing surveillance for safety.
Facades	Objective 4M-1	Building facades provide visual interest along the street while respecting the character of the local area.	The local area is being developed as the Shell Cove Centre, with multi storey apartment building and mixed development.	The proposal is consistent with the approved Concept Approval. The proposed façade design is considered consistent with the desired character of town centre housing, with consistent setbacks to define each street / avenue as a corridor.
	Objective 4M-2	Building functions are expressed by the façade.	Balconies to each unit are clearly visible to the façade to define the building function as residential	Façade forms for each building are considered to appropriately express their use as residential.

Part 3 Siting the Development		Control	Proposed	Council Comments
Roof Design	Objective 4N-1	Roof treatments are integrated into the building design and positively respond to the street.	Roof top terraces provide a mix of communal open space and private open space, plus solar cells and building plant.	Use of roof top areas maximise functionality and amenity of each building and its occupants.  Landscaping over the edge of the roof will enhance the townscape character as viewed from the street.
	Objective 4N-2	Opportunities to use roof space for residential accommodation and open space are maximised	Roof space areas designed for communal and private use.	Mix of private roof top spaces and communal spaces are maximised for occupant amenity.
Landscape Design	Objective 4O-1	Landscape design is viable and sustainable	Landscaping at ground level and for each balcony plus rooftop areas proposed.	Landscape Architect plans includes a range of native plant species selected as suitable for the local climate and planter box / roof top planting.
	Objective 4O-2	Landscape design contributes to the streetscape and amenity	Landscape design includes planting fronting street and hanging over balconies.	Landscape design is considered to positively contribute to the character of the proposed building and streetscape.
Planting on Structures	Objective 4P-1	Appropriate soil profiles are provided	Landscape Plan includes specifications for planting at ground and in slab for above ground with drainage layer	Planting specifications considered suitable.
	Objective 4P-2	Plant growth is optimised with appropriate selection and maintenance.	Native plant selection provided. Maintenance to be carried out by Strata manager and individual owners.	Maintenance of plants will require inclusion in the Body Corporate by-laws, with draft details to be provided prior to issue of the Occupation Certificate.

	Siting the elopment	Control	Proposed	Council Comments
	Objective 4P-3	Planting on structures contributes to the quality and amenity of communal and public open spaces.	Planting on balconies and roof top areas proposed.	Above ground planting to balconies and roof top areas positively contributes to amenity and visual appeal of each building to the streetscape.
Universal Design	Objective 4Q-1	Universal design features are included in apartment design to promote flexible housing for all community members.	Approximately 10% of units designed as adaptable, complying with requirements of Concept Plan and AS4299-1955.	Adaptable housing provides flexibility of use allowing for able bodied and mobility affected persons to occupy them.
	Objective 4Q-2	A variety of apartments with adaptable designs are provided.	Adaptable housing proposed in a mix of 1, 2 and 3 bedroom apartments for variety.	Sufficient variety in type and size of accessible apartments are proposed.
	Objective 4Q-3	Apartments layouts are flexible and accommodate a range of lifestyle needs	Apartments are designed with open plan living / dining areas	Open plan areas allow for flexibility in internal layout of furniture to suit occupants preferences and needs.
Energy Efficiency	Objective 4U-1	Development incorporates passive environmental design	Buildings are designed to optimise solar access to apartments and allow natural cross ventilation.	Apartment designs are considered achieve satisfactory levels of passive environmental design.
	Objective 4U-2	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.	Refer to comments in 4U-1 above.	BASIX Certificate and NatHERS Report submitted with proposal demonstrate that proposal satisfies required criteria for energy efficiency.
	Objective 4U-3	Adequate natural ventilation minimises the need for mechanical ventilation.	Apartments designed to allow cross ventilation between balcony and windows to front	Design of apartments is considered to achieve satisfactory levels of cross ventilation.

Part 3 Siting the Development		Control	Proposed	Council Comments
			door into lobby which has windows to facilitate air flow.	
Water management and Conservation	Objective 4V-1	Potable water use is minimised	BASIX Certificate specifies commitments for water consumption.	BASIX Certificate satisfactorily addresses water conservation.
Waste Management	Objective 4W-1	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	Waste storage areas located in the secure basement parking areas out of view from the streetscape.	Waste storage areas in basement areas are considered appropriately located.
	Objective 4W-2	Domestic waste is minimised by providing safe and convenient source separation and recycling	Waste Management Plan sets out details for separate bins for convenient source separation and recycling.	Secure waste storage rooms in the basement allow for residents to have safe access to separate and dispose of waste.
Building maintenance	Objective 4X-1	Building design detail provides protection from weathering	Coastal location considered in material selection for construction and finish.	Materials and finishes are considered suitable to limit weathering in context of the coastal location of the site.
	Objective 4X-2	Systems and access enable ease of maintenance.	Separate plant rooms and storage are provided on each level.	Full details of systems and access to plant rooms and storage to be provided as part of CC documentation – condition of consent.
	Objective 4X-3	Materials selection reduces ongoing maintenance.	Refer to schedule of materials and finishes	Materials considered appropriate for durability and limited maintenance requirements.