Apartment Design Guidelines Compliance

Project: 2-10 Stanley Street, Kogarah NSW

For: Carlton Investments No. 2 Pty Ltd

Prepared by:

Level 33
Architectural Division
30a Eva Street
Riverwood NSW 2210

	OBJECTIVE	DESIGN CRITERIA	COMPLIANCE	COMMENT
Part 3 - Siting the Development				
3A Site Analysis	**Objective 3A-1** Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and the relationship to the surrounding context		✓	The design of the proposed development has responded to the site I the following manner: The main street frontage is towards Stanley Street which is north facing. To the rear of the site is Stanley Lane. To the east is Regent Lane and to west are residential properties which are zoned the same as this site. As such, building separation to ADG compliance was established early on so that future changes may be possible with full ADG compliance Please refer to consultant's DA documentation for landscape and geotechnical reports.
3B Orientation	**Objective 3B-1** Building types and layouts respond to the street and site while optimizing solar access within the development	-responding to desired streetscape character -promoting amenity for both the proposed development and neighbouring properties -Providing for the enjoyment of significant views -retaining trees and locating open spaces -responding to the topography and contextual -constraints such as overshadowing and noise.	✓	The proposed development responds to the desired future streetscape character, which is higher density residential, including higher FSR and height. The proposed development promotes amenity for the proposed development and maintain compliant setback for future development The proposed development being north facing provides for the enjoyment of significant views

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	Objective 3B-2 Overshadowing of neighbouring properties is minimized during mid-winter		✓	from the private balconies as well as from the roof top common open space. The proposed development responds to the topography. The parking entry was kept to only one, where vehicles enter the site from Regent Lane. SRV access is provided at the same entry. Living Areas and Communal Open Space receive solar access in accordance with sections 3D Communal and Public Open Space and 4A-1 Solar and Daylight Access achieve 71% of apartments compliance.
3C Public Domain Interface	**Objective 3C-1** Transition between private and public domain is achieved without compromising safety and security	-Terraces, balconies and courtyard apartments should have direct street entry, where appropriate -Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings. -Upper level balconies and windows should overlook the public domain. - Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m Length of solid walls should be limited along street frontages. -Opportunities should be provided for casual interaction between residents and the public domain. Design solution public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets -In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: • architectural detailing • changes in materials	✓	The street setbacks of the proposed development conform to the Kogarah North Precinct Draft Urban Design Study. A 3.0 m wide deep soil strip has been provided along Stanley street to promote large trees and vegetation. A setback of 5.0 m to the balconies is provided to levels ground to 3 as required by the typical street section on page 27 of the Kogarah North Precinct Draft Urban Design Study. The balconies to Levels 4 and above have been setback a further 3.0 m from the levels below, which is a total of at least 8.0 m from the main Stanley Street.

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		• plant species • colours -Opportunities for people to be concealed should be minimised		The residential lobbies and entries are easily identifiable and will provide legibility from the street. The proposed residential entries from the street provide on grade wheelchair access from Stanley Street and provides direct Lift lobby access via compliant accessible ramps. A variety of differentiating materials have been used to activate the street façade to provide a level of differentiation. These include feature like tubular metal framing to the podium levels up to level 4 that will provide visual interest to the street scape.
	Objective 3C-2 Amenity of the public domain is retained and enhanced		✓	A variety of plant species have been provided in the landscape design which will enhance the transition between the public domain and the private domain while providing privacy to the ground floor residential units Mailboxes are located in the two main lobbies. Substation and fire exits are located on Regent and Stanley lanes.
3D Communal	**Objective 3D-1**	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	✓	Communal open spaces have been located on the roofs and will

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and Public Open Space	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21st June (mid- winter)		provide gathering areas to provide the residents with the opportunity for social interaction. The required COS is 25% of the site area being 1634 m^2 or 409 m^2. The communal open space provided is 633 m2 and therefore complies with this requirement. The proposed development will achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21st June (mid-winter)
	Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting		✓	The proposed Communal open space is designed to allow for a range of activities, including quiet reading areas, children's play as well as shaded roofed areas BBQ and a variety of planting and floor finishes including tiling and timber decking
	Objective 3D-3 Communal open space is designed to maximize safety		✓	The proposed Communal open space is readily accessible via the lifts. As there are no residential units on the roof, there will be no privacy issues between the COS and private units.
	Objective 3D-4 Public open space, where provided, is		✓	Solar access to the COS is provided year along as its north facing.

<table>
<tr><th></th><th>OBJECTIVE</th><th>DESIGN CRITERIA</th><th>COMPLIANCE</th><th>COMMENT</th></tr>
<tr><td></td><td>responsive to the existing pattern and uses of the neighbourhood</td><td></td><td></td><td>Opportunities for a range of recreational activities have been provided for people of all ages</td></tr>
<tr><td>3E Deep soil zones</td><td>Objective 3E-1
Deep soil zone provides areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality</td><td>Deep soil zones are to meet the following minimum requirements:
<table><tr><th>Site Area</th><th>Min. Dimensions</th><th>Deep Soil Zone (% of the site area)</th></tr><tr><td>Less than 650m2</td><td>-</td><td>7%</td></tr><tr><td>650m2 - 1500m2</td><td>3m</td><td>7%</td></tr><tr><td>Greater than 1500m2</td><td>6m</td><td>7%</td></tr><tr><td>Greater than 1500m2 with significant tree cover</td><td>6m</td><td>7%</td></tr></table></td><td>✓</td><td>The Deep soil requirement for this site is 7% of 1634 m^2 = 114.38m^2
The proposed deep soil is 114.8 m^2, which is ADG compliant.</td></tr>
<tr><td>3F Visual Privacy</td><td>Objective 3F-1
Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.

Note:
Separation distance’s between buildings on the same site should combine required building separations depending on the type of room.</td><td>Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:
<table><tr><th>Building Height</th><th>Habitable rooms and balconies</th><th>Non- habitable rooms</th></tr><tr><td>Up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr><tr><td>Up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr><tr><td>Over to 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr></table></td><td>✓</td><td>The Stanley street setbacks have been governed by the Kogarah North Precinct Draft Urban Design Study.

That is, 2.0 m deep soil zone followed by the 3.0 m setback to the balconies up to fourth storey. Balconies above the 4th storey are setback a further 3.0 m.

For the Podium levels up to level 4, the boundary setbacks on Regent Lane and Stanley Lane are set to 4.5m for non-habitable rooms and 6.0m for habitable rooms and balconies respectively.

Above level 4, the boundary setback is set to 6.0m for non-habitable rooms and 9.0m for habitable rooms and balconies respectively.</td></tr>
</table>

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				The west boundary setbacks for levels above 4 are set to 6.0m for no-habitable rooms and 9.0m for habitable rooms and balconies respectively.
	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 has been increased by: -providing solid or partially solid balustrades to balconies to the podium levels -providing fencing and/or trees and vegetation to separate spaces Balconies and private terraces have been located in front of living rooms to increase internal privacy Vertical fins have been provided to the balconies to provide privacy from adjacent units.
3G Pedestrian Access and Entries	**Objective 3G-1** Building entries and pedestrian access connects to and addresses the public domain		✓	Multiple entries have been provided at the ground floor entries to activate the street edge The entry locations relate more closely to the street and subdivision pattern and the existing pedestrian network The Building entries are clearly identifiable with canopy entry statements

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	Objective 3G-2 Access, entries and pathways are accessible and easy to identify		✓	Building access areas have been designed so that they are clearly visible from the public domain. The proposal provides steps and ramps from the public domain and have been integrated into the overall building and landscape design.
	Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations		**N/A**	
3H Vehicle Access	**Objective 3H-1** Vehicle access points are designed and located to achieve safety, minimize conflicts between pedestrians and vehicles and create high quality streetscapes		✓	The vehicle entry to the site has been minimised to just one entry. Garbage collection will occur in the basement level B1.
3J Bicycle and Car Parking	**Objective 3J-1** Car parking is provided based on proximity to public transport in metropolitan Sydney	For development in the following locations: - On sites that are within 800m of a railway station or light rail stop in the Sydney Metropolitan Area; or - land zoned, and sites within 400m of land zoned, B3 Commercial Core, B4 Mixed Use of equivalent in a nominated regional centre	✓	The carparking for this development has been provided based on the sites proximity to public transport.

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	and centres in regional areas	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		✓	Parking facilities have been provided for motorbikes, scooters and bicycles Secure undercover bicycle parking is provided on all basement levels that is easily accessible from the lift lobbies. 148 bike racks have been provided.
	Objective 3J-3 Car park design and access is safe and secure		✓	Direct, clearly visible and well lit access has been provided in the car park design into common circulation areas
	Objective 3J-4 Visual and environmental impacts of underground car parking are minimised		✓	Car parking layout has been well organised, using a logical, efficient structural grid with double loaded aisles. Natural ventilation will be provided to basement B1 with a mesh type roller shutter.
	Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised **Objective 3J-6** Visual and environmental impacts of above ground enclosed parking are minimised		**NA** **NA**	There is no on grade parking in this development. There are no above grade parking levels in this development.

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Part 4 – Designing the Building				
4A Solar and Daylight Access	**Objective 4A-1** To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.	-Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours of direct sunlight between 9am and 3pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas - 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 9am and 3pm at mid winter - A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm mid winter.	✓ **N/A** **No**	71 % (62 units out of 87 units) Living rooms and private open spaces will receive the minimum of 2 hours of direct sunlight between 9am and 3pm at mid-winter in the Sydney Metropolitan Area 29% (25 units out of 87 units) building receive no direct sunlight between 9am and 3pm mid winter
	Objective 4A-2 Daylight access is maximized where sunlight is limited		**N/A**	
	Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months.		✓	Balconies extend far enough to shade summer sun but allow winter sun to penetrate living areas.
4B Natural Ventilation	**Objective 4B-1** All habitable rooms are naturally ventilated		✓	The proposed building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms

	OBJECTIVE	DESIGN CRITERIA	COMPLIANCE	COMMENT
				The depths of habitable rooms will support natural ventilation
	Objective 4B-2 The layout and design of single aspect apartments maximizes natural ventilation		✓	The layout and design of single aspect apartments maximises natural ventilation.
	Objective 4B-3 The number of apartments with natural cross ventilation is maximized to create a comfortable indoor environment for residents	- At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed	✓	62% of apartments will be naturally cross ventilated or 54 units out of 87 units.
		- Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	✓	The overall depth of the cross-through apartment does not exceed 18m, measured glass line to glass line They are 15 m depth.
4C Ceiling Heights	**Objective 4C-1** Ceiling height achieves sufficient natural ventilation and daylight access	Measured from finished floor level to finished ceiling level, minimum ceiling heights are: Minimum ceiling height for apartment and mixed-use buildings **Habitable Rooms** 2.7m **Non-Habitable Rooms** 2.4m **For 2 Storey Apt** 2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area **Attic Space** 1.8m at edge of room with a 30-degree minimum ceiling slope **If located in mixed use areas** 3.3m for ground and first floor to promote future flexibility	✓	Minimum floor to ceiling heights are achieved, please refer to the sections.

<table>
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<tr><td></td><td>Objective 4C-2
Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms</td><td></td><td>✓</td><td></td></tr>
<tr><td></td><td>Objective 4C-3
Ceiling heights contribute to the flexibility of building use over the life of the building</td><td></td><td>NA</td><td></td></tr>
<tr><td>4D Apartment Size and Layout</td><td>Objective 4D-1
The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</td><td>- Apartments are required to have the following minimum internal areas:
<table><tr><th>Apartment Type</th><th>Minimum Internal Area</th></tr><tr><td>Studio</td><td>35m^2</td></tr><tr><td>1 bedroom</td><td>50m^2</td></tr><tr><td>2 bedroom</td><td>70m^2</td></tr><tr><td>3 bedroom</td><td>90m^2</td></tr></table>-The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m^2 each.

-A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each

- Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms</td><td>✓</td><td>All residential units comply to the minimum room sizes stipulated in this objective. Please refer to the calculations sheet for a m2 total area of each residential unit.</td></tr>
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<tr><td></td><td>Objective 4D-2
Environmental performance of the apartment is maximised</td><td>- Habitable room depths are limited to a maximum of 2.5 x the ceiling height
2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</td><td>✓</td><td>All residential units comply, where the depths of the rooms have been limited to a maximum of 2.5 x the ceiling height.</td></tr>
<tr><td></td><td>Objective 4D-3
Apartment layouts are designed to accommodate a variety of household activities and needs</td><td>- Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)

- Bedrooms have a minimum dimension of 3m (excluding wardrobe space)
- Living rooms or combined living/dining rooms have a minimum width of:
- 3.6m for studio and 1 bedroom apartments
- 4m for 2 & 3 bedroom apartments

- The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</td><td>✓</td><td>All residential units comply, with the minimum areas required by this clause and for the minimum width for living areas or combined living/dining areas.</td></tr>
<tr><td>4E Private open spaces and balconies</td><td>Objective 4E-1
Apartments provide appropriately sized private open space and balconies to enhance residential amenity</td><td>- All apartments are required to have primary balconies as follows:

<table><tr><th>Dwelling Type</th><th>Minimum Area</th><th>Minimum Depth</th></tr><tr><td>Studio Apartments</td><td>4m2</td><td>-</td></tr><tr><td>1 Bedroom Apartments</td><td>8m2</td><td>2m</td></tr><tr><td>2 Bedroom Apartments</td><td>10m2</td><td>2m</td></tr><tr><td>3 Bedroom Apartments</td><td>12m2</td><td>2.4m</td></tr></table>-The minimum balcony depth to be counted as contributing to the balcony area is 1m.

- For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m2 and a minimum depth of 3m</td><td>✓</td><td>The proposed private open spaces for each unit are greater than that required by this clause. Ground floor units have bigger areas to their POS as they are required as part of the bigger setbacks requirement of the Kogarah North Precinct Draft Urban Design Study.</td></tr>
<tr><td></td><td>Objective 4E-2</td><td></td><td></td><td></td></tr>
</table>

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	Primary private open space and balconies are appropriately located to enhance liveability for residents		✓	All private open spaces have been located adjacent the living areas, dining room or kitchen so as to extend the living spaces,
	Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building		✓	The private open spaces and balconies have been designed to be o the overall architectural form and detail of the building.
	Objective 4E-4 Private open space and balcony design maximises safety		✓	The private open spaces and balcony design maximises safety. The a/c units have been located at least 1.2 m away from the balustrades to avoid any opportunities for climbing and falls. All balustrades have been designed so that they are not climbable.

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<tr><td rowspan="3">4F Common Circulation and Spaces</td><td>Objective 4F-1
Common circulation spaces achieve good amenity and properly service the number of apartments</td><td>- The maximum number of apartments off a circulation core on a single level is eight

- For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</td><td>✓

N/A</td><td>The common circulation spaces or lift lobbies service a maximum number of 6 apartments off a circulation core on a single level on podium levels and 4 apartments on levels above.</td></tr>
<tr><td>Objective 4F-2
Common circulation spaces promote safety and provide for social interaction between residents</td><td></td><td>✓</td><td>The Common circulation spaces will promote safety and provide for social interaction between residents.

There are no tight corners in the lift lobbies.

Circulation spaces will be well lit at night and have legible signage for apartment numbers, common areas and general wayfinding.

The entry lobbies can be provided with seating.</td></tr>
<tr><td>Objective 4G-1
Adequate, well designed storage is provided in each apartment</td><td>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:
<table><tr><th>Dwelling Type</th><th>Storage Size Volume</th></tr><tr><td>Studio Apartments</td><td>4m2</td></tr><tr><td>1 Bedroom Apartments</td><td>6m2</td></tr><tr><td>2 Bedroom Apartments</td><td>8m2</td></tr></table></td><td>✓</td><td>All units have been provided with the required volumes of storage. Please refer to drawing DA016 – DA018 for a details unit per unit schedule that outlines where the storage has been provided.</td></tr>
</table>

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		3 Bedroom Apartments	10m2		
		-At least 50% of the required storage is to be located within the apartment			
	Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments			✓	Specific apartments have dedicated baseman secure storage either at the rear of their car space or nearby their car space.
4H Acoustic Privacy	**Objective 4H-1** Noise transfer is minimised through the siting of buildings and building layout			✓	Appropriate finishes, treatments and construction methods have been implemented in the design to reduce noise transmission through walls and floors.
	Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments			✓	Noise impacts have been mitigated within apartments through layout and acoustic treatments Internal apartment layout have been designed to separate noisy spaces from quiet spaces, using a the following design solutions: -rooms with similar noise requirements are grouped together -doors separate different use zones -wardrobes in bedrooms are co-located to act as sound Buffers Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: -double or acoustic glazing

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				- acoustic seals
4J 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		✓	physical separation between the habitable rooms that face Stanley street and the noise or pollution source, have been achieved by the use of solid masonry balustrades to the podium levels. Planting and Landscaping along the ground floor street setbacks act as noise buffers to the habitable rooms on the ground level.
	Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission		✓	Design solutions that have been used to mitigate noise include providing seals to prevent noise transfer through gaps and using louvre screens to control noise from the street to the habitable rooms.
4K 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		✓	
	Objective 4K-2 The apartment mix is distributed to suitable locations within the building		✓	Different apartment types have been used and located strategically to achieve a successful façade composition and to optimise solar access.

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4L Ground Floor Apartments	**Objective 4L-1** Street frontage activity is maximised where ground floor apartments are located		✓	Ground floor apartments have been designed to address the Public domain and even though most ground floor units cannot be accessed from the street, street activation is achieved through the use of ramps and landscaping.
	Objective 4L-2 Design of ground floor apartments delivers amenity and safety for resident		✓	The proposed Design of the ground floor apartments will provide amenity and safety by casual surveillance through the use of -landscaping and private courtyards Solar access should be maximised through: -high ceilings and tall windows. - trees and shrubs that allow solar access in winter and shade in summer
4M Facades	**Objective 4M-1** Building facades provide visual interest along the street while respecting the character of the local area		✓	-The composition of building Provides a well-defined podium level. With metalwork running diagonally and unifying the 3 podium levels acting as a buffer between ground floor and the levels above, with a roof top landscaping in its perimeter visible from the streets. -Changes in texture, material, detail and colour to have been used to modify the prominence of elements

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				-The building services on the roof have been integrated within the overall façade and landscape roof design. -The building facades have been designed with appropriate scale and proportion to the streetscape and human scale by utilising well composed horizontal solid balustrades combined with glass balustrade in a dynamic position that changes at every level on Stanley Street. -On Regent Lane, the metalwork continues to identify the podium levels and on Stanley Lane the metalwork contrast with the horizontal white rendering bands awning windows continuing till top level.
	Objective 4M-2 Building functions are expressed by the facade		✓	The apartment layout has been expressed externally through façade features such as party walls and floor slabs.
4N Roof Design	**Objective 4N-1** Roof treatments are integrated into the building design and positively respond to the street		✓	Roof treatments have been integrated into the building design and positively respond to the street by: - special roof features seating and pergolas.

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				-breaking down the massing of the roof by using smaller elements to avoid bulk -Common open space with extensive landscaped areas and seating areas and BBQ areas have been provided on the roof
	Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised		**N/A**	
	Objective 4N-3 Roof design incorporates sustainability features		✓	The roof extends to the front of Stanley Street providing shading to the balconies of below levels.
4O Landscape Design	**Objective 4O-1** Landscape design is viable and sustainable		✓	Please refer to the Landscape architect's documentation that forms part of this submission.
	Objective 4O-2 Landscape design contributes to the streetscape and amenity		✓	Please refer to the Landscape architect's documentation that forms part of this submission.
4P Planting on Structures	**Objective 4P-1** Appropriate soil profiles are provided		✓	A 2.0 m wide strip of deep soil has been provided to main street frontage to allow for bigger planting species.
	Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance		✓	Please refer to the Landscape architect's documentation that forms part of this submission.

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	Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance		✓	Please refer to the Landscape architect's documentation that forms part of this submission.
4Q Universal Design	**Objective 4Q-1** Universal design features are included in apartment design to promote flexible housing for all community members		✓	20 % of the apartments are "liveable" layouts. As shown from ground level to level 3.
	Objective 4Q-2 A variety of apartments with adaptable designs are provided		✓	10 % of the apartments are "accessible" layouts. Please refer drawing DA850
	Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs		✓	The accessible units living areas are able to be furnished in different configurations.
4R Adaptive Reuse	**Objective 4R-1** New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place		**NA**	
	Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse		**NA**	

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4S Mixed Use	**Objective 4S-1** Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement		**NA**	
	Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents		**NA**	
4T Awnings and Signage	**Objective 4T-1** Awnings are well located and complement and integrate with the building design		**NA**	
	Objective 4T-2 Signage responds to the context and desired streetscape character		✓	
4U Energy Efficiency	**Objective 4U-1** Development incorporates passive environmental design		✓	Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access) Well located, screened outdoor areas should be provided for clothes drying

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	Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer		✓	The following design solutions were used: -the use of smart glass or other technologies on north and west elevations - thermal mass in the floors and walls of north facing rooms is maximised -concrete floors and tiles and or timber rather than carpet - insulated roofs, walls and floors and Seals window and door openings Provision of consolidated heating and cooling infrastructure will be located in a centralised location, the roof.
	Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation.		✓	Rooms with similar usage have been grouped together where possible. Natural cross ventilation for apartments is optimised Natural ventilation has been provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible,
4V Water Management and Conservation	**Objective 4V-1** Potable water use is minimised		✓	Apartments will be individually metered. Rainwater will be collected, stored and reused on site

	OBJECTIVE	DESIGN CRITERIA	COMPLIANCE	COMMENT
				Drought tolerant, low water use plants have nominated to be use in the landscaped areas
	Objective 4V-2 Urban storm-water is treated on site before being discharged to receiving waters		✓	Please refer to the Hydraulic engineers documentation which forms part of this submission.
	Objective 4V-3 Flood management systems are integrated into site design		✓	Please refer to the Hydraulic engineer's documentation which forms part of this submission
4W Waste Management	**Objective 4W-1** Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents		✓	The waste storage facilities are located in the basement level B1 and has been designed to minimise impacts on the streetscape, building entry and amenity of residents by allowing the entry of an SRV into the building for garbage collection Adequately sized storage areas for rubbish bins have been provided in B1 basement level. Waste and recycling room will be mechanically ventilated. Circulation design allows bins to be easily manoeuvred between the storage and collection points Temporary storage as bulky goods has been provided for large bulk items such as mattresses. A waste management plan forms part of this submission.

	OBJECTIVE	DESIGN CRITERIA	COMPLIANCE	COMMENT
	Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling		✓	The chute facility on each level will allow the residents to choose between recycle materials and rubbish which in turn will guide the compactor and chute in the in the basement to alter direct to the appropriate bin.
4X Building Maintenance	**Objective 4X-1** Building design detail provides protection from weathering		✓	Careful design and material selection has been implemented to reduce the long term maintenance obligations of the apartment development, as effective maintenance of the development ensures the longevity of buildings, sustaining the value of the property and will reduce the life-cycle cost to future owners.
	Objective 4X-2 Systems and access enable ease of maintenance		✓	The building layout should provide easy access for maintenance and inspection of services and plant equipment
	Objective 4X-3 Material selection reduces on-going maintenance costs		✓	Sensors will be used in the roof top landscape gardens to control artificial lighting in the common open space. Natural materials have been nominated which will weather well and improve with time such as robust and durable materials and finishes in locations which receive heavy wear and tear like common circulation areas and lift interiors.