

## DESIGN VERIFICATION STATEMENT

**PROJECT:** 1 Phillip Street

**DATE:** 21 December 2023

**ISSUE:** Juliana Abdalla

44 Ashmore Rd  
Bundall QLD 4217  
PO Box 7404  
GCMC QLD 9726

This is a Design Verification Statement (DVS) in accordance with **Clause 50** of the **Environmental Planning and Assessment Regulation 2000** and **Schedule 1 Design Quality Principles** of the **State Environmental Planning Policy No 65 (SEPP 65) – Design Quality of Residential Apartment Development**.

ABN 12 887 885 845  
BOAQ reg # 2843  
NSWARB reg # 11433  
ARBV reg # 18521  
TASBOA reg # 1176  
ABWA reg # 3214  
NZRAB reg # 5972

### PART 1. Design Verification:

I, Frank Raunik, verify that I have directed the design of the proposed project at 1 Phillip Street, Goonellabah, containing a total of 18 units.

I verify the proposed development complies with:

Design Quality Principles set out in Part 2 of State Environmental Planning Policy No. 65 – Design for Quality of Residential Apartment Development.

The objectives in Parts 3 and 4 of the Apartment Design Guide.

### PART 2. SEPP No. 65 - Schedule 1 Design Quality Principles:

#### Principle 1: Context & Neighbourhood Character

*Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.*

#### Response:

Lismore, nestled in the heart of the Northern Rivers region of New South Wales, Australia, is a vibrant and picturesque city that captivates visitors with its unique blend of natural beauty, cultural richness, and a laid-back lifestyle. This charming city serves as a hub for the surrounding lush hinterland, pristine national parks, and the meandering waters of the Wilsons River. Lismore is not only blessed with natural beauty but also boasts a rich cultural scene. The city is known for its thriving arts community, evident in the numerous galleries, theatres and festivals that take place throughout the year.

Goonellabah is a suburb located just east of Lismore in the Northern Rivers region of New South Wales, Australia. The neighbourhood character of Goonellabah is defined by a mix of residential, recreational, and educational elements that contribute to its unique charm. Goonellabah features a mix of residential housing, ranging from traditional standalone houses to more modern developments. The suburb caters to a diverse demographic, including families, young professionals, and retirees. The housing styles vary, providing options for those seeking a suburban lifestyle.

Goonellabah is characterized by a harmonious blend of residential diversity, scenic surroundings, educational facilities, community engagement, and convenient amenities. The neighbourhood's unique combination of these elements creates a distinctive and appealing environment for the residents and community.



ISO 9001 QUALITY  
Certified System

**Principle 2: Built Form & Scale**

*Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements.*

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

**Response:**

The proposed development sits on a 1821m<sup>2</sup> lot and comprises of a three storey building with a total of 18 units spread across levels 2 and 3. The unit types include 1 and 2 bedroom apartments, catering to various accommodation needs as a social housing project. The building has been thoughtfully designed to maximize natural light, taking into account the surrounding context and the slope of the site. The height of the building has been designed to comply with the height restrictions for the area.

The ground floor comprises of a car park with capacity for 19 vehicles, which caters to both residents and visitors. Additionally, there is an outdoor landscaped communal area on the ground floor, which provides an inviting space for residents to socialize and enjoy picnics outdoors on the grass. The second floor also counts with a large planter that transforms the circulation area into a big communal opens space for residents to socialize. The design is focused on creating a comfortable and welcoming atmosphere for residents.

The proposed development balances function and form, providing a well-designed space that responds to the needs of its residents. The design has taken into account the context of the site, ensuring that the development contributes positively to the surrounding area. The building has been designed to enhance the streetscape and offer an inviting presence to passersby, while creating a comfortable and secure environment for residents.

**Principle 3: Density**

*Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population.*

*Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.*

**Response:**

The proposal is consistent with the context of the locality and within the established & proposed density response accepted by Council for the area. The proximity to public transport, community and health services ensures that the development of this scale will be supported by the existing infrastructure.

**Principle 4: Sustainability**

*Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.*

**Response:**

The proposal has been oriented and designed in a manner that maximizes the utilization of available solar energy. The number of apartments with over 3 hours of sunlight in Mid-winter exceeds that stipulated in SEPP 65. The design ensures that openings are protected by balconies and some vertical screening elements. Cross ventilation has been designed to all units. Analysis of the Western elevation summer sun exposure has been carried out to confirm that batten screens and depth of balconies are appropriate to ensure adequate shading is provided at this time of year for occupant comfort.

Thermal insulation will be in accordance with BASIX Section J for roof, floors and walls. Materiality has been chosen for durability as well as aesthetics. Where possible, units facing south are provided with skylights to receive direct sunlight to main living rooms.

**Principle 5: Landscape**

*Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.*

*Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.*

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

**Response:**

The proposed development incorporates high quality soft and hard landscaping with features such as built-in seating along the entry walkway to enliven the community spirit and native plants & trees that will enhance the functional and aesthetic live ability of the site. Entry into the development occurs alongside Deep soil zones with extensive planting. The landscape to the Communal areas of the property allow for buffer to the private terraces and ground floor grassed areas that allow for multiple uses by the occupants. The Deep soil zones are oriented towards the street-front & side boundaries to enhance privacy.

**Principle 6: Amenity**

*Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.*

**Response:**

Amenity is provided to the residences through generous private open spaces and communal areas with open grounds that could support the residents own initiatives. The communal areas are specially located to receive good amount of sunlight.

Unit layouts focus around flexibility of space for different end users and provision of varied storage areas within the unit and in the garage allowing for convenient storage of different categories for all residents. These were key design drivers that provide a high level of convenience to the occupants. Storage is an element that is becoming increasingly important for users particularly for older resident's that may be downsizing from family homes.

Two accessible car spaces are provided on ground level and an accessible ramp provides access to the main entry, from this point all units could be considered accessible via the lift and accessible entry door openings.

**Principle 7:**

*Safety Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well-lit and visible areas that are easily maintained and appropriate to the location and purpose.*

**Response:**

The proposed development will be consistent with the need to maximize passive observation opportunities in relation to the adjacent roads and to the central communal open space on Level 2. Both street frontages are passively observed by all of the apartments on Levels 2 and 3 facing North and East. It is also proposed to use elements such as screens to the North and West private open spaces to provide privacy to units and to the adjacent neighbours.

The screens to the carpark on the Ground level add an extra element of transparency that would contribute to the passive surveillance and also minimize the need for mechanically ventilate that space.

**Principle 8: Housing Diversity & Social Interaction**

*Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well-designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.*

**Response:**

The proposed social housing development sits on a 1821m<sup>2</sup> lot and comprises of a three story building with a total of 18 units spread across levels 2 and 3. The unit types include 1 and 2 bedroom apartments in each level, catering to various accommodation needs and to the rising demand for social and affordable developments. The development will count with different landscaped open spaces for the residents to enjoy whilst increasing visual amenity to the streetscape.

**Principle 9: Aesthetics**

*Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of a well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.*

**Response:**

A contemporary and yet timeless material palette was chosen. This helps the architecture to speak for itself. In addition, the materials have a harmonious relationship amongst themselves and the surrounding landscape. The design is minimalistic and modern and it is suited for both traditional and modular construction.

The building façade has interesting articulation exacerbated by the deep balconies, framed elements and the flying eaves, which also help with the building cooling and sun protection. Similarly, the use of screens to the west and south facades are both for sun protection and privacy for the residents and the neighbours. The screens also add an extra layer of interest to the facade.

The different textures and materials in addition to elements such as the different type of screens paired with a relevant landscape design help provide an interesting visual appeal to the façade. The colours in use represent a timeless palette when pairing the warmth of the timber grain with the eternal strength of a good mix of greys.

In conclusion the proposed development is considered to be consistent with the relevant design principles contained within SEPP No. 65, the Apartment Design Guide and would be a positive insertion in this area that is set for growth and change.

Client: Social Futures  
 Project: 1 Phillip Street, Goonellabah  
 Subject: Design Verification Statement

Refer to the attached checklist for detailed response to each item.

**PART 3. Apartment Design Guide Checklist:**

<b>SEPP 65 APARTMENT DESIGN GUIDE COMPLIANCE CHECKLIST</b>		
<b>CONTROLS</b>	<b>PROPOSED</b>	<b>COMPLIANCE</b>
<b>PART 3 - SITING THE DEVELOPMENT</b>		
<p><b>Objective 3A-1</b>  <i>Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.</i></p> <p><b>Design Guidance</b>  <i>*Each element in the Site Analysis Checklist should be addressed (see Appendix 1)</i></p>	<p><i>Achieved. Refer to SITE ANALYSIS; FLOOR PLAN L1; L2; L3</i></p> <p><i>*Achieved</i></p>	<p>YES</p>
<p><b>Objective 3B-1</b>  <i>Building types and layouts respond to the streetscape and site while optimising solar access within the development.</i></p> <p><b>Design Guidance</b>  <i>*Buildings along the street frontage define the street, by facing it and incorporating direct access from the street.</i></p> <p><i>*Where the street frontage is to the east or west, rear buildings should be orientated to the north.</i></p> <p><i>*Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west.</i></p>	<p><i>The built form has been designed in response to the site, the way it slopes represented an opportunity for more generous POS to the southern units on L2. All the other units were optimized for natural lighting &amp; cross ventilation to occur. Direct access has been incorporated into the street frontage to allow access for residents. Refer to FLOOR PLAN L1; L2; SEPP CONTROLS [GROUND - L1]; SEPP CONTROLS [L2]; SEPP CONTROLS [L3]</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p>	<p>YES</p>
<p><b>Objective 3B-2</b>  <i>Overshadowing of neighbouring properties is minimised during mid-winter.</i></p> <p><b>Design Guidance</b>  <i>*Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access.</i></p> <p><i>*Solar access to living rooms, balconies and private open spaces of neighbours should be considered.</i></p>	<p><i>The building was positioned in order to minimize the shadow on the neighbours and utilize the slope of the site. The height of the building is under the height limit and also helps to reduce overshadowing of neighbours. Refer to SHADOW DIAGRAMS; SECTIONS; SEPP CONTROLS</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	<p>YES</p>

<p><i>*Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%.</i></p> <p><i>*If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy.</i></p> <p><i>*Overshadowing should be minimised to the south or downhill by increased upper-level setbacks.</i></p> <p><i>*It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development.</i></p> <p><i>*A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings.</i></p>	<p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*Achieved where possible</i></p> <p><i>*Achieved where possible</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 3C-1</b>        Transition between private and public domain is achieved without compromising safety and security.</p> <p><b>Design Guidance</b>  <i>*Terraces, balconies and courtyard apartments should have direct street entry, where appropriate</i></p> <p><i>*Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)</i></p> <p><i>*Upper-level balconies and windows should overlook the public domain.</i></p> <p><i>*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.</i></p> <p><i>*Length of solid walls should be limited along street frontages.</i></p> <p><i>*Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets.</i></p> <p><i>*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:</i></p> <ul style="list-style-type: none"> <li>• architectural detailing</li> <li>• changes in materials</li> <li>• plant species</li> <li>• colours</li> </ul> <p><i>*Opportunities for people to be concealed should be minimised.</i></p>	<p><i>Achieved. Refer to FLOOR PLAN L1; L2; L3</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*Achieved. Balconies have been oriented to survey the public area.</i></p> <p><i>*Achieved.</i></p> <p><i>*Achieved.</i></p> <p><i>*Achieved. Seating has been provided at the entry adjacent to the mailboxes.</i></p> <p><i>*N/A</i></p> <p><i>*Achieved.</i></p>	<p><b>YES</b></p>
<p><b>Objective 3C-2</b>        Amenity of the public domain is retained and enhanced.</p>	<p><i>Amenity has been retained and</i></p>	<p><b>YES</b></p>

<p><b>Design Guidance</b></p> <p><i>*Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking.</i></p> <p><i>*Mailboxes should be located in lobbies, perpendicular to the street. Alignment or integrated into front fences were individual street. Entries are provided.</i></p> <p><i>*The visual prominence of underground car park vents should be minimised and located at a low level where possible.</i></p> <p><i>*Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view</i></p> <p><i>* Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels Durable, graffiti resistant and easily cleanable materials should the following design solutions:</i></p> <ul style="list-style-type: none"> <li><i>• street access, pedestrian paths and building entries which are clearly defined</i></li> <li><i>• paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space</i></li> <li><i>• minimal use of blank walls, fences and ground level parking</i></li> </ul> <p><i>*On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking.</i></p>	<p><i>enhanced through landscaping at the ground floor to minimise the overall impact of the built form.</i></p> <p><i>The residents mailboxes have been integrated into the entry statement. Service areas have been located in relation to the car park area to minimise visual impact in order to retain the public amenity and not impact negatively from the street.</i></p> <p><b>Refer to FLOOR PLAN L1</b></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 3D-1</b></p> <p><i>An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping.</i></p> <p><b>Design Criteria</b></p> <p><i>1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)</i></p> <p><i>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)</i></p>	<p><i>Open spaces have been created at the ground level and at Level 2, to enhance residential amenity, landscaping and deep soil zones. Refer to FLOOR PLAN L1; L2; LANDSCAPE PLAN</i></p> <p><i>*Achieved. Communal Open Space, Deep Soil Zones + Landscaping have a total of 522.4m<sup>2</sup>, which represents 28.6% of the site.</i></p> <p><i>Achieved. At least 50% of the Ground Floor Lawns receive more than 2 hours sunlight between 9- 3pm on 21 June</i></p>	<p><b>YES</b></p>

<p><b>Design Guidance</b>  <i>* Communal open space should be consolidated into a well designed, easily identified and usable area</i></p> <p><i>*Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions</i></p> <p><i>*Communal open space should be co-located with deep soil areas.</i></p> <p><i>* Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies</i></p> <p><i>*Where communal open space cannot be provided at ground level, it should be provided on a podium or roof</i></p> <p><i>* Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:</i></p> <ul style="list-style-type: none"> <li><i>•provide communal spaces elsewhere such as a landscaped roof top terrace or a common room</i></li> <li><i>•provide larger balconies or increased private open space for apartments</i></li> <li><i>•demonstrate good proximity to public open space and facilities and/or provide contributions to public open space</i></li> </ul>	<p><i>*Achieved. The communal open space has been designed to be a central large landscaped area on Level 2 with integrated seating. The COS on Ground, which consists of landscaping, deep soil zones and lawns are off the street and highly visible.</i>  <i>*Achieved</i></p> <p><i>*Achieved on Ground (L1)</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 3D-2</b>  <i>Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</i></p> <p><b>Design Guidance</b>  <i>*Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements:</i></p> <ul style="list-style-type: none"> <li><i>• seating for individuals or groups</i></li> <li><i>• barbecue areas</i></li> <li><i>• play equipment or play areas</i></li> <li><i>• swimming pools, gyms, tennis courts or common rooms</i></li> </ul> <p><i>*The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts</i></p> <p><i>*Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks</i></p>	<p><i>Achieved. COS has been incorporated into the overall design at both Ground (L1) and Level 2 where a range of activities can be carried out. Refer to FLOOR PLAN L1; L2</i></p> <p><i>*Achieved. Integrated bench seating and lawns are provided for a range of activities.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved. Visual impacts have been minimised.</i></p>	<p>YES</p>
<p><b>Objective 3D-3</b>  <i>Communal open space is designed to maximise safety</i></p>	<p><i>Security and safety for residents has been incorporated through creating a Communal Open Space at L2, where only residents and their guests have access. Refer to FLOOR PLAN L2</i></p>	<p>YES</p>

<p><b>Design Guidance</b>  <i>* Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• bay windows</li> <li>• corner windows</li> <li>• balconies</li> </ul> <p><i>*Communal open space should be well lit.</i></p> <p><i>*Where communal open space/facilities are provided for children and young people they are safe and contained</i></p>	<p><i>*Achieved. Visibility has been achieved from units above through windows and balconies. Visibility to L2 COS has been achieved through kitchen windows.</i></p> <p><i>*Achieved. Lighting has been provided to ensure safety and visibility is maintained.</i></p> <p><i>*N/A</i></p>	
<p><b>Objective 3D-4</b>  <i>Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.</i></p> <p><b>Design Guidance</b>  <i>* The public open space should be well connected with public streets along at least one edge</i></p> <p><i>*The public open space should be connected with nearby parks and other landscape elements</i></p> <p><i>*Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid</i></p> <p><i>* Solar access should be provided year round along with protection from strong winds</i></p> <p><i>*Opportunities for a range of recreational activities should be provided for people of all ages</i></p> <p><i>*A positive address and active frontages should be provided adjacent to public open space</i></p> <p><i>*Boundaries should be clearly defined between public open space and private areas</i></p>	<p><i>Achieved. Public open space has been provided in relation to existing uses within the area. Refer to FLOOR PLAN L1</i></p> <p><i>*Achieved. Public open space has been situated along the boundaries in relation to both the streets</i></p> <p><i>*Achieved. Connection to street provided via pedestrian access.</i></p> <p><i>*Achieved.</i></p> <p><i>* Achieved. Solar access to the communal spaces is achieved all year round.</i></p> <p><i>*Achieved.</i></p> <p><i>*Achieved. Provided through the use of architectural and landscaping features.</i></p> <p><i>*Achieved. POS is located on ground level while all units are located from L2 to L3. Also fencing is provided with lockable doors and block walls to separate COS from car park.</i></p>	<p>YES</p>
<p><b>Objective 3E-1</b>  <i>Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality</i></p> <p><b>Design Criteria</b>  <i>1. Deep soil zones are to meet the following minimum requirements:</i></p>	<p><i>Achieved. Refer to FLOOR PLAN GROUND FLOOR; L2; LANDSCAPE PLAN</i></p> <p><i>*Achieved. 276.1m<sup>2</sup> of deep soil zone has been provided (15.15% of site).</i></p>	<p>YES</p>

Site area	Minimum dimensions	Deep soil zone (% of site area)
less than 650m <sup>2</sup>	-	7%
650m <sup>2</sup> - 1,500m <sup>2</sup>	3m	
greater than 1,500m <sup>2</sup>	6m	
greater than 1,500m <sup>2</sup> with significant existing tree cover	6m	

  

*\* On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:*

- 10% of the site as deep soil on sites with an area of 650m<sup>2</sup>-1,500m<sup>2</sup>
- 15% of the site as deep soil on sites greater than 1,500m<sup>2</sup>

*\* Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:*

- basement and sub basement car park design that is consolidated beneath building footprints
- use of increased front and side setbacks
- adequate clearance around trees to ensure long term health
- co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep Soil

*\* Achieving the design criteria may not be possible on some sites including where:*

- the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres)
- there is 100% site coverage or non-residential uses at ground floor Level Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure

  

**Objective 3F-1**  
 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

**Design Criteria 1**  
 Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:

Building height	Habitable rooms and balconies	Non-habitable rooms
up to 12m (4 storeys)	6m	3m
up to 25m (5-8 storeys)	9m	4.5m
over 25m (9+ storeys)	12m	6m

*Note: Separation distances between buildings on the same site should combine required building separations*

  

*\*Achieved. As above.*

*\*Achieved. The deep soil zone(s) have been located to the front, both sides of the property and to the rear in the POS to visually enhance the street view and provide green space for viewing for residents and to provide more privacy with existing neighbours.*

*\*N/A*

  

*The separation from subject sites is appropriate. Deep soil was located along the boundaries to plant trees which will enrich privacy. Also, fixed screens located in POS are proposed. Refer to FLOOR PLAN L1; L2; L3; SECTIONS*

*The separation between the building and the neighbours is appropriate. Refer to floor plans.*

**YES**

<p><i>depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.</i></p> <p><i>* Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance.</i></p> <p><i>*For residential buildings next to commercial buildings, separation distances should be measured as follows:</i></p> <ul style="list-style-type: none"> <li><i>• for retail, office spaces and commercial balconies use the habitable room distances</i></li> <li><i>• for service and plant areas use the non-habitable room distances</i></li> </ul> <p><i>* New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:</i></p> <ul style="list-style-type: none"> <li><i>• site layout and building orientation to minimise privacy impacts (see also section 3B Orientation)</i></li> <li><i>• on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)</i></li> </ul> <p><i>*Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)</i></p> <p><i>* Direct lines of sight should be avoided for windows and balconies across corners</i></p> <p><i>* No separation is required between blank walls.</i></p>	<p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*Visual separation provided through the use of deeper balconies, fixed vertical screening and deep soil located along site boundaries for tree planting.</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 3F-2</b>  <i>Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space</i></p> <p><b>Design Guidance</b>  <i>* Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• setbacks</i></li> <li><i>• solid or partially solid balustrades to balconies at lower levels</i></li> <li><i>• fencing and/or trees and vegetation to separate spaces</i></li> <li><i>• screening devices</i></li> <li><i>• bay windows or pop out windows to provide privacy in one direction and outlook in another</i></li> <li><i>• raising apartments/private open space above the public domain or communal open space</i></li> <li><i>• planter boxes incorporated into walls and balustrades to increase visual separation</i></li> <li><i>• pergolas or shading devices to limit overlooking of lower apartments or private open space</i></li> <li><i>• on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies</i></li> </ul>	<p><i>Visual separation provided through the use of deeper balconies, fixed vertical screening and deep soil located along site boundary for tree planting. All units and POS are located from L2 to L3. Refer to ELEVATIONS</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>

<p><i>* Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas</i></p> <p><i>* Balconies and private terraces should be located in front of living rooms to increase internal privacy</i></p> <p><i>* Windows should be offset from the windows of adjacent buildings.</i></p> <p><i>* Recessed balconies and/or vertical fins should be used between adjacent balconies.</i></p>	<p><i>*Achieved</i></p> <p><i>*Partially achieved. If possible, balconies are located in front of living rooms. If not, they are located adjacent to them and the living room window is screened to achieve privacy.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 3G-1</b>  <i>Building entries and pedestrian access connects to and addresses the public domain.</i></p> <p><b>Design Guidance</b>  <i>* Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge. Entry locations relate to the street and subdivision pattern and the existing pedestrian network</i></p> <p><i>* Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries.</i></p> <p><i>* Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries</i></p>	<p><i>Achieved. Refer to FLOOR PLAN L1</i></p> <p><i>*One pedestrian access and one vehicular connect to and address to public domain.</i></p> <p><i>*All entries (car and pedestrian) are clearly defined and identifiable.</i></p> <p><i>*N/A</i></p>	<p><b>YES</b></p>
<p><b>Objective 3G-2</b>  <i>Access, entries and pathways are accessible and easy to identify.</i></p> <p><b>Design Guidance</b>  <i>* Building access areas including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces.</i></p> <p><i>* The design of ground floors and underground car parks minimise level changes along pathways and entries.</i></p> <p><i>* Steps and ramps should be integrated into the overall building and landscape design.</i></p> <p><i>* For large developments 'way finding' maps should be provided to assist visitors and residents (see figure 4T.3)</i></p> <p><i>* For large developments electronic access and audio/video intercom should be provided to manage access.</i></p>	<p><i>Achieved. Refer to FLOOR PLAN GROUND (L1) and PERSPECTIVES</i></p> <p><i>*Achieved. Main entry to the building is off the street, enhanced by an entry statement, mailboxes area with seating and lighting. Stairs and ramps are provided for access.</i></p> <p><i>*Achieved.</i></p> <p><i>*Achieved.</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p>	<p><b>YES</b></p>
<p><b>Objective 3G-3</b>  <i>Large sites provide pedestrian links for access to streets and connection to destinations</i></p>	<p><i>Pedestrian footpath extension is proposed to link existing streets</i></p>	<p><b>N/A</b></p>

<p><b>Design Guidance</b></p> <p><i>* Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport</i></p> <p><i>* Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate</i></p>	<p><i>to the development and COS. It will also facilitate external connections between wider road systems.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 3H-1</b>  <i>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.</i></p> <p><b>Design Guidance</b></p> <p><i>* Car park access should be integrated with the building's overall facade. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• the materials and colour palette to minimise visibility from the street</i></li> <li><i>• security doors or gates at entries that minimise voids in the facade</i></li> <li><i>• where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed</i></li> </ul> <p><i>* Car park entries should be located behind the building line.</i></p> <p><i>* Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout.</i></p> <p><i>* Car park entry and access should be located on secondary streets or lanes where available.</i></p> <p><i>* Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided.</i></p> <p><i>* Access point locations should avoid headlight glare to habitable rooms.</i></p> <p><i>* Adequate separation distances should be provided between vehicle entries and street intersections.</i></p> <p><i>* The width and number of vehicle access points should be limited the minimum.</i></p> <p><i>* Visual impact of long driveways should be minimised through changing alignments and screen planting.</i></p> <p><i>* The need for large vehicles to enter or turn around within the site should be avoided.</i></p>	<p><i>Vehicle access does not interfere with pedestrians. All car park is separated from internal pedestrian circulation and COS and it's located on the same level of lift lobbies. Refer to FLOOR PLAN L1</i></p> <p><i>*Car park access is integrated to front facade in relation to street and public domain through a ramp which takes into the building. Visitors parking are provided within the car park. It is hidden from public domain by use of darker colours and landscaping, but properly identifiable to achieve safety. It is also permeable for an extra layer of passive surveillance. Refer to FLOOR PLAN GROUND (L1); ELEVATIONS</i></p> <p><i>*Achieved</i></p> <p><i>*Not achieved due to the sloping nature of the site.</i></p> <p><i>*Vehicle entry is located on the secondary street.</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved.</i></p> <p><i>*Achieved. Only one vehicle entry screened by landscaping.</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>

<p><i>* Garbage collection, loading and servicing areas are screened.</i></p> <p><i>* Clear sight lines should be provided at pedestrian and vehicle crossings.</i></p> <p><i>* Traffic calming devices such as changes in paving material or textures should be used where appropriate.</i></p> <p><i>* Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• changes in surface materials</i></li> <li><i>• level changes</i></li> <li><i>• the use of landscaping for separation</i></li> </ul>	<p><i>*Achieved</i></p> <p><i>*Achieved. Sight triangle shown on plan.</i></p> <p><i>*Provided</i></p> <p><i>*Achieved</i></p> <p><i>*They are independent one from another and easily distinguishable.</i></p>	
<p><b>Objective 3J-1</b>  <i>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas</i></p> <p><i>1. For development in the following locations:</i></p> <ul style="list-style-type: none"> <li><i>• on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metro Area, or</i></li> <li><i>• on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less. The car parking needs for a development must be provided off street.</i></li> </ul> <p><b>Design Guidance</b>  <i>* Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site</i>  <i>* Where less car parking is provided in a development, council should not provide on street resident parking permits.</i></p>	<p><i>Car parking needs have been achieved under the Infill Housing SEPP (0.5 carpark every 1 bed unit, 1 carpark every 2 bed unit). Refer to DEVELOPMENT SUMMARY; FLOOR PLAN GROUND (L1)</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p>	<p><b>YES</b></p>
<p><b>Objective 3J-2</b>  <i>Parking and facilities are provided for other modes of transport.</i></p> <p><b>Design Guidance</b>  <i>*Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters</i></p> <p><i>* Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas</i></p> <p><i>* Conveniently located charging stations are provided for electric vehicles, where desirable</i></p>	<p><i>Achieved.10 bicycle and 2 accessible parking spaces are provided. Refer to FLOOR PLAN GROUND ( L1)</i></p> <p><i>*N/A</i></p> <p><i>*Partially Achieved</i></p> <p><i>*N/A</i></p>	<p><b>YES</b></p>
<p><b>Objective 3J-3</b>  <i>Car park design and access is safe and secure.</i></p> <p><b>Design Guidance</b>  <i>* Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces</i></p>	<p><i>Achieved. Refer to FLOOR PLAN GROUND (L1)</i></p> <p><i>*Achieved. Car parking has been designed to allow unobstructed access.</i></p>	<p><b>YES</b></p>

<p><i>* Direct, clearly visible and well-lit access should be provided into common circulation areas.</i></p> <p><i>* A clearly defined and visible lobby or waiting area should be provided to lifts and stairs.</i></p> <p><i>* For larger car parks, safe pedestrian access should be clearly defined, and circulation areas have good lighting, colour, line marking and/or bollards</i></p>	<p><i>*Achieved</i></p> <p><i>*Achieved. Lift lobbies have a different flooring finish and are provided with clear signage.</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 3J-4</b>  <i>Visual and environmental impacts of underground car parking are minimised</i></p> <p><b>Design Guidance</b>  <i>* Excavation should be minimised through efficient car park layouts and ramp design</i></p> <p><i>* Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles</i></p> <p><i>* Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites</i></p> <p><i>* Natural ventilation should be provided to basement and sub-basement car parking areas</i></p> <p><i>* Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design</i></p>	<p><i>Car park excavation is to utilize the site slope, achieving a car park level but still maintaining the southern units on Level 2 on the natural ground to facilitate deep planting to fence line.</i></p> <p><i>*Achieved despite excavation extent.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved through split levels</i></p> <p><i>*Achieved through permeable screening to carpark</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 3J-5</b>  <i>Visual and environmental impacts of on-grade car parking are minimised.</i></p> <p><b>Design Guidance</b>  <i>* On-grade car parking should be avoided.</i></p> <p><i>* Where on-grade car parking is unavoidable, the following design solutions are used:</i></p> <ul style="list-style-type: none"> <li><i>• parking is located on the side or rear of the lot away from the primary street frontage</i></li> <li><i>• cars are screened from view of streets, buildings, communal and private open space areas</i></li> <li><i>• safe and direct access to building entry points is provided</i></li> <li><i>• parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space</i></li> <li><i>• stormwater run-off is managed appropriately from car parking surfaces</i></li> <li><i>• bio-swailes, rain gardens or on-site detention tanks are provided, where appropriate</i></li> <li><i>• light coloured paving materials or permeable paving</i></li> </ul>	<p><i>The portion of the car park that is on grade is away from both street frontages and is screened by landscape. The car park screen is permeable which facilitates the visual connectivity between the car park and the public domain and landscape.</i></p> <p><i>*It is minimized</i></p> <p><i>*Achieved</i></p>	<p><b>N/A</b></p>

<p>systems are used, and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving</p>		
<p><b>Objective 3J-6</b>  <i>Visual and environmental impacts of above ground enclosed carparking are minimised</i></p> <p><b>Design Guidance</b>  <i>* Exposed parking should not be located along primary street frontages the street frontage (see figure 3J.9)</i></p> <p><i>* Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels)</i></li> <li><i>• car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along</i></li> </ul> <p><i>* Positive street address and active frontages should be provided at ground level</i></p>	<p>N/A</p>	<p>YES</p>
<p><b>PART 4 – DESIGNING THE BUILDING</b></p>		
<p><b>Objective 4A-1</b>  <i>To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</i></p> <p><b>Design Criteria</b></p> <ol style="list-style-type: none"> <li><i>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</i></li> <li><i>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</i></li> <li><i>3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter</i></li> </ol> <p><i>* Where courtyards are used :</i></p> <ul style="list-style-type: none"> <li><i>• use is restricted to kitchens, bathrooms and service areas</i></li> <li><i>• building services are concealed with appropriate detailing and materials to visible walls</i></li> </ul>	<p><i>The layout, location and orientation of the development's buildings and the design of the units were chosen to optimize natural light and cross ventilation where possible. Refer to SEPP CONTROLS PLANS.</i></p> <p>N/A</p> <p><i>83% (15 of 18 units) of units receive 3 or more hours of direct sunlight between 9am to 3pm at mid-winter. Skylights are provided on roof for top level units.</i></p> <p><i>Not Achieved. 16% (3 of 18 units) don't receive direct sunlight between 9am to 3pm at mid-winter. The 3 units that do not receive the above mentioned sun light have extended on grade terraces with deep soil zones.</i></p> <p>*N/A</p>	<p>YES</p>

<ul style="list-style-type: none"> <li>• courtyards are fully open to the sky</li> <li>• access is provided to the light well from a communal area for cleaning and maintenance</li> <li>• acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved</li> </ul> <p>* Opportunities for reflected light into apartments are optimised through:</p> <ul style="list-style-type: none"> <li>• reflective exterior surfaces on buildings opposite south facing windows</li> <li>• positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light</li> <li>• integrating light shelves into the design</li> <li>• light coloured internal finishes</li> </ul>	<p>*Achieved</p>	
<p><b>Objective 4A-3</b>  <i>Design incorporates shading and glare control, particularly for warmer months</i></p> <p><b>Design Guidance</b>  <i>*A number of the following design features are used:</i></p> <ul style="list-style-type: none"> <li>• balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas</li> <li>• shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting</li> <li>• horizontal shading to north facing windows</li> <li>• vertical shading to east and particularly west facing windows</li> <li>• operable shading to allow adjustment and choice</li> <li>• high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)</li> </ul>	<p><i>Shading and glare control is provided through the use of deeper balconies, eaves, fixed vertical screening and sun hoods. Refer to ELEVATIONS and PERSPECTIVES</i></p> <p>*Achieved</p>	<p>YES</p>
<p><b>Objective 4B-1</b>  <i>All habitable rooms are naturally ventilated.</i></p> <p><b>Design Guidance</b>  <i>* The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms.</i></p> <p>* Depths of habitable rooms support natural ventilation</p> <p>* The area of unobstructed window openings should be equal to at least 5% of the floor area served</p> <p>* Light wells are not the primary air source for habitable rooms.</p> <p>* Doors and openable windows maximise natural ventilation opportunities by using the following design solutions:</p> <ul style="list-style-type: none"> <li>• adjustable windows with large effective openable areas</li> <li>• a variety of window types that provide safety and flexibility such as awnings and louvres</li> <li>• windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors</li> </ul>	<p><i>All habitable rooms are naturally ventilated. Refer to SEPP PLANS</i></p> <p>*Achieved</p> <p>*Achieved. Depth rooms based on SEPP 65</p> <p>*Achieved</p> <p>*Achieve. All habitable rooms have wall windows to exterior</p> <p>*Achieved</p>	<p>YES</p>
<p><b>Objective 4B-2</b>  <i>The layout and design of single aspect apartments</i></p>	<p><i>The layout and fenestration</i></p>	<p>YES</p>

<p><i>maximises natural ventilation.</i></p> <p><b>Design Guidance</b>  <i>* Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)</i></p> <p><i>* Natural ventilation to single aspect apartments is achieved with the following design solutions:</i></p> <ul style="list-style-type: none"> <li><i>• primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation)</i></li> <li><i>• stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries</i></li> <li><i>• courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells</i></li> </ul>	<p><i>within the single aspect units has been designed with inlets and outlets on opposite sides of the apartments to encourage cross ventilation. Refer to SEPP PLANS</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	
<p><b>Objective 4B-3</b>  <i>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</i></p> <p><b>Design Criteria</b></p> <p><i>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 enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed</i></p> <p><i>2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line</i></p> <p><b>Design Guidance</b>  <i>*The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths</i></p> <p><i>* In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)</i></p> <p><i>* Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow</i></p> <p><i>* Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow</i></p>	<p><i>The layout, location and orientation of the development's buildings and the design of the units were chosen to optimize natural light and cross ventilation. Refer to SEPP PLANS</i></p> <p><i>*Achieved. 100% of units have natural cross ventilation</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved. Refer to Floor Plans L2 and L3.</i></p> <p><i>*Not achieved. The sizes/areas are different.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved. Ceiling Heights are 2.7m. Refer Sections</i></p>	<p>YES</p>
<p><b>Objective 4C-1</b>  <i>Ceiling height achieves sufficient natural ventilation and daylight access.</i></p>	<p><i>2.7m ceiling height has been selected to all habitable rooms. Ceiling height has been selected to allow for ceiling lining with down lights and increased sound attenuation to the unit above. Refer to SECTIONS</i></p>	<p>YES</p>

<p><b>Design Criteria</b>          1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:</p> <table border="1" data-bbox="197 371 593 678"> <thead> <tr> <th colspan="2">Minimum ceiling height for apartment and mixed use buildings</th> </tr> </thead> <tbody> <tr> <td>Habitable rooms</td> <td>2.7m</td> </tr> <tr> <td>Non-habitable</td> <td>2.4m</td> </tr> <tr> <td>For 2 storey apartments</td> <td>2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area</td> </tr> <tr> <td>Attic spaces</td> <td>1.8m at edge of room with a 30 degree minimum ceiling slope</td> </tr> <tr> <td>If located in mixed used areas</td> <td>3.3m for ground and first floor to promote future flexibility of use</td> </tr> </tbody> </table> <p>These minimums do not preclude higher ceilings if desired.</p> <p><b>Design Guidance</b>          *Ceiling height can accommodate use of ceiling fans for cooling and heat distribution.</p>	Minimum ceiling height for apartment and mixed use buildings		Habitable rooms	2.7m	Non-habitable	2.4m	For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area	Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope	If located in mixed used areas	3.3m for ground and first floor to promote future flexibility of use	<p>*Achieved</p> <p>*Achieved</p>	
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If located in mixed used areas	3.3m for ground and first floor to promote future flexibility of use													
<p><b>Objective 4C-2</b>          Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms</p> <p><b>Design Guidance</b>          * A number of the following design solutions can be used:</p> <ul style="list-style-type: none"> <li>• the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces</li> <li>• well-proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings</li> <li>• ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non habitable areas, such as robes or storage, can assist.</li> </ul>	<p>Ceiling height is 2700mm to habitable rooms, min 2400mm to non-habitable and bulkheads. Refer to SECTIONS</p> <p>*Achieved</p>	<p>YES</p>												
<p><b>Objective 4C-3</b>          Ceiling heights contribute to the flexibility of building use over the life of the building.</p> <p><b>Design Guidance</b>          *Ceiling heights of lower-level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)</p>	<p>N/A</p>	<p>N/A</p>												
<p><b>Objective 4D-1</b>          The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity</p> <p><b>Design Criteria</b>          1. Apartments are required to have the following minimum internal areas:</p>	<p>Achieved. Refer to UNIT TYPES PLAN</p> <p>*Achieved:          1 Bed Unit = 50.7m<sup>2</sup>          2 Bed Unit = 70.0m<sup>2</sup></p>	<p>YES</p>												

Apartment type	Minimum internal area			
Studio	35m <sup>2</sup>			
1 bedroom	50m <sup>2</sup>			
2 bedroom	70m <sup>2</sup>			
3 bedroom	90m <sup>2</sup>			

  

<p>The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m<sup>2</sup> each. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m<sup>2</sup> each.</p> <p>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.</p> <p><b>Design Guidance</b>            * Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)</p> <p>* A window should be visible from any point in a habitable room</p> <p>* Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits.</p>	<p>*Achieved</p> <p>*Achieved</p> <p>*Achieved</p> <p>*N/A</p>	
<p><b>Objective 4D-2</b>            Environmental performance of the apartment is maximised</p> <p><b>Design Criteria</b>            1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height</p> <p>2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window</p> <p><b>Design Guidance</b>            * Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths.            * All living areas and bedrooms should be located on the external face of the building.</p>	<p>Achieved. Refer to <b>UNIT TYPES PLAN</b></p> <p>*Achieved</p> <p>*Achieved</p> <p>*N/A</p> <p>*Achieved</p>	<p>YES</p>
<p><b>Objective 4D-3</b>            Apartment layouts are designed to accommodate a variety of household activities and needs.</p> <p><b>Design Criteria</b>            1. Master bedrooms have a minimum area of 10m<sup>2</sup> and other bedrooms 9m<sup>2</sup> (excluding wardrobe space)            2. Bedrooms have a minimum 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</p>	<p>Achieved. Refer to <b>UNIT TYPES PLAN; SEPP PLANS</b></p> <p>*Achieved</p> <p>*Achieved</p> <p>*Achieved</p>	<p>YES</p>

<ul style="list-style-type: none"> <li>• 4m for 2- and 3-bedroom apartments</li> </ul> <p>4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts</p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>* Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas</li> <li>* All bedrooms allow a minimum length of 1.5m for robes</li> <li>* The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high</li> <li>* Apartment layouts allow flexibility over time, design solutions may include:       <ul style="list-style-type: none"> <li>• dimensions that facilitate a variety of furniture arrangements and removal</li> <li>• spaces for a range of activities and privacy levels between different spaces within the apartment</li> <li>• dual master apartments</li> <li>• dual key apartments</li> </ul> </li> </ul> <p>Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments</p> <ul style="list-style-type: none"> <li>• room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1))</li> <li>• efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms</li> </ul>	<p>*Achieved</p> <p>*Achieved</p> <p>*Achieved</p> <p>*Achieved</p> <p>*Achieved. Dual key apartments not provided.</p>																
<p><b>Objective 4E-1</b>          Apartments provide appropriately sized private open space and balconies to enhance residential amenity</p> <p><b>Design Criteria</b></p> <p>1. All apartments are required to have primary balconies as follows</p> <table border="1" data-bbox="193 1485 624 1697"> <thead> <tr> <th>Dwelling type</th> <th>Minimum area</th> <th>Minimum depth</th> </tr> </thead> <tbody> <tr> <td>Studio apartments</td> <td>4m<sup>2</sup></td> <td>-</td> </tr> <tr> <td>1 bedroom apartments</td> <td>8m<sup>2</sup></td> <td>2m</td> </tr> <tr> <td>2 bedroom apartments</td> <td>10m<sup>2</sup></td> <td>2m</td> </tr> <tr> <td>3+ bedroom apartments</td> <td>12m<sup>2</sup></td> <td>2.4m</td> </tr> </tbody> </table> <p>The minimum balcony depth to be counted as contributing to the balcony area is 1m</p> <p>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 15m<sup>2</sup> and a minimum depth of 3m.</p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>* Increased communal open space should be provided where the number or size of balconies are reduced.</li> <li>* Storage areas on balconies is additional to the minimum balcony size.</li> </ul>	Dwelling type	Minimum area	Minimum depth	Studio apartments	4m <sup>2</sup>	-	1 bedroom apartments	8m <sup>2</sup>	2m	2 bedroom apartments	10m <sup>2</sup>	2m	3+ bedroom apartments	12m <sup>2</sup>	2.4m	<p>Achieved. Refer to <b>UNIT TYPES PLAN; FLOOR PLANS GROUND (L1); L2; L3</b></p> <p>*Achieved</p> <p>*N/A</p> <p>*Achieved</p> <p>*N/A</p> <p>*N/A</p>	<p>YES</p>
Dwelling type	Minimum area	Minimum depth															
Studio apartments	4m <sup>2</sup>	-															
1 bedroom apartments	8m <sup>2</sup>	2m															
2 bedroom apartments	10m <sup>2</sup>	2m															
3+ bedroom apartments	12m <sup>2</sup>	2.4m															

<p><i>* Balcony use may be limited in some proposals by:</i></p> <ul style="list-style-type: none"> <li>• consistently high wind speeds at 10 storeys and above</li> <li>• close proximity to road, rail or other noise sources</li> <li>• exposure to significant levels of aircraft noise</li> <li>• heritage and adaptive reuse of existing buildings</li> </ul> <p><i>In these situations, Juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated.</i></p>		
<p><b>Objective 4E-2</b>  <i>Primary private open space and balconies are appropriately located to enhance liveability for residents.</i></p> <p><b>Design Guidance</b></p> <p><i>* Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space.</i></p> <p><i>* Private open spaces and balconies predominantly face north, east or west.</i></p> <p><i>* Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms.</i></p>	<p><i>Achieved. Refer to UNIT TYPES PLAN; FLOOR PLANS GROUND (L1); L2; L3</i></p> <p><i>*Achieved</i></p> <p><i>*Partially achieved (6 of 18 balconies face south)</i></p> <p><i>*Achieved</i></p>	<p>YES</p>
<p><b>Objective 4E-3</b>  <i>Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</i></p> <p><b>Design Guidance</b></p> <p><i>* Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred.</i></p> <p><i>* Full width full height glass balustrades alone are generally not desirable</i></p> <p><i>* Projecting balconies should be integrated into the building design and the design of soffits considered</i></p> <p><i>* Operable screens, shutters, hoods and pergolas are used to control sunlight and wind.</i></p> <p><i>* Balustrades are set back from the building or balcony edge where overlooking or safety is an issue.</i></p> <p><i>* Downpipes and balcony drainage are integrated with the overall facade and building design.</i></p> <p><i>* Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design.</i></p> <p><i>* Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design.</i></p> <p><i>* Ceilings of apartments below terraces should be insulated to avoid heat loss.</i></p>	<p><i>Achieved. Refer to ELEVATIONS; PERSPECTIVES</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p> <p><i>*Provided</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	<p>YES</p>

<p><i>* Water and gas outlets should be provided for primary balconies and private open space.</i></p>	<p><i>*Achieved</i></p>	
<p><b>Objective 4E-4</b>  <i>Private open space and balcony design maximises safety.</i></p> <p><b>Design Guidance</b>  <i>*Changes in ground levels or landscaping are minimised.</i></p> <p><i>*Design and detailing of balconies avoids opportunities for climbing and falls.</i></p>	<p><i>Achieved. Refer to ELEVATIONS</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 4F-1</b>  <i>Common circulation spaces achieve good amenity and properly service the number of apartments.</i></p> <p><b>Design Criteria</b></p> <p>1. <i>The maximum number of apartments off a circulation core on a single level is eight</i></p> <p>2. <i>For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</i></p> <p><b>Design Guidance</b>  <i>* Greater than minimum requirements for corridor widths and/or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry door</i></p> <p><i>* Daylight and natural ventilation should be provided to all common circulation spaces that are above ground</i></p> <p><i>* Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors</i></p> <p><i>* Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• a series of foyer areas with windows and spaces for seating</i></li> <li><i>• wider areas at apartment entry doors and varied ceiling heights</i></li> </ul> <p><i>* Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment.</i></p> <p><i>* Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:</i></p> <ul style="list-style-type: none"> <li><i>• sunlight and natural cross ventilation in apartments</i></li> <li><i>• access to ample daylight and natural ventilation in common circulation spaces</i></li> <li><i>• common areas for seating and gathering</i></li> <li><i>• generous corridors with greater than minimum ceiling heights</i></li> <li><i>• other innovative design solutions that provide high levels of amenity</i></li> </ul>	<p><i>Not achieved but a high level of amenity for common lobbies, corridors and apartments was demonstrated through sunlight and natural cross ventilation in apartments, access to ample daylight and natural ventilation in common circulation spaces, common areas for seating and gathering, generous corridors with greater than minimum ceiling heights. Refer SEPP CONTROLS [CIRCULATION CORE]</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>

<p><i>* Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level.</i></p> <p><i>* Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled.</i></p>	<p><i>*Achieved</i></p> <p><i>*N/A</i></p>											
<p><b>Objective 4F-2</b>  <i>Common circulation spaces promote safety and provide for social interaction between residents</i></p> <p><b>Design Guidance</b>  <i>* Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines</i></p> <p><i>* Tight corners and spaces are avoided</i></p> <p><i>* Circulation spaces should be well lit at night</i></p> <p><i>* Legible signage should be provided for apartment numbers, common areas and general way finding</i></p> <p><i>* Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided</i></p> <p><i>* In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space</i></p> <p><i>* Where external galleries are provided, they are more open than closed above the balustrade along their length</i></p>	<p><i>The lift lobbies and circulation corridors were designed for resident safety and interaction. They are open and all look into the COS on Level 2. The balustrades on L3 are code compliant in height and do not pose any risk such as toe hold. Refer FLOOR PLANS L2; L3</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>										
<p><b>Objective 4G-1</b>  <i>Adequate, well designed storage is provided in each apartment.</i></p> <p><b>Design Criteria</b>  <i>1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided</i></p> <table border="1" data-bbox="193 1778 624 1973"> <thead> <tr> <th>Dwelling type</th> <th>Storage size volume</th> </tr> </thead> <tbody> <tr> <td>Studio apartments</td> <td>4m<sup>3</sup></td> </tr> <tr> <td>1 bedroom apartments</td> <td>6m<sup>3</sup></td> </tr> <tr> <td>2 bedroom apartments</td> <td>8m<sup>3</sup></td> </tr> <tr> <td>3+ bedroom apartments</td> <td>10m<sup>3</sup></td> </tr> </tbody> </table> <p><i>At least 50% of the required storage is to be located within the apartment.</i></p> <p><b>Design Guidance</b>  <i>* Storage is accessible from either circulation or living areas.</i></p>	Dwelling type	Storage size volume	Studio apartments	4m <sup>3</sup>	1 bedroom apartments	6m <sup>3</sup>	2 bedroom apartments	8m <sup>3</sup>	3+ bedroom apartments	10m <sup>3</sup>	<p><i>Achieved. Refer to SEPP PLANS</i></p> <p><i>*Achieved. Refer to SEPP Plans for all levels.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
Dwelling type	Storage size volume											
Studio apartments	4m <sup>3</sup>											
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3+ bedroom apartments	10m <sup>3</sup>											

<p><i>* Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weatherproof and screened from view from the street.</i></p> <p><i>* Left over space such as under stairs is used for storage.</i></p>	<p><i>*N/A</i></p> <p><i>*N/A</i></p>	
<p><b>Objective 4G-2</b>  <i>Additional storage is conveniently located, accessible and nominated for individual apartments.</i></p> <p><b>Design Guidance</b>  <i>* Storage not located in apartments is secure and clearly allocated to specific apartments.</i></p> <p><i>* Storage is provided for larger and less frequently accessed items.</i></p> <p><i>* Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible.</i></p> <p><i>* If communal storage rooms are provided, they should be accessible from common circulation areas of the building</i></p> <p><i>* Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain.</i></p>	<p><i>Additional storage is provided for each apartment individually and easily accessible through the carpark. Storage lockers are secure and allocated.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p>	<p><i>N/A</i></p>
<p><b>Objective 4H-1</b>  <i>Noise transfer is minimised through the siting of buildings and building layout</i></p> <p><b>Design Guidance</b>  <i>* Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy)</i></p> <p><i>* Window and door openings are generally orientated away from noise sources</i></p> <p><i>* 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</i></p> <p><i>* Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources</i></p> <p><i>* The number of party walls (walls shared with other apartments) are limited and are appropriately insulated.</i></p> <p><i>* 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</i></p>	<p><i>Building is designed to follow the site slope, burying some of the carpark. Acoustically compliant walls and windows will be provided to units where necessary. Refer to FLOOR PLANS; ELEVATIONS; SECTIONS</i></p> <p><i>*Refer to response in item 3F</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved through building design</i></p> <p><i>*Achieved through unit design</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved.</i></p>	<p><i>YES</i></p>
<p><b>Objective 4H-2</b></p>		

<p><i>Noise impacts are mitigated within apartments through layout and acoustic treatments.</i></p> <p><b>Design Guidance</b>  <i>* Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions:</i></p> <ul style="list-style-type: none"> <li>• rooms with similar noise requirements are grouped together</li> <li>• doors separate different use zones</li> <li>• wardrobes in bedrooms are co-located to act as sound buffers</li> </ul> <p><i>* Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions:</i></p> <ul style="list-style-type: none"> <li>• double or acoustic glazing</li> <li>• acoustic seals</li> <li>• use of materials with low noise penetration properties</li> <li>• continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements</li> </ul>	<p><i>Achieved. Storage/robes have been utilised as a buffer to ensure noise impacts are kept to a minimum between apartments. BCA requirement for sound ratings between units, service spaces and communal spaces will be achieved. Refer to FLOOR PLANS L2; L3</i></p> <p><i>*Achieved through unit design</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 4J-1</b>  <i>In noisy or hostile environments, the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.</i></p> <p><b>Design Guidance</b>  <i>* To minimise impacts the following design solutions may be used:</i></p> <ul style="list-style-type: none"> <li>• physical separation between buildings and the noise or pollution source</li> <li>• residential uses are located perpendicular to the noise source and where possible buffered by other uses</li> <li>• non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces</li> <li>• non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources.</li> <li>• buildings should respond to both solar access and noise. Where solar access is away from the noise source, non-habitable rooms can provide a buffer</li> <li>• where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4)</li> <li>• landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry</li> </ul> <p><i>* Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas:</i></p> <ul style="list-style-type: none"> <li>• solar and daylight access</li> <li>• private open space and balconies</li> <li>• natural cross ventilation</li> </ul>	<p>N/A</p>	<p>N/A</p>

<p><b>Objective 4J-2</b>  <i>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.</i></p> <p><b>Design Guidance</b>  <i>* Design solutions to mitigate noise include:</i></p> <ul style="list-style-type: none"> <li>• limiting the number and size of openings facing noise sources</li> <li>• providing seals to prevent noise transfer through gaps</li> <li>• using double or acoustic glazing, acoustic louvers or enclosed balconies (wintergardens)</li> <li>• using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits</li> </ul>	<p><i>Achieved through material choice and selection. Development footprint avoids the direct relationship with the loudest sources and turns to the opposite direction. Refer to FLOOR PLAN L2; L3; MATERIALITY</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 4K-1</b>  <i>A range of apartment types and sizes is provided to cater for different household types now and into the future.</i></p> <p><b>Design Guidance</b>  <i>* A variety of apartment types is provided.</i></p> <p><i>* The apartment mix is appropriate, taking into consideration:</i></p> <ul style="list-style-type: none"> <li>• the distance to public transport, employment and education centres</li> <li>• the current market demands and projected future demographic trends</li> <li>• the demand for social and affordable housing</li> <li>• different cultural and socioeconomic groups</li> </ul> <p><i>* Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households.</i></p>	<p><i>A mix of apartment types has been designed to accommodate varied demographics within the area and to supply a demand for social housing: 6 1bed, and 12 2bed. Refer to DEVELOPMENT SUMMARY</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>

<p><b>Objective 4K-2</b>  <i>The apartment mix is distributed to suitable locations within the building.</i></p> <p><b>Design Guidance</b>  <i>* Different apartment types are located to achieve successful facade composition and to optimise solar access (see figure 4K.3)</i></p> <p><i>* Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available.</i></p>	<p><i>Achieved. 3 1bed and 6 2 bed per floor. Refer to DEVELOPMENT SUMMARY; FLOOR PLAN L2; L3</i></p> <p><i>*Achieved</i></p> <p><i>*Partially achieved. 2bed units at corners</i></p>	<p><b>YES</b></p>
<p><b>Objective 4L-1</b>  <i>Street frontage activity is maximised where ground floor apartments are located.</i></p> <p><b>Design Guidance</b>  <i>* Direct street access should be provided to ground floor apartments.</i></p> <p><i>* Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• both street, foyer and other common internal circulation entrances to ground floor apartments.</i></li> <li><i>• private open space is next to the street</i></li> <li><i>• doors and windows face the street</i></li> </ul> <p><i>* Retail or home office spaces should be located along street frontages.</i></p> <p><i>* Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases, provide higher floor to ceiling heights and ground floor amenities for easy conversion</i></p>	<p><i>Fencing for on grade L2 apartments has a mix of materials and textures to enhance the facade interest whilst facilitating both passive surveillance and safety.</i></p> <p><i>*Not achieved by design. Refer to floor plans</i></p> <p><i>*Achieved</i></p> <p><i>*Not achieved by design. Refer floor plans</i></p>	<p><b>PARTIAL</b></p>
<p><b>Objective 4L-2</b>  <i>Design of ground floor apartments delivers amenity and safety for residents.</i></p> <p><b>Design Guidance</b>  <i>* Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4)</i></li> <li><i>• landscaping and private courtyards</i></li> <li><i>• windowsill heights that minimise sight lines into apartments</i></li> <li><i>• integrating balustrades, safety bars or screens with the exterior design</i></li> </ul> <p><i>* Solar access should be maximised through:</i></p> <ul style="list-style-type: none"> <li><i>• high ceilings and tall windows</i></li> <li><i>• trees and shrubs that allow solar access in winter and shade in summer</i></li> </ul>	<p><i>Apartments have safe and varied fences which delivers safety and amenity plus passive surveillance.</i></p> <p><i>*Achieved</i></p> <p><i>*Not Achieved. Refer SEPP Plans L2</i></p>	<p><b>YES</b></p>
<p><b>Objective 4M-1</b>  <i>Building facades provide visual interest along the street while respecting the character of the local area.</i></p>	<p><i>The building facade has been designed to create visual</i></p>	<p><b>YES</b></p>

<p><b>Design Guidance</b></p> <p>* Design solutions for front building facades may include:</p> <ul style="list-style-type: none"> <li>• a composition of varied building elements</li> <li>• a defined base, middle and top of buildings</li> <li>• revealing and concealing certain elements</li> <li>• changes in texture, material, detail and colour to modify the prominence of elements</li> </ul> <p>* Building services should be integrated within the overall facade.</p> <p>* Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include:</p> <ul style="list-style-type: none"> <li>• well composed horizontal and vertical elements</li> <li>• variation in floor heights to enhance the human scale</li> <li>• elements that are proportional and arranged in patterns</li> <li>• public artwork or treatments to exterior blank walls</li> <li>• grouping of floors or elements such as balconies and windows on taller buildings</li> </ul> <p>* Building facades relate to key datum lines of adjacent buildings through upper-level setbacks, parapets, cornices, awnings or colonnade heights.</p> <p>* Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals.</p>	<p>interest along Phillip Street and McDermott Ave through variation and articulation of built form, as well as the transition between various materials and textures. Refer to <b>MATERIALITY; PERSPECTIVES; ELEVATIONS</b></p> <p>*Achieved</p> <p>*Achieved</p> <p>*Achieved</p> <p>*Achieved</p> <p>*Achieved</p>	
<p><b>Objective 4M-2</b>  <i>Building functions are expressed by the facade.</i></p> <p><b>Design Guidance</b></p> <p>* Building entries should be clearly defined.</p> <p>* Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height</p> <p>* The apartment layout should be expressed externally through facade features such as party walls and floor slabs</p>	<p>Achieved. Materials answer and are exposed based on building functions. Refer to <b>PERSPECTIVES; ELEVATIONS</b></p> <p>*Achieved through entry statement</p> <p>*Achieved</p> <p>*Achieved</p>	<p>YES</p>
<p><b>Objective 4N-1</b>  <i>Roof treatments are integrated into the building design and positively respond to the street</i></p> <p><b>Design Guidance</b></p> <p>* Roof design relates to the street. Design solutions may include:</p> <ul style="list-style-type: none"> <li>• special roof features and strong corners</li> <li>• use of skillion or very low pitch hipped roofs</li> <li>• breaking down the massing of the roof by using smaller elements to avoid bulk</li> </ul>	<p>The design consists of eaved roofs mixed with extruded elements to enhance the articulation of the facade. Refer to <b>ROOF PLAN; PERSPECTIVES; ELEVATIONS</b></p> <p>*Achieved</p>	<p>YES</p>

<ul style="list-style-type: none"> <li>• using materials or a pitched form complementary to adjacent buildings</li> </ul> <p><i>* Roof treatments should be integrated with the building design. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• roof design proportionates to the overall building size, scale and form</li> <li>• roof materials compliment the building</li> <li>• service elements are integrated</li> </ul>	<p><i>*Achieved</i></p>	
<p><b>Objective 4N-2</b>  <i>Opportunities to use roof space for residential accommodation and open space are maximised</i></p> <p><b>Design Guidance</b>  <i>* Habitable roof space should be provided with good levels of amenity. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• penthouse apartments</li> <li>• dormer or clerestory windows</li> <li>• openable skylights</li> </ul> <p><i>* Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations.</i></p>	<p><i>Roof is not accessible. However skylights where located on the top units which face south for sun access.</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p>	<p><b>N/A</b></p>
<p><b>Objective 4N-3</b>  <i>Roof design incorporates sustainability features</i></p> <p><b>Design Guidance</b>  <i>* Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• the roof lifts to the north</li> <li>• eaves and overhangs shade walls and windows from summer sun</li> </ul> <p><i>* Skylights and ventilation systems should be integrated into the roof design.</i></p>	<p><i>Water collection for water reuse, voids and skylights provided. Refer to ROOF PLAN</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved. Skylights provided for top 3 units facing south</i></p>	<p><b>YES</b></p>
<p><b>Objective 4O-1</b>  <i>Landscape design is viable and sustainable.</i></p> <p><b>Design Guidance</b>  <i>*Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating:</i></p> <ul style="list-style-type: none"> <li>• diverse and appropriate planting</li> <li>• bio-filtration gardens</li> <li>• appropriately planted shading trees</li> <li>• areas for residents to plant vegetables and herbs</li> <li>• composting</li> <li>• green roofs or walls</li> </ul> <p><i>* Ongoing maintenance plans should be prepared</i></p> <p><i>* Microclimate is enhanced by:</i></p> <ul style="list-style-type: none"> <li>• appropriately scaled trees near the eastern and western elevations for shade</li> <li>• a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter</li> <li>• shade structures such as pergolas for balconies and courtyards</li> </ul>	<p><i>By Others</i></p>	<p><b>By Others</b></p>

<p><i>* Tree and shrub selection considers size at maturity and the potential for roots to compete (see Table 4)</i></p>		
<p><b>Objective 4O-2</b>  <i>Landscape design contributes to the streetscape and amenity</i></p> <p><b>Design Guidance</b>  <i>* Landscape design responds to the existing site conditions including:</i></p> <ul style="list-style-type: none"> <li><i>• changes of levels</i></li> <li><i>• views</i></li> <li><i>• significant landscape features including trees and rock outcrops</i></li> </ul> <p><i>* Significant landscape features should be protected by:</i></p> <ul style="list-style-type: none"> <li><i>• tree protection zones (see figure 4O.5)</i></li> <li><i>• appropriate signage and fencing during construction</i></li> </ul> <p><i>* Plants selected should be endemic to the region and reflect the local ecology.</i></p>	<p><i>By Others</i></p>	<p><i>By Others</i></p>
<p><b>Objective 4P-1</b>  <i>Appropriate soil profiles are provided.</i></p> <p><b>Design Guidance</b>  <i>* Structures are reinforced for additional saturated soil weight.</i></p> <p><i>* Soil volume is appropriate for plant growth, considerations include:</i></p> <ul style="list-style-type: none"> <li><i>• modifying depths and widths according to the planting mix and irrigation frequency</i></li> <li><i>• free draining and long soil life span</i></li> <li><i>• tree anchorage</i></li> </ul> <p><i>* Minimum soil standards for plant sizes should be provided in accordance with Table 5</i></p>	<p><i>By Others</i></p>	<p><i>By Others</i></p>
<p><b>Objective 4P-2</b>  <i>Plant growth is optimised with appropriate selection and maintenance</i></p> <p><b>Design Guidance</b>  <i>* Plants are suited to site conditions, considerations include:</i></p> <ul style="list-style-type: none"> <li><i>• drought and wind tolerance</i></li> <li><i>• seasonal changes in solar access</i></li> <li><i>• modified substrate depths for a diverse range of plants</i></li> <li><i>• plant longevity</i></li> </ul> <p><i>* A landscape maintenance plan is prepared</i></p> <p><i>* Irrigation and drainage systems respond to:</i></p> <ul style="list-style-type: none"> <li><i>• changing site conditions</i></li> <li><i>• soil profile and the planting regime</i></li> <li><i>• whether rainwater, stormwater or recycled grey water is used</i></li> </ul>	<p><i>By Others</i></p>	<p><i>By Others</i></p>
<p><b>Objective 4P-3</b>  <i>Planting on structures contributes to the quality and amenity of communal and public open spaces</i></p> <p><b>Design Guidance</b>  <i>* Building design incorporates opportunities for planting on structures. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li><i>• green walls with specialised lighting for indoor green walls</i></li> <li><i>• wall design that incorporates planting</i></li> </ul>	<p><i>N/A</i></p>	<p><i>N/A</i></p>

<ul style="list-style-type: none"> <li>• green roofs, particularly where roofs are visible from the public domain</li> <li>• planter boxes</li> </ul> <p>Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time</p>		
<p><b>Objective 4Q-1</b>  <i>Universal design features are included in apartment design to promote flexible housing for all community members</i></p> <p><b>Design Guidance</b>  <i>* Developments achieve a benchmark of 20% of the total apartments incorporating the Liveable Housing Guideline's silver level universal design features.</i></p>	N/A	N/A
<p><b>Objective 4Q-2</b>  <i>A variety of apartments with adaptable designs are provided</i></p> <p><b>Design Guidance</b>  <i>* Adaptable housing should be provided in accordance with the relevant council policy</i></p> <p><i>* Design solutions for adaptable apartments include:</i></p> <ul style="list-style-type: none"> <li>• convenient access to communal and public areas</li> <li>• high level of solar access</li> <li>• minimal structural change and residential amenity loss when adapted</li> <li>• larger car parking spaces for accessibility</li> <li>• parking titled separately from apartments or shared car parking arrangements</li> </ul>	N/A	N/A
<p><b>Objective 4Q-3</b>  <i>Apartment layouts are flexible and accommodate a range of lifestyle needs</i></p> <p><b>Design Guidance</b>  <i>* Apartment design incorporates flexible design solutions which may include:</i></p> <ul style="list-style-type: none"> <li>• rooms with multiple functions</li> <li>• dual master bedroom apartments with separate bathrooms</li> <li>• larger apartments with various living space options</li> <li>• open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom</li> </ul>	<p><i>Achieved. Bedrooms have standard sizes/shapes to be used for other activities if needed/wanted. Open Plan Living/Dining also offers flexibility.. Refer to UNIT TYPES PLAN</i></p> <p><i>*Achieved. Dual apartments not provided.</i></p>	YES
<p><b>Objective 4R-1</b>  <i>New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</i></p> <p><b>Design Guidance</b>  <i>* Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• new elements to align with the existing building</li> <li>• additions that complement the existing character, siting, scale, proportion, pattern, form and detailing</li> <li>• use of contemporary and complementary materials, finishes, textures and colours</li> </ul> <p><i>* Additions to heritage items should be clearly identifiable from the original building.</i></p>	N/A	N/A

<p><i>* New additions allow for the interpretation and future evolution of the building.</i></p>		
<p><b>Objective 4R-2</b>  <i>Adapted buildings provide residential amenity while not precluding future adaptive reuse.</i></p> <p><b>Design Guidance</b>  <i>* Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• <i>generously sized voids in deeper buildings</i></li> <li>• <i>alternative apartment types when orientation is poor</i></li> <li>• <i>using additions to expand the existing building envelope</i></li> </ul> <p><i>* Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas:</i></p> <ul style="list-style-type: none"> <li>• <i>where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation)</i></li> <li>• <i>alternatives to providing deep soil where less than the minimum requirement is currently available on the site</i></li> <li>• <i>building and visual separation – subject to demonstrating alternative design approaches to achieving privacy</i></li> <li>• <i>common circulation</i></li> <li>• <i>car parking</i></li> <li>• <i>alternative approaches to private open space and balconies</i></li> </ul>	N/A	N/A
<p><b>Objective 4S-1</b>  <i>Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.</i></p> <p><b>Design Guidance</b>  <i>* Mixed use development should be concentrated around public transport and centres.</i></p> <p><i>* Mixed use developments positively contribute to the public domain. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• <i>development addresses the street</i></li> <li>• <i>active frontages are provided</i></li> <li>• <i>diverse activities and uses</i></li> <li>• <i>avoiding blank walls at the ground level</i></li> <li>• <i>live/work apartments on the ground floor level, rather than commercial</i></li> </ul>	N/A	N/A
<p><b>Objective 4S-2</b>  <i>Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents.</i></p> <p><b>Design Guidance</b>  <i>* Residential circulation areas should be clearly defined. Design solutions may include:</i></p> <ul style="list-style-type: none"> <li>• <i>residential entries are separated from commercial entries and directly accessible from the street</i></li> <li>• <i>commercial service areas are separated from residential</i></li> </ul>	N/A	N/A

<p><i>components</i></p> <ul style="list-style-type: none"> <li>• residential car parking and communal facilities are separated or secured</li> <li>• security at entries and safe pedestrian routes are provided</li> <li>• concealment opportunities are avoided</li> </ul> <p><i>* Landscaped communal open space should be provided at podium or roof levels.</i></p>		
<p><b>Objective 4T-1</b>  <i>Awnings are well located and complement and integrate with the building design</i></p> <p><b>Design Guidance</b>  <i>*Awnings should be located along streets with high pedestrian activity and active frontages</i></p> <p><i>* A number of the following design solutions are used:</i></p> <ul style="list-style-type: none"> <li>• continuous awnings are maintained and provided in areas with an existing pattern</li> <li>• height, depth, material and form complements the existing street character</li> <li>• protection from the sun and rain is provided</li> <li>• awnings are wrapped around the secondary frontages of corner sites</li> <li>• awnings are retractable in areas without an established pattern</li> </ul> <p><i>* Awnings should be located over building entries for building address and public domain amenity.</i></p> <p><i>* Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure.</i></p> <p><i>* Gutters and down pipes should be integrated and concealed.</i></p> <p><i>* Lighting under awnings should be provided for pedestrian safety.</i></p>	<p>N/A</p>	<p>N/A</p>
<p><b>Objective 4T-2</b>  <i>Signage responds to the context and desired streetscape character.</i></p> <p><b>Design Guidance</b>  <i>* Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development.</i></p> <p><i>* Legible and discrete way finding should be provided for larger developments.</i></p> <p><i>* Signage is limited to being on and below awnings and a single facade sign on the primary street frontage</i></p>	<p><i>Achieved. Building signage will be integrated to suit the style of development.</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 4U-1</b>  <i>Development incorporates passive environmental design</i></p> <p><b>Design Guidance</b>  <i>* Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)</i></p> <p><i>* Well located, screened outdoor areas should be provided for clothes drying.</i></p>	<p><i>Achieved. Refer to SEPP PLANS</i></p> <p><i>*Achieved</i></p> <p><i>*Not achieved</i></p>	<p><b>YES</b></p>

<p><b>Objective 4U-2</b>  <i>Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.</i></p> <p><b>Design Guidance</b>  <i>* A number of the following design solutions are used:</i></p> <ul style="list-style-type: none"> <li>• <i>the use of smart glass or other technologies on north and west elevations</i></li> <li>• <i>thermal mass in the floors and walls of north facing rooms is maximised</i></li> <li>• <i>polished concrete floors, tiles or timber rather than carpet</i></li> <li>• <i>insulated roofs, walls and floors and seals on window and door openings</i></li> <li>• <i>overhangs and shading devices such as awnings, blinds and screens</i></li> </ul> <p><i>* Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)</i></p>	<p><i>Achieved through facade design and materiality chosen. Refer to ELEVATIONS; MATERIALITY</i></p> <p><i>*Achieved</i></p> <p><i>*Not achieved. AC units fenced in balconies</i></p>	<p><b>YES</b></p>
<p><b>Objective 4U-3</b>  <i>Adequate natural ventilation minimises the need for mechanical ventilation.</i></p> <p><b>Design Guidance</b>  <i>* A number of the following design solutions are used:</i></p> <ul style="list-style-type: none"> <li>• <i>rooms with similar usage are grouped together</i></li> <li>• <i>natural cross ventilation for apartments is optimised</i></li> <li>• <i>natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible.</i></li> </ul>	<p><i>Achieved. All habitable rooms have natural ventilation and all units have natural cross ventilation. Refer to SEPP PLANS</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 4V-1</b>  <i>Potable water use is minimised</i></p> <p><b>Design Guidance</b>  <i>* Water efficient fittings, appliances and wastewater reuse should be incorporated.</i></p> <p><i>* Apartments should be individually metered</i></p> <p><i>* Rainwater should be collected, stored and reused on site</i></p> <p><i>* Drought tolerant, low water use plants should be used within landscaped areas.</i></p>	<p><i>TBC. Rainwater collected and stored in the specified buried rainwater tanks at ground level will be proposed.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*TBC</i></p> <p><i>*TBC by others</i></p>	<p><b>YES</b></p>
<p><b>Objective 4V-2</b>  <i>Urban stormwater is treated on site before being discharged to receiving waters</i></p> <p><b>Design Guidance</b>  <i>* Water sensitive urban design systems are designed by a suitably qualified professional</i></p> <p><i>* A number of the following design solutions are used:</i></p> <ul style="list-style-type: none"> <li>• <i>runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation</i></li> <li>• <i>porous and open paving materials is maximised</i></li> <li>• <i>on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits</i></li> </ul>	<p><i>By Others</i></p>	<p><i>By Others</i></p>

<p><b>Objective 4V-3</b>  <i>Flood management systems are integrated into site design.</i></p> <p><b>Design Guidance</b>  <i>* Detention tanks should be located under paved areas, driveways or in basement car parks</i></p> <p><i>* On large sites parks or open spaces are designed to provide temporary on site detention basins</i></p>	<p><i>By Others</i></p>	<p><i>By Others</i></p>
<p><b>Objective 4W-1</b>  <i>Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</i></p> <p><b>Design Guidance</b>  <i>* Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park</i></p> <p><i>* Waste and recycling storage areas should be well ventilated</i></p> <p><i>* Circulation design allows bins to be easily manoeuvred between storage and collection points Temporary storage should be provided for large bulk items such as mattresses A waste management plan should be prepared.</i></p>	<p><i>Achieved. Enclosed waste room located at car park area on Ground Level. Refer to FLOOR PLAN GROUND (L1)</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 4W-2</b>  <i>Domestic waste is minimised by providing safe and convenient source separation and recycling</i></p> <p><b>Design Guidance</b>  <i>* All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling</i></p> <p><i>* Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core</i></p> <p><i>* For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses</i></p> <p><i>* Alternative waste disposal methods such as composting should be provided.</i></p>	<p><i>Achieved. All levels are provided with waste and recycling chutes.</i></p> <p><i>*Achieved</i></p> <p><i>*Achieved</i></p> <p><i>*N/A</i></p> <p><i>*By Others</i></p>	<p><b>YES</b></p>
<p><b>Objective 4X-1</b>  <i>Building design detail provides protection from weathering.</i></p> <p><b>Design Guidance</b>  <i>* A number of the following design solutions are used:</i> <ul style="list-style-type: none"> <li><i>• roof overhangs to protect walls</i></li> <li><i>• hoods over windows and doors to protect openings</i></li> <li><i>• detailing horizontal edges with drip lines to avoid staining of surfaces</i></li> <li><i>• methods to eliminate or reduce planter box leaching</i></li> <li><i>• appropriate design and material selection for hostile locations</i></li> </ul> </p>	<p><i>Achieved. Details and materiality chosen to provide protection from weathering. Refer to MATERIALITY; PERSPECTIVES; ELEVATIONS</i></p> <p><i>*Achieved</i></p>	<p><b>YES</b></p>
<p><b>Objective 4X-2</b>  <i>Systems and access enable ease of maintenance</i></p>	<p><i>N/A</i></p>	<p><i>N/A</i></p>

<p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>* Window design enables cleaning from the inside of the building</li> <li>* Building maintenance systems should be incorporated and integrated into the design of the building form, roof and facade</li> <li>* Design solutions do not require external scaffolding for maintenance access</li> <li>* Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems</li> <li>* Centralised maintenance, services and storage should be provided for communal open space areas within the building</li> </ul>		
<p><b>Objective 4X-3</b>          Material selection reduces ongoing maintenance costs</p> <p><b>Design Guidance</b></p> <ul style="list-style-type: none"> <li>* A number of the following design solutions are used:             <ul style="list-style-type: none"> <li>• sensors to control artificial lighting in common circulation and spaces</li> <li>• natural materials that weather well and improve with time such as face brickwork</li> <li>• easily cleaned surfaces that are graffiti resistant</li> <li>• robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors</li> </ul> </li> </ul>	<p>Achieved. The materiality of the building was chosen for ease of maintenance. <b>Refer to MATERIALITY</b></p> <p>*Achieved</p>	<p>YES</p>