

APPENDIX 7 - State Environmental Planning Policy 65 & ADG Assessment

Detailed assessment undertaken of the proposed residential shop top housing development in relation to the nine (9) Design Quality Principles and Apartment Design Guidelines are provided below.

Nine (9) Design Quality Principles

1. Context and Neighbourhood Character

- The Caddens Precinct Centre is located within the Werrington Enterprise Living and Leaning (WELL) Precinct. The subject site is located between the Caddens residential developments to the south and south-west and University to the north and west of this site. The Precinct Centre is intended to form the hub of the WELL Precinct and to service the residential community, the university and TAFE.
- The proposed development will facilitate a major supermarket, speciality retail outlets, food retails, a gym (health services), non-retail/commercial uses, outdoor open areas and a community use building. The proposed design of the development has provided an interface between this commercial centre to the future residential subdivision to the South of the development, and to serve as a focal point the South-Western approach to the Caddens Precinct Centre. The development also provides open space outdoor public area at the north-west corner of the site to provide another focal point and linkage to the university located to the west and north of the site.
- The buildings are designed in a contemporary architecture that is a current trend in new urban release areas. The development also includes a shop top housing apartment building which has been designed to a compatible the bulk and scale that provides a transition from low rise residential development located on the south of this Precinct Centre with a design that is a focal point of the development with a good presentation to both streets and the intersection. This provides a focal point at the intersection of both O'Connell to the South-Western approach to the site. The site is located in close proximity to local bus stop which will take people to the train services.

The proposed development is considered to present well to the area and presents anticipated future character of the locality.

2. Built Form and Scale

- Proposed building design elements include a mixture of balconies, other facade relief elements/decorative screen, articulated walls and windows which fit into an appropriate proportional dimension for the building. These elements reinforce and complement the desired and anticipated streetscape character for a mixed use retail precinct.
- The proposed maximum height of the building is 16.70m at one area which slightly higher than the maximum 15.00m building height standard applicable to the site. The design of the buildings is such that bulk and scale of the development is considered to be reasonable within the site and the average height of all buildings are well below the 15m height limit and is also within the 4 storey buildings allowed by the Precinct guidelines.
- The proposed bulk and height of the building is responsive to the desired and anticipated future character of the locality, as anticipated by the Concept Precinct Plan under Penrith LEP 2014. The proposed built form is therefore appropriate for the site and its purpose

3. Density

- There is no prescribed FSR limit applicable to the site.

- The proposed shop top housing provides a reasonable density as envisaged by the Precinct Plan. The precinct requires a total of 124 dwelling and this forms the initial stage of residential development in the Centre. The proposal provides 19 dwellings towards the 124 dwellings required in this Precinct area and additional dwellings is envisaged to be provided in later stage 2 of the development and on the northern adjoining property in the future.
- The Precinct is accessible by Bus and Train station is located within 3 km from the site and a new train station is expected to be provided in close proximity of this site in the future.
- The proposed design of the building and its density is responsive to the site attributes and reflects the anticipated future character of the locality.

4. Sustainability

- The building has been designed to provide good natural day lighting and solar access into the primary living spaces to majority of the apartments, external living areas and roof garden.
- The design facilitates 17 units meeting or exceeding the SEPP 65 solar access requirements (i.e. 75% of the units) and provides 79% naturally cross ventilated apartments.
- The building aims to reduce water and will include tanks for the detention of stormwater and a stormwater treatment tank for water quality management. The residential areas have been designed to the provisions of BASIX. Energy and water reduction measures for the proposed development have been detailed in the submitted BASIX Certificate.
- The proposed the development has been examined by Council's Waterways Officer and found to comply with Council's Water Sensitive Urban Design (WSUD) Policy.

5. Landscape

- The landscape scheme draws upon the site context of existing vegetation along the frontage and attempts to retain the naturalistic and pastoral landscape character of the Caddens precinct. The development has made attempt to maintain as many existing trees as possible within the development site. This has however, resulted in loss of 33 trees within the whole site. The western frontage setbacks will provide additional trees to maintain and improved its existing vegetation character.
- The proposed mixed use shop top housing will incorporate balconies with a minimum of 2m wide balconies for each apartments and a communal terrace area on level 3 on the roof for use of apartment residents.
- The proposal will provide sufficient landscaping area to provide a good streetscape and amenity in long term for the development.

6. Amenity

The Proposal provides:

- appropriate room dimensions and shapes in the proposed apartments to the desired room functions;
- adequate 75% solar access and 79% natural cross-ventilation has been provided for the apartments;
- adequate separation and screening between apartments and balconies for visual and acoustic privacy;
- four (4) adaptable apartments which is 21% of the apartments allocated for people with disabilities;
- a 2.7m minimum high ceilings to all habitable areas; and
- adequate provision has been made for storage areas an parking spaces.

The proposal is therefore considered to provide good amenity.

7. Safety

- A clear entry point to the building via an open and covered forecourt off the commercial Centre is provided.
- Passive surveillance is available from residential apartment's balconies, roof garden and windows towards O'Connell Street and communal areas.
- There will be appropriate lighting to all exterior areas, both public and communal.
- The building will utilise a security system at all entry points, and within the lifts.
- A separate residential car park separated from the retail and commercial carpark via a secured roller shutter door will be accessed by secure remote control.

Subject to several conditions, the proposed development provides a safe and satisfactory design which promotes crime prevention in its existing environment.

8. Housing Diversity and Social Interaction

- The development provides a mix of single, 2 bedroom, 3 bedroom and one 4 bedroom apartments including 4 adaptable units hence providing a housing diversity for both public and university students.
- The site is in close proximity to public transport, amenities, and tertiary education facilities for easy access of the facilities by the students and the residents living in Caddens and Kingswood area.
- The proposed development provides for outdoor open space areas with outdoor furniture and shadings for public to provide social interaction and will contribute to the future social fabric of the neighbourhood by promoting vibrant living opportunities in a quality environment.

9. Aesthetics

- The buildings have been designed in a contemporary architecture that is in trend for new release areas.
- The design of the building responds to both street frontages and provides an appropriate address to the public domain.
- The proposed external elevations provide elements of depth and articulation.
- The proposed colour scheme for the building complements surrounding development by using material such as bricks and rendered finishes with the use of timber in areas which reflects a good combination of earthy light and brown tone colours that are existing in the area.
- A shop top housing apartment building has been designed well to both streets and address to the intersection and provides a focal point at the intersection of both O'Connell to the South-Western approach to the site.

In view of the above, the buildings in the development are considered to be of good aesthetics that present well to both streets and compatible with the existing developments in the area. The development is therefore considered to be consistent with nine design principles of the SEPP.

Apartment Design Guidelines

The *Apartment Design Guidelines* provides additional detail for applying the design quality principles contained in SEPP 65. An assessment has been undertaken of the proposed development in relation to the *Residential Apartment Design Code - Designing the Building*. Details of this assessment are provided below.

Design Criteria	Objectives	Compliance/comments
3A Site Analysis	Site Analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	<p>Complies.</p> <p>The site has been identified and zoned for a Local Precinct Centre.</p> <p>The Proposed shop top housing apartments are located in a prominent location and provide a landmark to the Precinct. The other buildings have been well positioned for a good internal pedestrian function.</p> <p>The site constraints were considered and the proposal has responded to the slope of the land to include basement parking area for the apartment.</p> <p>The building design responds to the desired scale and character of the street.</p>
3B Orientation	<p><i>Building types and layouts respond to the streetscape and site while optimising solar access within the development.</i></p> <p><i>Overshadowing of neighbouring properties is minimised during mid-winter</i></p>	<p>Complies.</p> <p>The shop top housing element of 4 storey appearance bulk, scale and design having a L shape ensures that the building presents well to both O'Connell Streets. As discussed earlier it provides adequate solar access to over 75% of apartments.</p> <p>The proposal is consistent with the bulk, scale and design that is expected for a Local Centre of this nature.</p>
3C Public Domain Interface	<i>Transition between private and public domain is achieved without compromising safety and security.</i>	<p>Complies.</p> <p>The proposal provides for a focal point with good landscape and appropriate pathways, lighting and residential building to the South-Western approach. This provides activation to the O'Connell Street and also</p>

	<i>Amenity of the public domain is retained and enhanced.</i>	provides a good amenity of the public domain along both streets.
3D Communal and Public Open space	<p><i>An adequate area of communal open space is provided to enhance the residential amenity and to provide opportunities for landscaping</i></p> <p><i>Design Criteria</i></p> <p><i>1. Communal open space has a minimum area equal to 25% of the site</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 9am and 3pm on 21 June (mid winter).</i></p>	<p>Complies.</p> <p>The proposal provides for a communal open space located on the roof terrace which includes landscape features and contains barbeque areas, and outdoor seating areas for individuals and groups.</p> <p>The communal area has solar access throughout the day.</p> <p>Each unit has been provided with a balcony or terrace in accordance with the code.</p> <p>The proposal achieves compliance with respect to sunlight access and provides a good residential amenity for future residents. This is satisfactory.</p>
3E Deep Soil Zone	<p><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><i>Provision 7% of the site as deep soil zone.</i></p>	<p>Complies.</p> <p>The development does not provide deep soil isolated only for the shop top housing however, sufficient landscaping within deep soils area will be provided throughout the Precinct both along the western, eastern and northern part of the site including row of street tree planting. These will form communal shared deep soil which ensures compliance.</p>
3F Visual Privacy	<i>Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.</i>	The building has been designed in L-shape and floor plans have been done to minimize any direct view to apartments. There is no visual privacy loss for any of the apartments.
3G Pedestrian access and entries	<i>Building entries and pedestrian access connects to and</i>	Complies. Appropriate access via pathway

	addresses the public domain.	and a lift is provided to and from the shop top housing. Appropriate conditions will be recommended with respect to intercom and other electronic safety for the building.
3H Vehicle Access	<i>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.</i>	Complies - The primary entry/exit driveway access has been provided off the East-west O'Connell Street frontages. Footpath paving and path way have been provided to ensure safe pedestrian accesses and crossing.
3J Bicycle and Car Parking	<i>Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas.</i> <i>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.</i>	The total amount of car parking (538) is sufficient for the proposed development and discussed in other part of report. There are in total 24 bicycle parking spaces provided for the development and 8 spots are located on the northern side of the building.
4A Solar and daylight access	<i>To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.</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 9am and 3pm at mid-winter in the Sydney Metropolitan area and in the Newcastle and	Complies. 17 out of 19 apartments living areas will receive solar access over 3 hours in a day and this equates to 75%, All apartments will receive sunlight access between 9am and 3pm in mid-winter.

	<p>Wollongong local government areas.</p> <p>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 9am and 3pm at mid winter.</p> <p>3. A maximum of 15% of apartments in a building receive no direct sunlight between 9am and 3pm at mid winter</p>	
4B Natural Ventilation	<p><i>The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents.</i></p> <p><i>At least 60% of apartments are naturally cross ventilated.</i></p>	<p>Complies.</p> <p>79% of apartments achieve cross ventilation.</p>
4C Ceiling Heights	<p><i>Ceiling height achieves sufficient natural ventilation and daylight access.</i></p> <p><i>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.</i></p>	<p>Complies.</p> <p>Habitable Rooms all have minimal required 2.7m floor to ceiling heights.</p> <p>The commercial ground floor is over 4.0m in floor to ceiling height.</p>
4D Apartment size and layouts	<p><i>Design Criteria</i></p> <p><i>1. Apartments are required to have the following minimum internal areas.</i></p>	<p>Complies</p> <p>1 x 1 Bedroom - 52m2 to 55m2</p> <p>2 x 2 Bedroom - 74m2, to 91m2</p>

	<p><i>Apartment Type</i> <i>Minimum Internal Area</i> <i>Studio 35m2</i></p> <p><i>1 Bedroom 50m2</i> <i>2 Bedroom 70m2</i> <i>3 Bedroom 90m2</i></p>	3 & 4 Bedroom – 111m2 to 119m2
4E Private Open Space and Balconies	<i>Primary private open space and balconies are appropriately located to enhance livability for residents</i>	<p>Complies.</p> <p>A roof garden has been provided as common open space for the residents and balconies have been provided for all apartments.</p>
4F Common Circulation and spaces	<i>Common circulation spaces achieve good amenity and properly service the number of apartments</i>	<p>Complies.</p> <p>Ground floor lobbies are relatively large and will include fixed seating. Lift lobbies on each level are naturally lit and ventilated.</p>
4G Storage	<i>Adquate, well designed storage is provided in each apartment</i>	<p>Complies.</p> <p>Overall minimum storage volumes are achieved.</p> <p>1 x 1 bedroom apartments - minimum storage volume 10m3</p> <p>2 x 2 bedroom apartments - minimum storage volume 11m2 &</p> <p>3 x 1 bedroom apartment - minimum storage volume 13m3</p>
4H Acoustic Privacy	<i>Noise transfer is minimised through the siting of buildings and building layout</i>	Complies.
4J Noise and Pollution	<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>Complies.</p> <p>Appropriate measures proposed and conditions applied for noise and pollution controls.</p>

4K Apartment Mix	A Range of apartment types and sizes is provided to cater for different household types now and into the future	Complies. The residential building provides for a mixed 8 x single, 6 x two , 4 x three and 1 x four bedroom units. 11% of the total apartments are adaptable
4M Facades	<i>Building facades provide visual interest along the street while respecting the character of the local area</i>	Complies. Building facades provide visual interest along the street while respecting the character of the local area.
4N Roof Design	<i>Roof treatments are integrated into the building design and positively respond to the street</i>	Complies Roof terrace has been provided on level 3 used for open space.
4O Landscaping Design	<i>Landscape design is viable and sustainable</i>	Complies. Appropriate landscaping has been proposed throughout the site and roof garden has been provided for shop top housing.
4W Waste Management	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents Domestic waste is minimise by providing safe and convenient source separation and recycling	Complies. All waste storage area are located within the ground floor area for apartment building and rest waste are located within the basement loading dock area.
4X Building Maintenance	Building design detail provides protection from weathering	Complies The external materials selected for the building are all low maintenance with a extensive design life expectancy. i.e. brick, colorbond metal sheeting, powder coated aluminium & glazing.

The proposed development is generally consistent with the aims and objectives of SEPP 65 Apartment Design Guidelines