

## **ASSESSMENT AGAINST ADG & DCP**

### **State Environmental Planning Policy (SEPP) No. 65 – Design Quality of Residential Apartment Development**

The SEPP requires consideration of the Apartment Design Guide (ADG) which supports the 9 design quality principles by giving greater detail as to how those principles might be achieved. The table below addresses the relevant matters.

#### Design Quality Principles

<b>Principle</b>	<b>Control</b>	<b>Comment</b>
<b>Design quality principles</b> The development satisfies the 9 design quality principles.		
1. Context & neighbourhood character	<p>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.</p> <p>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.</p> <p>Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.</p>	<p>The site is within an area undergoing transition in close proximity to mixed use/residential developments which are completed / under construction. The site benefits from being located near educational facilities, Macquarie Centre, the Macquarie University Metro Station and the Macquarie Park Corridor.</p> <p>The site has frontage to Lachlan Avenue (at the corner of Peach Tree Road) and has the potential to have pedestrian access to Herring Road (pending the dedication of the new road 'Mahogany Avenue' in Ivanhoe Estate to the south).</p> <p>In response to the shape of the site, the podium and tower form is orientated on an east-west axis.</p> <p>In this context, the proposal offers a layout and design that enhances the qualities of the area and demonstrates that the proposal is compatible with the various features of the neighbourhood.</p> <p>The building has been architecturally designed and is considered to support the social, economic, health and environmental identity of Macquarie Park.</p>
2. Built form & scale	<p>Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.</p> <p>Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments,</p>	<p>The built form, height and scale of the proposed development have been resolved by a thorough evaluation of the site's surrounding context, topography and environmental characteristics, with an emphasis on amenity for future residents. Specific consideration was also given to</p>

	<p>proportions, building type, articulation and the manipulation of building elements.</p> <p>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.</p>	<p>ensuring appropriate building separation is provided.</p> <p>In response to the shape of the site, the podium and tower form is orientated on an east-west axis.</p> <p>In this context, the proposal offers a layout and design that enhances the qualities of the area and demonstrates that the proposal is compatible with the various features of the neighbourhood.</p> <p>The scale is consistent with the height and floor space ratio permitted by the Ryde Local Environmental Plan 2014, as reflected by developments recently completed/under construction in the immediate vicinity.</p> <p>The location of open space at the ground level and rooftop reflects the constraints of the site, including potential overshadowing when the adjoining sites to the north and west are redeveloped.</p> <p>The overall scale is a positive contribution to the existing and future character of this area.</p>
3. Density	<p>Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.</p> <p>Appropriate densities are consistent with the area's existing or projected population.</p> <p>Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.</p>	<p>The proposed 124 apartments achieve a high level of design quality and are an appropriate development outcome for this site.</p> <p>The proposed density is capable of being sustained as the site is well serviced by infrastructure, public transport, facilities and public open space.</p> <p>Consistent with the Greater Sydney Regional Plan, the proposal creates the opportunity to place residents within 30 minutes of their jobs as the site is conveniently located within walking distance of educational establishments, Macquarie Centre and the Macquarie Park Corridor.</p>
4. Sustainability	<p>Good design combines positive environmental, social and economic outcomes.</p> <p>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</p>	<p>The proposal utilises sustainable design techniques to achieve natural cross ventilation and access to sunlight to support the amenity of occupants. This includes living areas at the northern corners to capture maximum sunlight, large north facing openings protected by balconies and awnings, and blade walls and external screening elements to protect east and east facing windows.</p> <p>The accompanying BASIX Certificate demonstrates that the targets for sustainability are achieved through the efficient use of energy and water</p>

	<p>soil zones for groundwater recharge and vegetation.</p>	<p>resources which are incorporated into the design of the buildings.</p> <p>Deep soil is located along the perimeters of the site to reinforce open space and suitable planting, including native plant species to minimise waster use.</p> <p>The proposal demonstrates appropriate waste management during the demolition, construction and ongoing use phases.</p>
5. Landscape	<p>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.</p> <p>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.</p> <p>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.</p>	<p>The proposal will provide appropriately sited landscaping elements which are of a high quality design and are capable of being sustained and maintained.</p> <p>The proposed landscaping will complement the presentation of the built form as viewed from the public domain and will enhance the amenity of the private and common open space areas.</p> <p>Key design features include generous ground level private open spaces, naïve plant species to minimise water use, planting of replacement trees and screen planting to soften the boundaries.</p>
6. Amenity	<p>Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.</p> <p>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.</p>	<p>The design of the proposal is considered to provide a suitable level of amenity through a carefully considered spatial arrangement and layout.</p> <p>In light of the future occupants within the site, as well as the surrounding properties, the proposal achieves a suitable level of internal amenity through providing 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.</p> <p>The spaces are accessible for the residential occupants and visitors.</p>

7. Safety	<p>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.</p> <p>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.</p>	<p>The application includes an assessment of the proposal against the Crime Prevention Through Environmental Design (CPTED) guidelines. This demonstrates that the proposal has been designed to incorporate the CTPED design principles of natural surveillance, access control, territorial enforcement and space management. The proposal reflects good design that optimises safety and security.</p> <p>The proposal is considered to be satisfactory in terms of future residential occupants overlooking communal spaces while maintaining internal privacy.</p> <p>The development enhances resident and public safety through its built form, opportunities for passive surveillance and lighting.</p>
8. Housing diversity & social interaction	<p>Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.</p> <p>Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix.</p> <p>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.</p>	<p>The proposed mix of apartment sizes and communal spaces cater to the anticipated market and demographic demand in the area.</p> <p>The communal open space areas within the site are easily accessible by residents and encourage community and a sense of ownership.</p> <p>The apartment mix and layout provided 1/2/3 bedroom apartments, as well as townhouse style double storey apartments.</p>
9. Aesthetics	<p>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.</p> <p>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.</p>	<p>The proposed development is considered to be appropriate in terms of the composition of building elements, textures, materials, finishes and colours, and reflects the use, internal design and structure of the resultant buildings.</p> <p>The distinct and contemporary architecture assists in setting a high quality standard for the transitioning character of this locality and creates a desirable streetscape.</p>

ADG Requirement		Proposal	Compliance
Controls			
2F Building Separation	<b>Up to 4 storeys/12 m:</b> 12 m between habitable rooms/balconies 9 m between habitable rooms/balconies and non-habitable rooms 6 m between non-habitable rooms	Variations sought.	Refer to detailed consideration <b>Section 5.6</b> of the Assessment report. Departure from this numerical requirement is supported in this instance.
	<b>5 to 8 storeys/up to 25 m:</b> 18 m between habitable rooms/balconies 13 m between habitable rooms/balconies and non-habitable rooms 9 m between non-habitable rooms	Variations sought.	
	<b>Nine storeys and above/over 25 m:</b> 24 m between habitable rooms/balconies 18 m between habitable rooms/balconies and non-habitable rooms 12 m between non-habitable rooms	Variations sought.	
Siting the Development			
3A Site analysis	Satisfy the site analysis guidelines - Appendix 1.	The application is accompanied by a site analysis which examines the opportunities and constraints of the site.	Yes
3B Orientation	Where an adjoining property does not currently receive the required hours of solar access, the solar access is not to be reduced by more than 20%.	The adjoining apartment building at 1 Peach Tree Road currently receives the required hours of solar access. Sufficient solar access is maintained.  The site to the south comprises the Ivanhoe Estate, which benefits from concept approval for a high density mixed use development. The assessment of the Concept Approval took into consideration the future desired character and associated potential overshadowing impacts of the subject site. Satisfactory solar access is available to Ivanhoe Estate.	Yes
	4 hours of solar access should be retained to solar collectors on neighbouring buildings.	There are no affected solar collectors.	N/A

ADG Requirement		Proposal	Compliance
<b>3C Public domain interface</b>	Ground level courtyards to have direct access, if appropriate.	Direct access is provided to Units UG6-12 fronting the southern boundary.	Yes
	Ground level courtyards to be above street level for visual privacy.	Courtyards are orientated to the adjoining properties and feature suitable levels to achieve privacy.	Yes
	Balconies and windows to overlook the public domain.	Balconies & windows are suitably placed to view public spaces, in particular to Lachlan Avenue and Mahogany Avenue (in Ivanhoe Estate).	Yes
	Front fences to be visually permeable with maximum 1 m height, and limited length.	Front fences not proposed to Lachlan Avenue.	N/A
	Entries to be legible.	Entries are clear and legible.	Yes
	Raised terraces to be softened by landscaping.	Landscape screening is provided where there are changes in level where there are change in level in the setback areas.	Yes
	Mailboxes to be located in lobbies, perpendicular to the street or within the front fence.	Mailboxes are located in the lobby.	Yes
	Basement carpark vents not to be visually prominent.	Carpark vents are integrated into the building design.	Yes
	Substations, pump rooms, garbage storage rooms and other service rooms should be located in the basement car parks or out of view.	<p>The padmount substation is located at the southern corner of the site and is screened by fencing (timber look balustrade to match the podium).</p> <p>The fire hydrant pump room is located in the basement.</p> <p>The meters and fire brigade booster assembly are sited perpendicular to the public domain the eastern boundary and have minimal visibility.</p> <p>The garbage chute and storage rooms are located in the basement. The waste collection area is located at the southern portion of the site and will only accommodate bins while waiting for collection (bins are not permanently stored in this location).</p> <p>The bulky waste store room is also located at the southern corner of the site, and is not visible from the public domain given its distance from Lachlan Avenue and landscaping.</p>	Yes

ADG Requirement		Proposal	Compliance
	Ramping for accessibility to be minimised.	The extent of ramping is minimal and suitable.	Yes
	Durable, graffiti resistant and easily cleanable materials should be used.	Suitable materials are proposed.	Yes, condition recommended to be imposed regarding management of graffiti. See <b>Condition 45</b> .
	On sloping sites, protrusion of car parking should be minimised.	The development follows the slope of the land, including providing split levels/mezzanine to avoid a protruding car park.	Yes
<b>3D Communal and public open space</b>	Communal open space (COS) >25% of the site.	Required: 687.75m <sup>2</sup> Provided: 847.61m <sup>2</sup> (30.8%) COS provided at ground/lobby level and the rooftop.	Yes
	Direct sunlight to >50% of communal open space for 2 hours between 9am and 3pm.	Achieved.	Yes
	Minimum dimension of 3m.	Dimensions are greater than 3m.	Yes
	Direct and equitable access.	Access is suitable.	Yes
	If communal open space cannot be located on Ground level, provide on the podium or roof.	COS areas provided at ground level and rooftop.	Yes
	If communal open space can't be achieved, provide on rooftop of a common room, provide larger balconies, or demonstrate proximity to public open space and facilities.	N/A	N/A
	Range of activities (e.g. seating, BBQ, play area, gym or common room).	A range of passive and active spaces are proposed.	Yes
	Visual impacts minimised from ventilation, substations and detention tanks.	Ventilation/exhaust services are hidden from view. The padmount substation is located at the southern corner of the site and is screened by fencing (timber look balustrade to match the podium). Detention tanks are located in the basement.	Yes
	Maximise safety.	The COS is suitably designed to foster the safety of residents and visitors.	Yes

ADG Requirement		Proposal	Compliance
	Public Open Space, where provided, is to be well connected and adjacent to street.	N/A	N/A
<b>3E Deep soil zones</b>	Minimum area = 7% of site area. Preferred area = 15%. If over 1,500 m <sup>2</sup> then minimum dimensions of 6 m.	Minimum required 7% = 192.57m <sup>2</sup> . Provided: 195.63m <sup>2</sup> (7.1%) Minimum dimensions are achieved.	Yes
<b>3F Visual privacy</b>	Building Separation: refer to 2F above.	No, variations sought.	<b>No. However, satisfactory as discussed at Section 5.6 of the Assessment report.</b>
	Separation distances between buildings on the same site depending on the type of room as to reflect Figure 3F.2.	N/A	
	Direct lines of sight should be avoided for windows and balconies across corners.	Direct lines of sight are avoided.	Yes
	Appropriate design solutions should be in place to separate POS and habitable windows to common areas.	Separation is achieved by providing blank walls or carefully places windows and landscape screening.	Yes
	Note: When adjacent to a lower density residential zone an additional 3 m rear side setback is required.	N/A Adjoining sites are also zoned B4 Mixed Use with the same density permitted.	N/A
<b>3G Pedestrian access and entries</b>	Connect to and activate the public domain. Easy to identify access. Internal pedestrian links to be direct.	Access points and pedestrian links are direct and easily identifiable (including the opportunity for a future link to Mahogany Avenue in Ivanhoe Estate). Integrated connections are provided to the lobby, COS areas and apartments.	Yes
<b>3H Vehicle access</b>	Access points are safe and create quality streetscapes.	One vehicular access point is provided. Sufficient space and sight lines are provided to ensure a two way driveway is achieved which enables vehicles to enter and exit the site at the same time. The entry driveway includes a loading area which does not obstruct vehicular movements which undertaking bin collection. The proposed traffic management measures ensure safety. The design does not detract from the quality of the streetscape.	Yes
	The need for large vehicles to enter or turn around within the site should be avoided.	Suitable access and manoeuvring space is provided on-site for waste and loading vehicles.	Yes



ADG Requirement		Proposal	Compliance
<b>3J Bicycle and car parking</b>	Sites within 800 m of a railway station are to comply with the minimum requirements of the Guide to Traffic Generating Developments.		
	<b>&lt; 20 units</b> 1 space for each unit An additional 0.2 space for each 2 bed unit An additional 0.5 space per 3 bed unit 0.2 space for visitor parking	N/A	N/A
	<b>&gt;20 units</b> Metropolitan Sub-Regional Centres: 0.6 spaces per 1 bed unit. 0.9 spaces per 2 bed unit. 1.4 spaces per 3 bed unit. 1 space per 5 units (visitor parking)	N/A	N/A
	At least 1 loading dock.	Loading dock provided.	Yes
	Conveniently located and sufficient numbers of bicycle and motorbike spaces.	Bicycle spaces = 15 (and the bicycle store room on Basement 1 Level is of a substantial size and can accommodate more bicycles). Motorbike spaces = Nil Sufficient bicycle spaces are provided. It is not considered necessary to provide motorbike spaces.	Satisfactory

#### Designing the building

<b>4A Solar and daylight access</b>	Living rooms and private open space receive minimum 2 hours direct sunlight between 9 am to 3 pm in mid-winter > 70% of units. (Minimum 1m <sup>2</sup> of direct sunlight measures at 1m above floor level is achieved for at least 15 minutes).	The applicant states that 87/123 (70.7%) of apartments receive at least 2 hours of direct sunlight to their living room and private open space area. However, this includes 2 apartments on the top level (Level 13) which receive sunlight via a sunlight.) Therefore, only 85/123 (69.1%) of apartments receive direct sunlight to their living room and private open space.	<b>No. However, satisfactory as discussed at Section 5.6 of the Assessment report.</b>
	Maximum number with no sunlight access < 15%.	28 (23%) of apartments receive no sunlight.	<b>No. However, satisfactory as discussed at Section 5.6 of the Assessment report.</b>
	Suitable design features for operable shading to allow adjustment and choice.	Sliding screens are provided on the outer edge of balconies to enable shading.	Yes

ADG Requirement		Proposal	Compliance
<b>4B Naturally ventilation</b>	All habitable rooms naturally ventilated. Number of naturally cross ventilated units in the first 9 storeys > 60%.	All habitable rooms are ventilated. 64.4% of apartments are cross ventilated (47/73 in the first 9 storeys, being the Mezzanine Level to Level 7 inclusive).	Yes. <b>However, 19 double storey apartments rely on cross ventilation between the levels (i.e. they are not dual aspect/cross-through apartments). Satisfactory as discussed at Section 5.6 of the Assessment report.</b>
	Depth of cross over apartments < 18 m.	Cross over apartments do not exceed 18m.	Yes
	The area of unobstructed window openings should be equal to at least 5% of the floor area served.	The window areas are satisfactory.	Yes
<b>4C Ceiling heights</b>	2.7 m for habitable 2.4 m for non-habitable	Achieved. Achieved.	Yes
	For mixed use buildings, 3.3m for ground and first floor to promote future flexibility of use.	N/A	N/A
<b>4D Apartment size and layout</b>	Studio > 35m <sup>2</sup> 1 bed > 50m <sup>2</sup> 2 bed > 70m <sup>2</sup> 3 bed > 90m <sup>2</sup> + 5m <sup>2</sup> for each unit with more than 1 bathroom.	- Minimum area achieved. Minimum area achieved. Minimum area achieved. Noted.	Yes
	Habitable Room Depths: limited to 2.5m x ceiling height (6.75m with 2.7m ceiling heights)	Maximum room depth achieved.	Yes
	Open Plan Layouts that include a living, dining room and kitchen – maximum 8m to a window.	All apartments are open plan layout. Maximum 8m to a window.	Yes
	Bedroom sizes (excl wardrobe space): Master - 10m <sup>2</sup> Other - 9m <sup>2</sup>	Minimum are achieved.	Yes
	Minimum dimensions: 3m	Minimum dimensions achieved.	Yes
	Living rooms/dining areas have a minimum width of: 3.6m – Studio or 1 bedroom	Minimum areas achieved.	Yes

ADG Requirement		Proposal	Compliance
	4.0m – 2 or 3 bedroom  Cross-over/cross-through: minimum 4m wide.	Minimum width achieved.	Yes
<b>4E Private open space and balconies</b>	<p>Studio &gt; 4 m<sup>2</sup>  1 bed &gt; 8 m<sup>2</sup> and 2 m depth  2 bed &gt;10 m<sup>2</sup> and 2 m depth  3 bed &gt;12 m<sup>2</sup> and 2.4 m depth  Ground level/ podium apartments &gt; 15 m<sup>2</sup> and 3m depth</p> <p>Extension of the living space.</p> <p>A/C units should be located on roofs, in basements, or fully integrated into the building design.</p>	<p>-  Minimum area &amp; depth achieved.  Minimum area &amp; depth achieved.  Minimum area &amp; depth achieved.  Minimum area &amp; depth achieved.</p> <p>The POS is an extension of the living room.</p> <p>The location of the A/C units is not nominated.</p>	<p>Yes</p> <p>Yes</p> <p>Satisfactory given <b>Condition 1</b> is imposed requiring air conditioning condenser units located on balconies to be screened and treated for noise attenuation.</p>
<b>4F Common circulation and spaces</b>	<p>Maximum number of apartments off a circulation core on a single level – 8 to 12.</p> <p>Buildings over 10 storeys - maximum of 40 units sharing a single lift.</p> <p>Daylight and natural ventilation to all common circulation areas above ground level.</p> <p>Corridors greater than 12m from the lift core to be articulated by more foyers, or wider areas/higher ceiling heights at apartment entry doors.</p> <p>Maximise dual aspect apartments and cross over apartments.</p> <p>Primary living room and bedroom windows are not to open directly onto common circulation spaces.</p> <p>Direct and legible access.</p> <p>Tight corners and spaces to be avoided.</p> <p>Well lit at night.</p>	<p>Maximum 12.</p> <p>123 apartments share 2 lifts. This is a ratio of 1 lift to 61 units.</p> <p>Achieved.</p> <p>Achieved.</p> <p>Provided.</p> <p>Achieved.</p> <p>Achieved.</p> <p>Achieved.</p> <p>Achieved.</p>	<p>Yes</p> <p>No. However, satisfactory as discussed at <b>Section 5.6</b> of the Assessment report.</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

ADG Requirement		Proposal	Compliance
	For larger development – community rooms for owners meetings or resident use should be provided.	N/A Not considered warranted for this proposal.	N/A
<b>4G Storage</b>	<p>Studio &gt; 4m<sup>3</sup></p> <p>1 bed &gt; 6m<sup>3</sup></p> <p>2 bed &gt; 8m<sup>3</sup></p> <p>3 bed &gt;10m<sup>3</sup></p> <p>Min 50% within the apartment.</p>	<p>-</p> <p>Minimum area provided.</p> <p>Minimum area provided.</p> <p>Minimum area provided.</p> <p>Storage provided in the apartment and basement levels.</p>	Yes
<b>4H Acoustic privacy</b>	Window and door openings orientated away from noise sources.	Window and door opening appropriately placed.	Yes
	Noise sources from garage doors, driveways, services, communal open space and circulation areas to be 3m from bedrooms.	Bedrooms are suitably separated from noisy areas. This is achieved by using dual level apartments with bedrooms on the upper level; and using blank walls.	Yes
	Separate noisy and quiet spaces.	Habitable spaces are appropriately separated.	Yes
	Provide double/acoustic glazing, acoustic seals, materials with low noise penetration.	Acoustic treatments are recommended in the accompanying Acoustic DA Report.	Yes
<b>4J Noise and pollution</b>	<p>In noisy or hostile environments, the impacts of external noise and pollution are to be minimised through the careful siting and layout of buildings.</p> <p>To mitigate noise transmission:</p> <p>Limit the number and size of openings facing the noise sources.</p> <p>Use double or acoustic glazing, acoustic louvres or enclosed balconies (winter gardens).</p> <p>Use materials with mass and/or sound insulation (e.g., solid balcony balustrades, external screens or soffits).</p>	Acoustic treatments are recommended in the accompanying Acoustic DA Report.	Yes
<b>Configuration</b>			
<b>4K Apartment mix</b>	<p>Provide a variety of apartment types.</p> <p>Flexible apartment mix.</p>	<p>36 x 1 bed (29%)</p> <p>62 x 2 bed (50%)</p> <p>3 x 3 bed ( 2%)</p> <p>15 x 2 bed (12%) (2 storey)</p> <p>8 x 3 bed ( 7%) (3 storey)</p>	Yes
<b>4L Ground floor apartments</b>	<p>Maximise street frontage activity.</p> <p>Direct street access to ground floor apartments.</p>	<p>Achieved.</p> <p>N/A Street access from Lachlan Avenue is limited, and used for</p>	Yes

ADG Requirement		Proposal	Compliance
	Ground floor apartments to deliver amenity and safety for residents.	access to the lobby and basement. Achieved.	
<b>4M Facades</b>	Front building facades are to provide visual interest whilst respecting the character of the local area. Building services are to be integrated into the overall façade. Provide design solutions which consider scale and proportion to the streetscape and human scale.	Façade design achieves visual interest.  Building services are appropriately placed and integrated. The scale and proportion of the building is in proportion with the streetscape and human scale.	Yes
<b>4N Roof design</b>	Roof treatments are to be integrated into the building design and positively respond to the street.	A flat roofline is proposed.	Yes
<b>4O Landscape design - site area</b>	< 850m <sup>2</sup> = 1 medium tree per 50m <sup>2</sup> of deep soil zone. 850m <sup>2</sup> to 1,500m <sup>2</sup> = 1 large tree or 2 medium trees per 90m <sup>2</sup> of DSZ. >1,500m <sup>2</sup> = 1 large tree or 2 medium trees per 80m <sup>2</sup> of deep soil zone.	- - Required: 1 large trees or 4 medium trees. Provided: 3 large trees (mature height of 15m) and 2 medium trees (mature height of 8m) are proposed in the deep soil zones. Shrubs and groundcovers are also proposed.	Yes
<b>4P Planting on structures</b>	Provide sufficient soil volume, depth and area.	Sufficient soil is provided.	Yes
	Provide suitable plant selection.	Suitable plants are selected.	Yes
	Provide suitable irrigation and drainage systems and maintenance.	Suitable maintenance is proposed.	Yes
	Enhance the quality and amenity of communal open space with green walls, green roof and planter boxes, etc.	Communal open space is appropriately embellished.	Yes
<b>4Q Universal design</b>	Adaptable housing should be provided in accordance with Council's policy. Benchmark of 20% of the apartments incorporating the Liveable Housing Guideline's silver level universal design features.	Ryde DCP 2014 requires 10% of apartments to be adaptable. 13 (10%) apartments are adaptable.	Yes
	Flexible design solutions to accommodate the changing needs of occupants.	The design of the apartments and overall development foster accessibility for all users.	Yes

ADG Requirement		Proposal	Compliance
<b>4R Adaptive reuse</b>	New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.	N/A	N/A
<b>4S Mixed use</b>	Provide active street frontages and encourage pedestrian movement.  Residential entries separate and clearly defined.  Landscaped communal open space to be at podium or roof level.	N/A	N/A
<b>4T Awnings and signage</b>	Awnings to be continuous and complement the existing street character.  Provide protection from sun and rain, wrapped around the secondary frontage.  Gutters and down pipes to be integrated and concealed.  Lighting under awnings is to be provided.  Signage is to be integrated and in scale with the building.  Legible and discrete way finding is to be provided.	N/A  N/A  Provided.  N/A  N/A. No signage is proposed.  Provided.	N/A  N/A  Yes  N/A  N/A  Yes

#### Performance

<b>4U Energy efficiency</b>	The development is to incorporate passive solar design. Heating and cooling infrastructure are to be centrally located (e.g., basement).	Passive solar measures are incorporated. Adequate natural light is provided to all habitable rooms.  The accompanying Ecologically Sustainable Design (ESD) Report prepared by Vipac states that high efficiency heating and cooling will be used.	Yes
<b>4V Water management and conservation</b>	Rainwater collection and reuse. Drought tolerant plants. Water sensitive urban design measures. Detention tanks should be located under paved areas, driveways or in basement car parks.	Rainwater is reused. Provided. WSUD is incorporated into the development. Detention tanks are located in the basement.	Yes
<b>4W Waste management</b>	Waste storage should be discreetly located away from the front of the development or in the basement.	Waste storage is located in the basement.	Yes

ADG Requirement		Proposal	Compliance
	Waste cupboard within each dwelling. Waste and recycling rooms are to be in convenient and accessible locations related to each vertical core.	Each apartment is provided with a bin storage area. Waste rooms are accessible.	
<b>4X Building maintenance</b>	The design is to provide protection from weathering. Enable ease of maintenance. The materials are to reduce ongoing maintenance costs.	The building is designed to be well maintained in the long term.	Yes

## Ryde Development Control Plan (DCP) 2014

The proposal has been assessed against the following relevant sections of the Ryde DCP 2014 as follows:

Ryde DCP 2014 Control	Comment	Compliance
<b>Part 4.5: Macquarie Park Corridor</b>		
<b>2.0 Vision</b>		
<p>‘Macquarie Park will mature into a premium location for globally competitive businesses with strong links to the university and research institutions and an enhanced sense of identity.</p> <p>The Corridor will be characterised by a high-quality, well-designed, safe and liveable environment that reflects the natural setting, with three accessible and vibrant railway station areas providing focal points.</p> <p>Residential and business areas will be better integrated, and an improved lifestyle will be forged for all those who live, work and study in the area.’</p>	The proposal is consistent with vision for Macquarie Park as the development comprises well designed residential apartments in close proximity to public transport, public open space, educational and commercial uses, shops and services. The development complements the character of the immediately surrounding area which is undergoing transition with development of multi storey residential apartments and mixed use developments replacing existing 3 storey residential apartment blocks.	Yes
<b>3.2 Urban Structure Plan</b>		
Macquarie Park Corridor will include new residential communities around the North Ryde and Macquarie University Stations while the Commercial Core will be centred on the Macquarie Park Station and Waterloo Road. Intensive development centred on Waterloo Road is proposed to transition through the Business Park areas to the lower scaled residential areas adjoining the Macquarie Park Corridor.	The site is located within the mixed use/residential area within the urban structure plan and will contribute to the development of residential uses that will complement the employment and educational facilities within the Macquarie Park Corridor.	Yes
<b>4.0 Access Network</b>		
<b>4.1 Streets</b>		
Provide new public streets and pedestrian connections in accordance with Figure 4.1.1 Access Network.	N/A	N/A
Lighting, paving and street furniture, landscaped setbacks and tree planting are to be provided as required in the Macquarie Park Corridor Public Domain Technical Manual.	Multi function poles with street lighting, granite paving and small street trees are required under the Macquarie Park	Yes

	Corridor Public Domain Technical Manual. Council's Public Domain raises no objection to the proposal subject to <b>Condition 52</b> .	
<b>4.3 Bicycle Network</b>		
<p>a) Provide dedicated cycle access in accordance with <i>Ryde Bicycle Strategy 2014</i> in accordance with <i>Figure 4.3.1 Indicative Cycleways</i>.</p> <p>b) The Regional Bicycle Network is to be implemented as on-street shared cycleways in accordance with the <i>Macquarie Park Public Domain Technical Manual</i>. The Regional Bicycle Network comprises:</p> <ul style="list-style-type: none"> <li>i. Waterloo Road;</li> <li>ii. Delhi Road;</li> <li>iii. Epping Road;</li> <li>iv. Lane Cove Road;</li> <li>v. Khartoum Road;</li> <li>vi. The M2; and</li> <li>vii. Shrimptons Creek pathways.</li> </ul> <p>c) The Local Bicycle Network is to be implemented as on-street shared ways in accordance with the <i>Macquarie Park Public Domain Technical Manual</i>. The Local Bicycle Network comprises:</p> <ul style="list-style-type: none"> <li>i. Lyon Park Road;</li> <li>ii. Talavera Road;</li> <li>iii. Wicks Road; and</li> </ul> <p>Proposed new roads in accordance with the <i>Ryde Bicycle Strategy 2014</i>.</p>	N/A	N/A
<b>4.4 Sustainable Transport Travel Plans</b>		
A Framework Travel Plan (FTP) is required to be submitted to Council for approval together with a DA for all development that exceeds 10,000m <sup>2</sup> new floor space.	<p>The proposal has a total floor space of 11,032m<sup>2</sup>. The accompanying Transport Impact Statement considers <i>“active transport and the proposal will deliver 36 bicycle parking spaces and will provide a bicycle storage and service room to support active transport. The development is within 400m walking distance of the Macquarie University Metro Station.”</i></p> <p>The requirement for the preparation of a FTP prior to the issue of an Occupation Certificate is addressed by <b>Condition 177</b> imposed by Council's Traffic Section.</p> <p>Council's Sustainability – Transport and Environment Team has raised no objection to the proposal subject to further detail being provided in the FTP for approval prior to the issue of an Occupation Certificate (see above condition).</p>	Yes
For all development the FTP must also:	Satisfied, as above.	Yes



Identify measures in an Action Plan that will implement the 40% public transport / 60% private transport target for the journey to work, including appointing a Travel Plan Coordinator, minimising drive alone trips to work, encouraging walking, cycling, car sharing, car pooling and public transport use.		
<b>Parking Rates</b>		
Bicycle parking and end-of-trip facilities are to be provided in accordance with the Ryde DCP 2014 Part 9.3 Parking Controls.	15 bicycle parking spaces are provided. This is consistent with the minimum requirements under Part 9.3 of the RDCP 2014, detailed below.	Yes
Parking is to be provided in accordance with the RDCP 2014 Part 9.3 Parking Controls.	Maximum permitted: 105 spaces. Proposed: 105 resident spaces.  Maximum visitor: 13 Proposed visitor: 2	Yes  Visitor parking is inconsistent with the objectives of the RDCP 2014. Refer to discussion at <b>Section 5.9</b> of the Assessment report.
<b>Car Sharing Parking</b>		
All parking spaces for car share schemes are to be: <ul style="list-style-type: none"> <li>i. Publicly accessible 24 hours a day 7 days per week.</li> <li>ii. Located together in the most convenient locations.</li> <li>iii. Located near and with access from a public road and integrated with the streetscape through appropriate landscaping where the space is external.</li> <li>iv. Designated for use only by car share vehicles by signage.</li> <li>v. Parking spaces for car share schemes located on private land are to be retained as common property by the Owners Corporation of the site.</li> </ul>	None proposed.	No. Refer to discussion at <b>Section 5.9</b> of the Assessment report.
<b>5.0 Public Domain</b>		
<b>5.2 New Open Space</b>		
Provide public open space as shown in Figure 5.1.1 Proposed Open Space Network and in accordance with sections 5.3 and 5.6 of this Part. To vary public open space requirements, refer to master plan controls under Clause 8.1 Site Planning and Staging.	The site is not required to provide any new publicly accessible open space.	N/A
<b>5.8 Street Trees, Front Setback Tree Planting and Significant Trees</b>		
Street trees and front setbacks must be provided in accordance with the Street Tree Key Plan in the Macquarie Park Public Domain Technical Manual, and their health guaranteed for min. 5 years.	All trees are sought to be removed. Replacement trees in the front setback area and new small street trees are required to be planted.	Satisfactory.
At grade parking is not permitted in the front setback.	All parking is within basement car parking levels.	Yes
<b>5.10 Art in Publicly Accessible Spaces</b>		
Art must be included in all new development with more than 10,000m <sup>2</sup> new floor space in the amount of 0.1% of the construction cost of the works capped at \$1,500,00.00.	The proposal has a floor space of 11,003m <sup>2</sup> . and triggers this requirement for public art.	Yes, subject to <b>Condition 49</b> .

	<p>The applicant states that <i>“The proposal does not make provision for artwork as it is considered that this is more suited to commercial development with a greater public use. The development is expected to mainly be used and occupied by residents and the landscape scheme and features provides a more beneficial outcome for residents. It is noted that an Artwork Plan was not raised as a requirement in the Pre-DA or URDP discussions.”</i></p> <p>The site has a limited frontage width to Lachlan Avenue. However, given its location it will receive a high degree of visibility by a large number of vehicles and pedestrians in future. The front setback area, void area or soffit of the lobby present opportunities for public art to be erected. <b>Condition 52</b> is recommended to be imposed requiring the preparation of a detailed Public Art Plan for Council approval prior to the issue of the Construction Certificate.</p> <p>The DCP requires site-specific integrated artworks integrated into the landscape or building features of new development in Macquarie Park Corridor. This site and type of development is not exempt from this requirement.</p>	
Art must be located within the site so as to be publicly accessible (i.e., viewed or experienced from publicly accessible places).	The site is capable of accommodating art work.	Yes, as above.
<p>A site specific Arts Plan is to be submitted together with the development application.</p> <ul style="list-style-type: none"> <li>i. Arts project description and statement of artistic intent.</li> <li>ii. Thematic framework for the artwork. Suggested themes arising from the history of the Macquarie Park Corridor are: <ul style="list-style-type: none"> <li>▪ Innovation and / or technology</li> <li>▪ Transport (train, bus, car) and people movement</li> <li>▪ History of Macquarie Park Corridor e.g. market gardening</li> <li>▪ Future of Macquarie Park</li> <li>▪ Natural environment e.g. water</li> </ul> </li> <li>iii. Concept drawing and descriptions of proposed art works including: <ul style="list-style-type: none"> <li>▪ Proposed location</li> <li>▪ Whether or not the artwork is integrated into the building design, landscape or other site features (including the building</li> </ul> </li> </ul>	A Public Art Plan is to be submitted to Council for approval prior to the issue of any Construction Certificate for above ground works.	Yes, as above.

<p>façade, paving, lighting design, outdoor seating, play equipment and the like)</p> <ul style="list-style-type: none"> <li>▪ Proposed use of materials with particular information to be provided on robustness, durability, and low maintenance</li> </ul> <p>iv. Implementation (detailing at what stage the artwork will be implemented etc)</p> <p>v. Preliminary construction details with particular emphasis on public safety considerations.</p>		
<b>6.0 Implementation – Infrastructure, Facilities and Public Domain Improvements</b>		
Floor Space Ratios and Height of Buildings are to comply with the Ryde LEP 2014.	Refer to assessment against Ryde LEP 2014 in the Assessment report.	Variation sought to Height of buildings.
The public land such as the road verge adjoining a development site is to be embellished and dedicated to Council as part of any new development. The design and construction of the works are to be undertaken in accordance with the Macquarie Park Public Domain Technical Manual and Section 4 of this Part.	Public domain improvements are addressed by Council's Public Domain section subject to <b>Condition 51</b> .	Yes
<b>7.0 Built Form</b>		
<b>7.1 Site Planning and Staging</b>		
Sites are to be planned to allow for the future provision of new streets and open spaces in accordance the Figure 4.1.1 Access Network and Figure 5.1.1 Proposed Open Space Network.	New roads or pedestrian connections are not required under Ryde DCP 2014. The proposal will not impact on the provision of public open space or the proposed access networks within Macquarie Park.	N/A
<b>7.4 Setbacks and Build-to Lines</b>		
<p>Minimum setbacks and build-to lines must be provided as shown Figure 7.3.2 Active Frontage and Setback Control Drawing – summarised as follows:</p> <ul style="list-style-type: none"> <li>i. Zero setbacks / build-to lines to Primary Active Frontage;</li> <li>ii. 5m setback to all existing and new streets unless otherwise specified;</li> <li>iii. 10m setback to Waterloo Road and Talavera Road;</li> <li>iv. 10m green setbacks to the M2 tollway and Epping Road; and</li> <li>v. 5m built form setback to all parks (existing and proposed – subject to providing a Riparian Corridor in accordance with the NSW Office of Water's Guidelines for Riparian Corridors on Waterfront Land).</li> </ul>	Part of the podium encroaches into the 5m front building line setback to the cul-de-sac. The majority of the encroachment is balconies, which is permitted as discussed below.	No. Variation supported as discussed in <b>Section 5.9</b> of the Assessment report.
Underground parking is not permitted to encroach into the front setback areas unless it can be demonstrated that the basement is designed to support significant mature trees and deep root planting.	<p>Part of the Basement Level (B1) encroaches into the 5m front setback to Lachlan Avenue.</p> <p>This encroachment is supported, as the basement layout provides a deep soil area within part of the setback area which is capable of accommodating mature tree plantings.</p> <p>Council's Landscaped Architect has reviewed the amended</p>	No. Variation supported as discussed in <b>Section 5.9</b> of the Assessment report.

	landscape plans and raises no objection to the proposed deep soil areas within the front setback. In this instance, non compliance with the front setback control for the basement levels is acceptable on merit as the proposal satisfies the objectives of the setback controls.	
Awnings, canopies, balconies, sun shading and screening elements can project forward of the street setback line.	The majority of the podium encroachment into the 5m front building line setback to the cul-de-sac comprises balconies, which satisfies this control.	Yes
60% of the street setback area is to be soft landscaping. Existing mature trees are to be retained where possible. Paved areas are to relate to the materials and finishes of the adjacent streetscape. At grade car parking must not be located within this setback	This is achieved as a substantial deep soil zone is provided in the front setback area.	Yes
<b>7.5 Awnings and Canopies</b>		
<b>Entry Canopies</b>		
Entry canopies and discontinuous awnings may be provided to building entries not located along Active Frontages. Entry canopies may be glazed or solid, and are to be coordinated with a soffit height of 3.6 m minimum.	<p>The site is not on any active street frontages.</p> <p>The entry lobby via Lachlan Avenue is covered by the podium level above.</p> <p>The future access via Mahogany Avenue has a feature cover to assist with all-weather access which is integrated into the architectural design of the building and is acceptable.</p>	Yes
<b>7.6 Rear and Side Setbacks</b>		
Buildings are to be set back 10m from the rear boundary and 5m from a side boundary unless a proposed new road is shown on the site.	The rear and side setbacks satisfy the 5m setback. Consideration is also given to building separation requirements under the ADG where the proposed building is in the vicinity of existing / approved apartment buildings, which is discussed further in the Assessment report.	Satisfactory.
Awnings, canopies, balconies, sun shading and screening elements may project into the rear setback zones	Private terraces at the western corner of the site (in the vicinity of Mahogany Avenue) comprise a minor encroachment into the setback zone from Ground Level to Level 2. The encroachments enhance the amenity for future residential occupants.	Yes
Basement car park structures should not encroach into the minimum required rear or side setback zone unless the structure can be designed to support mature trees and deep root planting.	The basement car park encroaches into the 5m setback zone. However, the amended proposal demonstrates deep soil area is provided to satisfy	Satisfied.

	the minimum requirements of the ADG.	
Above ground portions of basement car-parking structures are discouraged and deep soil planting is promoted.	The access driveway and loading area at ground level. However, these areas are screened by landscaping and the front entry lobby. The remainder of the basement is below the ground level as it follows the slope of the land. Sufficient deep soil area is provided to satisfy the minimum requirements of the ADG.	Satisfied.
Natural ground level is to be retained throughout side and rear setbacks, wherever possible. Refer to Section 8.4 Topography and Building Interface for controls.	Achieved.	Yes
<b>7.7 Building Separation</b>		
Commercial: Provide minimum 20m separation between buildings facing each other within a site.	N/A	Refer to the discussion in the Assessment report.
Commercial: Provide minimum 10m separation between buildings perpendicular to each other within a site.	N/A	
Residential: Provide building separation as per the Apartment Design Guide.	ADG building separation provisions discussed in the Assessment report.	
<b>7.8 Building Bulk and Design</b>		
The floor-plate of buildings above 8 storeys is not to exceed 2,000m <sup>2</sup> , unless it can be demonstrated that slender building forms are achieved through courtyards, atria, articulation or architectural devices.	The floor plates are less than 2,000m <sup>2</sup> .	N/A
Buildings are to address the street and are to have a street address.	The development addresses Lachlan Avenue as the primary street frontage. Pedestrian access is catered for in the future once Mahogany Avenue is completed and dedicated to Council as part of the Ivanhoe Estate development.	Yes
Facade design is to		
i. Reflect and respond to the orientation of the site using elements such as sun shading and other passive environmental controls where appropriate.	The design incorporates passive solar controls that satisfy BASIX requirements and will contribute to thermal comfort and internal amenity for occupants.	Yes
ii. Provide building articulation such as well design roof forms, expressed vertical circulation etc.	Strong articulation is provided.	Yes
iii. Express corner street locations by giving visual prominence to parts of the façade (eg a change in building articulation, material or colour, or roof expression).	N/A	N/A
iv. Integrate and co-ordinate building services such as roof plant, parking and mechanical ventilation with the overall façade and building design and be screened from view.	Building services are incorporated into the rooftop and basement structures and screened from view.	Yes

v. Roof forms, building services and screening elements are to occur within the overall height controls. Refer to Ryde LEP 2014 for height controls.	No. Variation sought.	No. Refer to <b>Section 5.7</b> of the Assessment Report for consideration of height variation.
vi. Ventilation louvres and car park entry doors are to be coordinated with the overall façade design.	The car park entry is screened from view by landscaping, screening and the entry lobby.	Yes
The distance of any point on a habited floor from a source of natural daylight should not exceed 12m (such as from the core to an external window). i. Atria and courtyards are to be used to promote access to natural light, pedestrian links and slender building forms. ii. Arrange courtyards and atria to respond to street lot & solar orientation. iii. The preferred height to width ratio of atria is 3:1.	Natural daylight is provided to habitable rooms and internal corridors.	Yes
Buildings are to be designed to be flexible – car parking above the ground level is to have a floor to ceiling height of not less than 2.7m.	No above ground car parking is proposed.	N/A
<b>8.0 Site Planning and Staging</b>		
<b>8.2 Site Coverage, Deep Soil Areas and Private Open Space</b>		
A minimum 20% of a site must be provided as deep soil area. Deep soil areas must be at least 2 m deep. For the purpose of calculating deep soil areas, only areas with a minimum dimension of 20m x 10m may be included.	0% of the site area is provided as deep soil area according to definition in the DCP.	No. Variation supported as discussed in <b>Section 5.9</b> of the Assessment report.
A minimum 20% of the site area is to be provided as Landscaped Area. Landscaped Area is defined as: Area on the site not occupied by any buildings, except for swimming pools or open air recreation facilities, which is landscaped by way of gardens, lawns, shrubs or trees and is available for use and enjoyment by the occupants of the building, excluding areas used for driveways, parking areas or drying yards.	More than 20% of the site is embellished with landscaping.	Yes
Solar access to communal open spaces is to be maximised. Communal courtyards must receive a minimum of 3 hours direct sunlight between 9 am and 3 pm on the 21st of June.	Communal open space areas are provided at the ground level and rooftop, which achieve sufficient solar access.	Yes
Appropriate shading is to be provided so that communal spaces are useable during summer.	Shading has been incorporated into the design of communal open spaces, including a pergola on the rooftop. These spaces are considered to be usable during summer.	Yes
Communal open spaces are to incorporate the primary deep soil area where possible.	Communal open spaces at the ground level are in the vicinity of deep soil area (adjoining the entry lobby and the rear grassed area.	Yes
Landscaping is to contribute to water efficiency and effective stormwater management. Landowners are to consult with Council for requirements to address stormwater quality.	Landscaping and stormwater management are considered acceptable. The rainwater tank is to be used for irrigation.	Yes
<b>8.3 Planting on Structures</b>		

<p>Provide optimum conditions for plant growth by providing appropriate irrigation and drainage methods.</p> <p>Design planters to provide the largest possible volume of soil, in accordance with the recommended standards outlined in the DCP.</p>	<table><tr><th>Tree</th><th>Canopy diameter</th><th>Soil Volume</th><th>Soil Depth</th><th>Soil Area</th></tr><tr><td>Large</td><td>16m</td><td>150m<sup>3</sup></td><td>1.3m</td><td>10m x 10m</td></tr><tr><td>Medium</td><td>8m</td><td>35m<sup>3</sup></td><td>1m</td><td>6mx6m</td></tr><tr><td>Small</td><td>4m</td><td>9m<sup>3</sup></td><td>800mm</td><td>3.5m x 3.5m</td></tr><tr><td>Shrubs</td><td>-</td><td>-</td><td>500-600mm</td><td>-</td></tr><tr><td>Ground Cover</td><td>-</td><td>-</td><td>300-450mm</td><td>-</td></tr><tr><td>Turf</td><td>-</td><td>-</td><td>100-300mm</td><td>-</td></tr></table>	Tree	Canopy diameter	Soil Volume	Soil Depth	Soil Area	Large	16m	150m <sup>3</sup>	1.3m	10m x 10m	Medium	8m	35m <sup>3</sup>	1m	6mx6m	Small	4m	9m <sup>3</sup>	800mm	3.5m x 3.5m	Shrubs	-	-	500-600mm	-	Ground Cover	-	-	300-450mm	-	Turf	-	-	100-300mm	-	<p>Planting on structures is proposed at the ground level, as well as throughout the balconies and rooftop communal open space areas. Council's Landscape Architect has reviewed the proposal, and no objection.</p>	<p>Yes</p>
Tree	Canopy diameter	Soil Volume	Soil Depth	Soil Area																																		
Large	16m	150m <sup>3</sup>	1.3m	10m x 10m																																		
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Turf	-	-	100-300mm	-																																		
<b>8.4 Topography and Building Interface</b>																																						
<p>Level changes across sites are to be resolved within the building footprint.</p> <ul style="list-style-type: none"><li>i. Where buildings are built to the street boundary (i.e. zero setbacks, refer to Section 7.4 Setbacks and Build-to Lines), a level transition must be provided between the building and the adjacent footpath. This level must be maintained for a minimum depth of 10 m into the building.</li><li>ii. Where buildings are set back from the street boundary, entries are to be provided at street level wherever possible.</li></ul> <p>An accessible path of travel is to be provided from the street through the main entry door of all buildings.</p> <p>Where necessary, stairs and ramps are to be integrated with the landscape design of front setbacks.</p>	<p>N/A</p> <p>The proposal steps down with the slope of the land and the entry point is at street level.</p> <p>Achieved.</p> <p>N/A</p>	<p>Yes</p>																																				
<p>Natural ground level is to be retained for a zone of 4m from the side and rear property boundaries. Retaining walls, cut and fill are not permitted within this zone.</p> <p>The maximum height of retaining walls within the front, side and rear setbacks is not to exceed 1.2 m.</p>	<p>Natural ground level is being retained adjacent to side and rear boundaries.</p> <p>Retaining structures are provided within the site, where necessary, to accommodate pedestrian and vehicular access.</p>	<p>Yes</p>																																				
<p>Publicly accessible open spaces under private ownership (courtyards, forecourts) must be provided at footpath level. Where level changes cannot be avoided due to topography, the finished level of the open space must not exceed 1.2 m above footpath level.</p>	<p>N/A</p>	<p>N/A</p>																																				
<b>8.5 Site Facilities</b>																																						
<p>Residential:</p> <p>Provide either communal or individual laundry facilities to each dwelling, and at least one external clothes drying area. The public visibility of this area should be minimised. Clothes drying is only</p>	<p>Each dwelling has an internal laundry.</p> <p><b>Condition 199</b> is recommended to be imposed restricting clothes drying on</p>	<p>Yes</p>																																				



permitted on balconies that are permanently screened from view from the public domain.  Provide storage to dwellings in accordance with SEPP 65 requirements.  Lockable mail boxes are to be provided in a location visible from the public domain. Mailboxes are to be integrated with the design of building entries and to Australia Post standards.	balconies, where visible from the public domain. Storage is provided in accordance with the ADG.  Mail boxes are provided in the lobby. <b>Condition 149</b> is recommended requiring the design and access to the mail boxes to be in accordance with the requirements of Australia Post.	
<b>8.6 Vehicular Access</b>		
Vehicular access is not permitted along streets identified as 'Active Frontages' (refer to Section 7.3 Active Frontages).	The site is not located along an active street frontage.	N/A
Where practicable, vehicle access is to be from secondary streets.	The site does not have a secondary street frontage that can accommodate vehicular access.	N/A
Potential pedestrian/vehicle conflict is to be minimised by: <ul style="list-style-type: none"> <li>i. limiting the width and number of vehicle access points</li> <li>ii. ensuring clear site lines at pedestrian and vehicle crossings</li> <li>iii. utilising traffic calming devices</li> <li>iv. separating and clearly distinguishing between pedestrian and vehicular accessways</li> </ul>	A single vehicular access point is proposed. Clear sight lines are achieved.  Not required. Separate access is achieved for pedestrians and vehicles.	Yes
The appearance of car parking and service vehicle entries is to be improved by: <ul style="list-style-type: none"> <li>i. locating or screening garbage collection, loading and servicing areas visually away from the street</li> <li>ii. setting back or recessing car park entries from the main façade line</li> <li>iii. avoiding black holes in the façade by providing security doors to car park entries</li> <li>iv. where doors are not provided, it is to be ensured that the visible interior of the car park is incorporated into the façade design and material selection and that building services pipes and ducts are concealed, and</li> <li>v. returning the façade material into the car park entry recess for the extent visible from the street as a minimum.</li> </ul>	The loading area is behind screen fencing and the front lobby. Achieved.  Achieved.  A security door is provided.  N/A The car park entry is not visible from the street.	Yes
The width of driveways is to be determined in accordance with the requirements of Ryde DCP 2014 and the relevant Australian Standards.	The driveway width at the property boundary is 6.6m and satisfies the relevant Australian Standards.	Yes
<b>8.7 Onsite Parking</b>		
<b>Basement parking</b>		
Basement parking areas should be located directly under building footprints to maximise opportunities for deep soil areas unless the structure can be designed to support mature plants and deep root plants.	The Basement is outside of the building footprint in places. However, the minimum required providing of deep soil under the ADG is achieved and is capable of supporting new plants and trees.	Variation supported as discussed in <b>Section 5.9</b> of the Assessment report.
Basement parking areas must not extend forward of the building line along a street.	The basement car park extends into the 5m building line to the street. As addressed above,	Variation supported as discussed in



	sufficient deep soil landscaping can be provided within the front setback which will contribute positively to the landscaped character of the development and streetscape.	<b>Section 5.9</b> of the Assessment report.
Along active frontages, basement parking must be located fully below the level of the footpath. Refer to Section 7.3 Active Frontages.	The site is not located on an active street frontage.	N/A
Basement parking should be contained wholly beneath ground level along public streets.	The basement car park is not visible from the public domain.	Yes
Where this cannot be achieved due to topography, the parking level must protrude no more than 1.2 m above ground level for no more than 60% of the building frontage along a public street (Refer to Figures 8.7.1 and 8.7.2).	See comment above.	N/A
Ventilation grills or screening devices of car park openings are to be integrated into the overall façade and landscape design of the development.	Ventilation grills are not proposed at ground level.	Yes
<b>8.8 Fencing</b>		
Fencing is not permitted on the perimeter boundary of sites. Security should be provided within buildings.	No fencing is proposed along the street boundary.	Yes
<b>9.0 Environmental Performance</b>		
<b>9.1 Wind Impact</b>		
<p>Buildings shall not create uncomfortable or unsafe wind conditions in the public domain which exceeds the Acceptable Criteria for Environmental Wind Conditions. Carefully locate or design outdoor areas to ensure places with high wind level are avoided.</p> <p>All applications for buildings over 5 storeys in height shall be accompanied with a wind environment statement. For buildings over 9 storeys and for any other building which may be considered an exposed building shall be accompanied by a wind tunnel study report. Refer to Council for documentation and report requirements.</p> <p>Calculation rules – refer to the DCP for acceptable criteria for environmental wind conditions.</p>	<p>The accompanying Wind Impact Statement prepared by Vipac states that no recommendations are required for wind amelioration and provides the following comments:</p> <ul style="list-style-type: none"> <li>• With the proposed design, the ground level footpaths would be expected to have wind levels within the <b>walking</b> comfort criterion;</li> <li>• With the proposed design, the wind conditions near the main entrance areas would be expected to be within the criterion for <b>standing</b>;</li> <li>• With the proposed design, the communal terrace on the lower ground level and Level 13 would be expected to have wind levels within the <b>walking</b> comfort criterion.</li> </ul>	Yes
<b>9.2 Noise and Vibration</b>		
<p>An Acoustic Impact Assessment report prepared by a suitably qualified acoustic consultant is required to be submitted with all development applications for commercial, industrial, retail and community buildings, with the exception of applications minor building alterations.</p> <p>Development is to comply with all relevant statutory regulations.</p>	The accompanying Acoustic DA Report prepared by Vipac has been reviewed by Council's Environmental Health Officer and no objection is raised.	Yes
Where light industrial and commercial development adjoins residential development, the use of mechanical plant equipment and building services will be restricted and must have appropriate acoustic insulation.	The proposed development is residential and adjoins existing/approved residential developments.	N/A

Loading and unloading facilities must not be located immediately adjacent to residential development.		
Retail premises must limit any spruiking and the playing of amplified music or messages so as not to disturb the amenity of other public and private places.	No retail premises is proposed.	N/A
Air conditioning ducts shall not be situated immediately adjacent to residential development.	Air conditioning units are not located near the boundaries in the immediate vicinity of residential buildings. <b>Condition 205</b> is recommended to ensure that appropriate noise attenuation measures are implemented, if required.	Yes
<b>9.4 Soil Management</b>		
Development is to be designed and constructed to integrate with the natural topography of the site to minimise the need for excessive sediment disturbance and prevent soil loss. Effective site management and maintenance practices are to be followed to prevent soil loss. Ensure that suspended Solid concentrations in stormwater leaving the site do not exceed more than 50 mg/litre. An Erosion and Sediment Control Plan (ESCP), prepared by a suitably qualified environmental engineer, is required to be submitted in support of all development proposals requiring development consent under the Ryde Local Environmental Plan, (other than for minor building modifications) including: Demolition; Excavation; Trenching and Building. The ESCP must make reference to the entire construction and post construction period, and all devices must be installed prior to commencement of any demolition or construction works on-site.	The proposal steps down with the slope of the land. The proposed Sediment and Erosion Management Plans ensure that appropriate soil management is to be implemented.	Yes

Ryde DCP 2014 Control	Comment	Compliance
<b>Part 7: Environment</b>		
<b>Part 7.1: Energy Smart, Water Wise</b>		
(a) Energy efficiency performance report (b) Details of hot water system, insulation, energy and water efficient appliances and water storage. (c) Site Analysis.	The application is accompanied by a NatHERS and BASIX Assessment report and the required information is detailed on the plans.	Yes
<b>Part 7.2 Waste Minimisation and Management</b>		
<b>2.3 All Developments</b>		
(a) Developments must provide space for onsite waste containers. (b) Compliant size of storage areas and number of storage containers. (c) Space to be provided for bulk waste where appropriate. (d) Storage of green waste provided. (e) Stored within the boundaries of the site. (f) Site Waste Minimisation and Management Plan (SWMMP) required.	Provided in the basement.  Size and number of storage containers is provided. Provided at the rear of the site.  Provided in the basement. Provided within the site. SWMMP submitted.	Yes

(g) Located to provide easy, direct and convenient access.	Suitably located.	
(h) Storage areas visible from the street are to complement the design of the development and streetscape.	Storage areas are within the basement or screened from view.	
(i) No incineration devices.	No incineration devices.	
(j) Collection point identified on plan.	Shown on plans.	
(k) Path for wheeling bin collection not less than 14:1.	Achieved.	
(l) Complies with Australian Standard AS 2890.2-2002 Parking Facilities – Part 2: Off-street commercial vehicle facilities.	Complies with AS.	
(m) Complies with the Building Code of Australia and relevant Australian Standards.	Complies with BCA & AS.	

#### 2.4 Demolition and Construction

(a) Demolition must comply with AS and WorkCover.	Yes, condition recommended ( <b>Condition 28</b> ).	Yes
(b) Demolition work plan submitted.	Submitted.	
(c) Dedicated area on site for stockpile of materials taking into account environmental factors and amenity impacts.	Plan shows suitable area for stockpile of waste.	
(d) Construction materials to be stored away from the waste materials on site.	Yes, condition recommended ( <b>Condition 116</b> ).	

#### 2.9 Mixed Use Developments (in addition to 2.3 above)

(a) Separate waste and recycling storage, handling and collection systems for the residential and commercial areas.	N/A	N/A
(b) Waste management systems to efficiently operate without conflict between the systems within the development and surrounding land uses.		
(c) Easily accessible to users and waste collection staff.		
(d) The waste management systems are to comply with the relevant requirements for those developments under this part.		
(e) Noise from the operation of waste collection is not to impact on residents, with consideration given to siting of equipment and the collection area, and appropriate measures to mitigate potential daily noise impacts.		
(f) Commercial tenants to be discouraged from using residential waste facilities (e.g., via signage, separate keys and locking systems).		
(g) Details to be clearly identified in the site waste minimisation and management plan.		

### Part 8: Engineering

#### Part 8.1 Construction Activities

2.1.2 Erosion and sediment control plan to be submitted.	Erosion and sediment control plans provided.	Yes
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#### Part 8.2 Stormwater and Floodplain Management

2.0 Stormwater Drainage. To ensure the collection and conveyance of stormwater runoff on property is undertaken in a manner to preserve the amenity of the land, prevent damage to property and without jeopardising public safety.	Reviewed by Council's Development Engineer and City Works section. Satisfactory, subject to conditions. See <b>Conditions 58-63 &amp; 70-73</b> .	Yes
3.0 Water Sensitive Urban Design	N/A. Does not apply to this land use zone.	N/A

4.0 Flooding and Overland Flow Applies to land identified as "Flood Planning Area" on the Flood Planning Map within Ryde LEP 2014, and other land at or below the flood planning level.	The site is identified as at risk of flooding. Refer to <b>Section 5.7</b> of the Assessment report for further discussion. Council's Development Engineering and City Works section have reviewed the proposal and no objection is raised.	Satisfactory.
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### Part 8.3 Driveways

2.0 Design Standards. Layout and design of the driveway and parking facility shall take into account the design standards.	The proposal is consistent with the design standards.	Yes
3.2 Disused footway crossings that become redundant are to be removed and footway restored.	The crossing is to be replaced and footway restored.	Yes

### 4.0 Designing internal access roads and parking spaces

4.1 (a) General: The design of all parking spaces, circulation roads and manoeuvring areas on the property must confirm to the minimum requirements of AS2890.1-2004 and AS2890.2-2002.	The proposal is consistent with the design criteria.	Yes
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### 4.2 Design of Parking Spaces

(a) Parking spaces and driveway widths for all vehicles shall comply with A.S.2890.	Suitable widths are provided.	Yes
(b) Vehicles (85th percentile) to enter and leave designated parking space in a single 3 point turn manoeuvre. A 99 <sup>th</sup> percentile vehicle for disabled vehicles.	Suitable space for manoeuvring is provided.	
(c) Enter and leave in a forward direction.	All vehicles enter and exit in a forward direction.	

### 4.3 Gradient for Cars and Small Rigid Trucks

(a) The access driveway from the centreline of the public road to the parking space is to be designed to minimise entry hazards from the road, account for pedestrian safety and prevent scraping of vehicles using the access.	Driveway access is safe and includes specific traffic safety measures including ensuring that sight lines are not obstructed where the driveway meets the public road and replacement of the footway.	Yes
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### Part 9.2 Access for People with Disabilities

An accessible path of travel from the street to unit. 10% apartments adaptable.	The proposal is accompanied by a BCA Report prepared by Atelier Consultancy which demonstrates that the development is capable of complying with the BCA. An accessible path of travel is provided. 13 (10%) adaptable apartments are provided.	Yes
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### Part 9.3 Parking Controls: 2.2 Residential Land Uses

The proposal is for 105 resident and 2 visitor car parking spaces, which does not exceed the maximum permitted car parking spaces permitted under the DCP.

The proposal does not provide any car share spaces. 2 are required under the DCP at the rate of 1 space per 50 car parking spaces. Refer to the table below:

Apartment Type	Maximum DCP Parking Rate	Minimum Spaces	Maximum Spaces	Provided	Compliance
1 bed (44)	0.6 space per dwelling	-	26.4	105	Yes

2 bed (63)	0.9 space per dwelling	-	56.7		
3 bed (16)	1.4 spaces per dwelling	-	22.4		
Sub-total		-	105.5	105	Yes
Visitor	1 space per 10 dwellings	-	12.3	2	Yes
Car Share	1 car share per 50 proposed spaces	2	-	Nil	No

Refer to **Sections 5.9 & 12.1** of the Assessment report for further discussion regarding the shortfall of visitor and car share parking.

## Part 9.5 Tree Preservation

The accompanying Arboricultural Impact Assessment and Tree Management Plan identifies that all trees within the site are sought to be removed. All trees on adjoining sites are capable of being retained, including Tree 2 located within No. 1 Peach Tree Road to the south. As discussed in the Assessment Report, Council's Landscape Architect supports the retention of this tree which was considered in the accompanying Root Investigation Analysis prepared by Redgum Horticultural. Tree 2 experiences minor encroachment due to the proposed driveway and is capable of being retained and protected during works.

There are 22 existing trees within the site, none of which are of high retention value under the Ryde DCP 2014 Part 9.5 Tree Preservation.

Of the 22 trees: 2 are exempt, 4 are in poor condition and 16 are in fair condition.

Of the 22 trees: 2 are exempt, 5 are categorised as 'remove' in terms of retention value, 10 are of low retention value and 5 are of medium retention value.

This includes Tree 7 in the front setback area which is a Lemon Scented Gum *Corymbia citriodora* which has been assessed as a mature tree with a height of 18m, with Low Vigour, Fair Condition and medium estimated life expectancy. Tree 7 is in poor form with medium significance and medium retention value. There is no objection from Council's Landscape Architect for the removal of this tree.

25 new trees are proposed to be planted within the site, as well as shrubs and groundcovers. This includes 3 trees a mature height of 15m (Spotted Gums). The remaining 22 new trees are to be planted within the development site with mature heights of 6m to 8m.

Overall, the proposal provides a favourable balance between the built form, retention of existing trees on adjoining sites and the planting of new trees and landscaping which is in keeping with the desired future character of the locality to foster a green environment.

4.0 Development Applications c. Trees removed as a consequence of Development Application approval must be replaced, in accordance with Section 6 of the Urban Forest Technical Manual, to effectively maintain the Urban Forest canopy.	The proposal is for: 22 trees in the site to be removed. Nil street trees to be removed. Nil trees in the site to be retained. New street trees. 25 new trees in the site.	Yes
5.0 Construction Activities a. All reasonable efforts are to be taken to protect trees from damage during construction. b. Tree protection zones are to be fenced off to ensure that they are not disturbed and to prevent vehicles, building materials, and refuse being placed in those locations. c. Fences for tree protection zones are to be erected prior to any demolition or construction work. d. Trees that are to remain on the site are to be protected against damage during construction. e. Installation of Services: Trenches for services shall be located outside the dripline of all trees that	Tree protection measures are provided for trees to be retained on the adjoining properties. Conditions of consent have been provided by our Landscape Architect. See <b>Conditions 101-107.</b>	Yes

must be retained on the property and all trees on adjoining public and private lands.		
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