

## Sydney North Planning Panel

<b>SNPP No</b>	2017SNH010
<b>DA Number</b>	LDA2016/0567
<b>Local Government Area</b>	City of Ryde
<b>Proposed Development</b>	<p>Demolition of all buildings and structures on the site and construction of a mixed use development comprising the following:</p> <ul style="list-style-type: none"> <li>• Four towers with a total rise of 23 storeys over a shared two storey podium;</li> <li>• 1674.8m<sup>2</sup> of retail space;</li> <li>• 680 residential apartments comprising of: 177 x 1 bedroom, 447 x 2 bedroom, 49 x 3 bedroom and 7 x 4 bedroom apartments;</li> <li>• Two basement levels &amp; two above ground levels of car parking for a total of 688 car parking spaces;</li> <li>• A new public road (Road 27) off Waterloo Road running from south to north;</li> <li>• Pedestrian link (bridge) at the north western corner connecting to the adjacent Macquarie Shopping Centre site and</li> <li>• Site landscaping including public domain improvements along Waterloo Road.</li> </ul>
<b>Street Address</b>	101-107 Waterloo Road, Macquarie Park
<b>Applicant</b>	Waterloo Road Development P/L
<b>Number of Submissions</b>	Two (2) submissions.
<b>Regional Development Criteria (Schedule 4A of the Act)</b>	General Development over \$20 million - \$206,800,000
<b>List of All Relevant s79C(1)(a) Matters</b>	<ul style="list-style-type: none"> <li>• Environmental Planning and Assessment Act 1979</li> <li>• State Environmental Planning Policy (State and Regional Development) 2011</li> <li>• State Environmental Planning Policy No. 55 (Remediation of Land)</li> <li>• State Environmental Planning Policy (Building Sustainability Index: BASIX)</li> <li>• State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development</li> <li>• State Environmental Planning Policy (Infrastructure) 2007</li> <li>• Deemed State Environmental Planning Policy Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005</li> <li>• Ryde Local Environmental Plan 2014</li> <li>• Ryde Development Control Plan 2014</li> </ul>
<b>List all documents submitted with this report for the panel's consideration</b>	<p>Attachment 1: Conditions of consent  Attachment 2: Clause 4.6 Request  Attachment 3: Peer Review for Acoustic Reports by GHD</p>
<b>Recommendation</b>	Approval subject to conditions
<b>Report by</b>	Sandra McCarry Senior Town Planner
<b>Report date</b>	June 2017

<b>Summary of s79C matters</b>	
Have all recommendations in relation to relevant s79C matters been summarised in the Executive Summary of the assessment report?	Yes
<b>Legislative clauses requiring consent authority satisfaction</b>	
Have relevant clauses in all applicable environmental planning instruments where the consent authority must be satisfied about a particular matter been listed, and relevant recommendations summarized, in the Executive Summary of the assessment report?	Yes
<b>Clause 4.6 Exceptions to development standards</b>	
If a written request for a contravention to a development standard (clause 4.6 of the LEP) has been received, has it been attached to the assessment report?	Yes
<b>Special Infrastructure Contributions</b>	
Does the DA require Special Infrastructure Contributions conditions (S94EF)?	No
<b>Conditions</b>	
Have draft conditions been provided to the applicant for comment?	Yes – The applicant has agreed to the conditions except for Condition 57 which is a Sydney Water condition. The condition requires building plans to be approved by Sydney Water prior to excavation or construction works commencing. The applicant sought to amend the condition to exclude the word “excavation”. Sydney Water does not support this as excavation may impact on their assets Plans are required to be approved prior to excavation. The applicant has been advised of this.

## Assessment Report and Recommendation

### 1. EXECUTIVE SUMMARY

The following report is an assessment of a development application for the approval for a mixed use redevelopment at 101-107 Waterloo Road, Macquarie Park.

It is proposed to demolish the existing commercial building and construct a mixed use development consisting of four towers with a maximum building height of 64.9m (23 storeys) comprising:

- Four towers (known as Buildings A, B, C & D) on a shared two storey podium containing 1674.8m<sup>2</sup> retail floor space, 680 residential units, communal facilities including a swimming pool and gym;
- Communal open space at the podium (level 1) and communal open space at the podium rooftops (level 5) of Buildings A, B & D;
- Private terraces on each tower rooftop;
- Construction of a new public road off Waterloo Road. Vehicular access to the site will be via a driveway off the new road to two basement levels and two levels of above ground car parking for 688 car parking spaces, storage, loading areas and waste facilities; and
- Construction of a pedestrian link (bridge) to the adjoining western site (Macquarie Shopping Centre).

Clause 7 of State Environmental Planning Policy No. 55 Remediation of Land requires the consent authority to consider if the land is contaminated and if it is contaminated, is it suitable for the proposed development.

A Preliminary Site Investigation prepared by STS GeoEnvironmental P/L dated September 2015 was submitted with the application. The investigation found the site to be suitable for both an ongoing commercial/industrial use and also for future high-density residential use in its current condition. The report also identified an underground petroleum storage system (UPSS) located in the south-west corner of the site, believed to be installed during the 1990s. The SIS report states that should the UPSS be excavated and removed from the site, validated sampling from the excavated area should be performed in accordance with the details and strategy for the removal of UPSS.

Concurrence is required from Sydney Trains in accordance with Clause 86 of State Environmental Planning Policy (Infrastructure) 2007. Sydney Trains has granted its concurrence subject to deferred commencement condition and general operational conditions.

The applicant and Council have agreed to enter into a Voluntary Planning Agreement under Section 93 of the Act and the applicant has provided Council with a letter of offer. Council at its Ordinary Meeting of 13 December 2016 endorsed the offer to enter into a VPA. The VPA will allow for the delivery of:

- Construction and dedication of a new 14.5m wide access road from Waterloo Road which will eventually connect to a road in Macquarie Shopping Centre that leads to Talavera Road
- Construction of a pedestrian link from the site to the Macquarie Shopping Centre boundary
- Public plaza
- 21 Key Worker Housing Apartments and
- Section 94 contributions.

During the notification period (25 January 2017 to 15 February 2017) Council received two submissions, one from Macquarie Shopping Centre (the adjacent north, western site) and one from ProInvest P/L on behalf of Holiday Inn Express located at 10 Byfield Street.

The submissions raised the following concerns:

- Impact to adjoining sites during demolition and construction
- Acoustic Privacy
- Visual Impact
- Solar Impact
- Parking, site access and traffic impacts.

The matters raised in the submissions are discussed in further detail in Section 11 of the report.

The development complies with the height control under Ryde Local Environment Plan 2014 however the proposal will result in a FSR of 3.3:1 which is over the floor space by 5,663,4m<sup>2</sup>, an 11% variation. A variation under Clause 4.6 of the LEP is sought and is discussed in detail later in the report.

The development also does not comply with the planning requirements in respect to building depth, basement parking design, communal open space and common circulation areas. These non-compliances are considered to be acceptable on planning grounds and have been discussed in the body of the report.

Assessment of the application against the relevant planning framework and consideration of various design matters by Council's technical departments have not identified any issues of concern that cannot be dealt with by way of conditions. Consequently this report concludes that this application is sound in terms of its design, function, and relationship with its neighbours.

This report recommends that consent be granted to this application, subject to draft conditions provided as **Attachment 1**.

## **2. APPLICATION DETAILS**

Applicant: Waterloo Road Development P/L

Owner: JQZ Eleven P/L

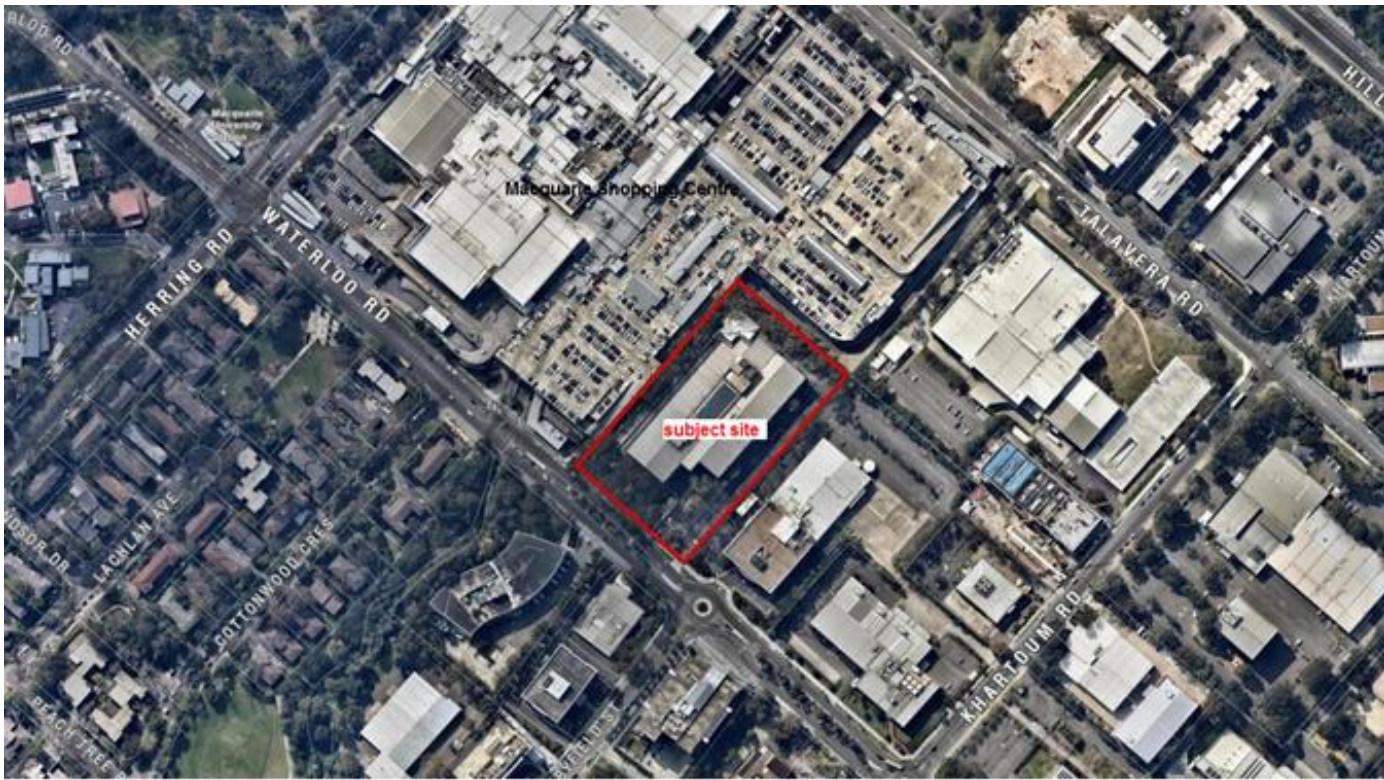
Estimated value of works: \$206,800,000

Disclosures: No disclosures with respect to the Local Government and Planning Legislation Amendment (Political Donations) Act 2008 have been made by any persons.

## **3. SITE DESCRIPTION**

The site is known as 101- 107 Waterloo Road, Macquarie Park and is legally described as Part Lot 4 in DP 1046092. The site is rectangular in shape, has an approximate area of 17,161m<sup>2</sup> and a 102m street frontage to Waterloo Road.





**Figure 1: Aerial photograph of the site.**

The site is predominately covered by existing development, with underdeveloped open space and overgrown vegetation covering the site's northern, western and southern boundaries. Currently on the site is a commercial office building accommodating Fuji Xerox (**Figure 2**) with vehicular access/driveway off Waterloo Road.



**Figure 2: Existing commercial building currently on site.**

#### 4. SITE CONTEXT

The subject site is within the area identified as the Macquarie University Station Priority Precinct (formally known as Herring Road Urban Activation Precinct). This precinct encompasses land surrounding Macquarie University and Macquarie Shopping Centre. The Precinct proposed the revitalisation of the area to provide new housing, public spaces, shops and employment. By 2031, it is expected that the precinct will become a major strategic hub, containing a range of educational, commercial and residential land uses. This transition has been aided by amendments to the Ryde Local Environmental Plan 2014 which rezoned land within the precinct to B4 Mixed Use, increased maximum building heights and increased permissible floor space ratios.

The site is surrounded by the following:

- Directly adjacent to the north is a loading dock and car park for Macquarie Shopping Centre (**Figure 3**).
- Situated opposite, to the south-east are multiple commercial buildings accommodating the likes of Optus, Schneider Electric and Relationships Australia NSW (**Figure 4**).
- Located opposite (south) is Shrimptons Creek and commercial buildings undergoing a transition to facilitate high-density mixed use. This includes 80 Waterloo Road and 82 Waterloo Road Macquarie Park, which will accommodate future high rise towers and mixed-use developments (**Figure 5**).
- Directly adjacent to the west and north is Macquarie Shopping Centre, which comprises speciality shops, cafes, major department stores and supermarkets (**Figure 6**). Note: Macquarie Shopping Centre has a concept approval for a Stage 1 mixed use development comprising 4 towers ranging in height of 90m to 120m.
- Further west approximately 220m is Macquarie University Station and approximately 350m to the west is Macquarie University.





**Figure 3: Adjacent to the rear boundary – Back of house facilities for Macquarie Shopping Centre, loading docks and car park.**

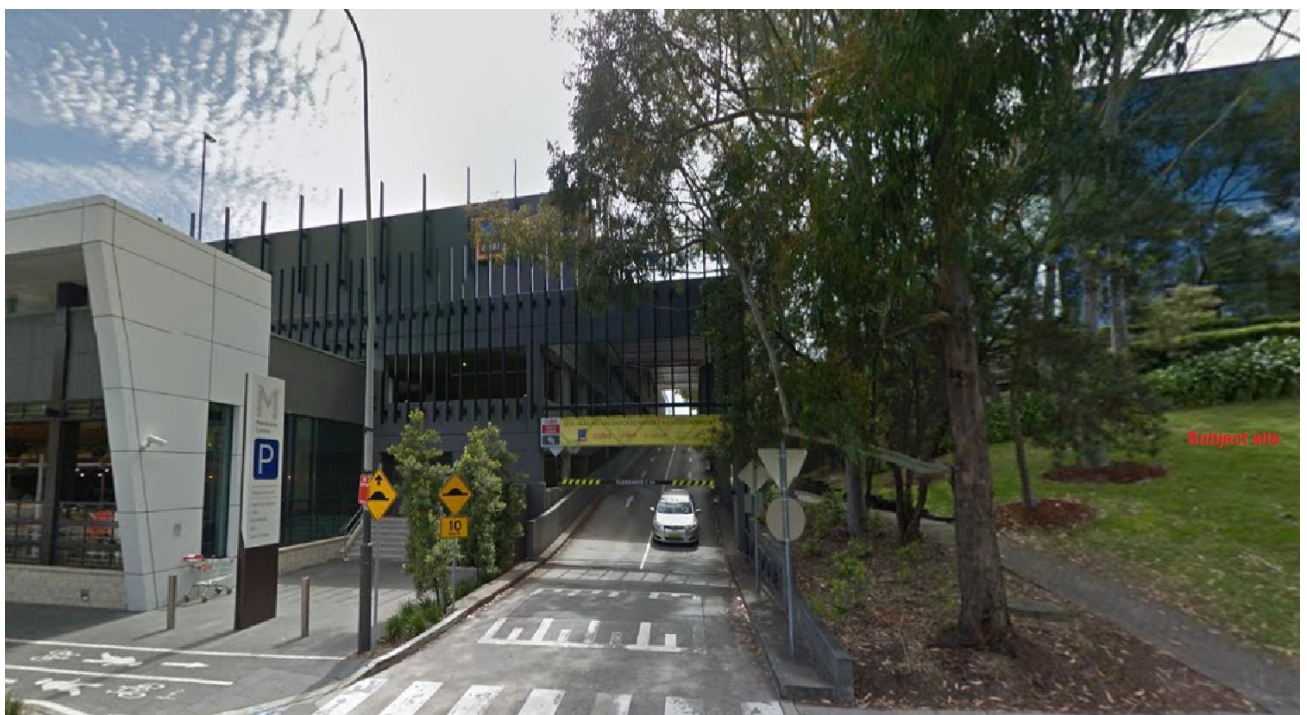


**Figure 4: Commercial buildings located east of the subject site along Waterloo Road.**





**Figure 5: Proposed redevelopment of 80 Waterloo Road, located opposite (south east). The application is currently being assessed by Council.**



**Figure 6: Macquarie Shopping Centre adjacent west of the site. Driveway ramp is located adjacent to the western boundary.**



## 5. THE PROPOSAL

The DA seeks consent for:

- Demolition of the existing building on site;
- Excavation to a depth of approximately 10.5m below existing ground level for the purpose of basement parking, storage, and waste management;
- Construction of a mixed use development consisting of four towers with a maximum building height of 64.9m (RL115.9) including:
  - Two basement levels and two levels of above ground car parking, storage, loading areas and waste facilities;
  - Four mixed use towers with a total rise of 23 storeys, including a shared two storey podium containing 1,674.8m<sup>2</sup> retail floor space, residential units, communal facilities including a swimming pool and gym;
  - Communal open space at the podium (level 1) and communal open space at the podium rooftops (level 5); and
  - Private open space at the tower rooftops.
- The proposal comprises 680 dwellings. The proposed residential apartment mix is 177 x 1 bedroom, 447 x 2 bedroom, 49 x 3 bedroom and 7 x 4 bedroom apartments.
- Construction of a new public road off Waterloo Road with vehicular access to the development via a driveway off the new road;
- Associated landscaping, public art, and public domain improvements.
- The applicant has offered to enter into a Voluntary Planning Agreement with Council to provide the following public benefits:
  - i. Road construction and dedication to Council
  - ii. Public Plaza
  - iii. Pedestrian Access to Macquarie Shopping Centre
  - iv. 21 Key Worker Housing Apartments (constructed and transferred to Council)
  - v. Section 94 Contributions.

The DA also proposes publicly accessible space (public plaza) along the Waterloo Road frontage. A landscaped setback is proposed to facilitate the accessible public plaza that will contribute to the amenity of Waterloo Road and facilitate a direct pedestrian connection between Waterloo Road and the Macquarie Shopping Centre adjacent to the site. A sequence of landscape spaces will define the public domain as well as new community spaces for residential use. Trees to the northern and western boundary edges will be retained or replanted to provide screening and privacy from the adjoining Macquarie Centre carpark.

Photomontages of the proposed development are provided below in **Figures 7 to 10**.



**Figure 7: Layout of the proposed development identifying the location of each of the Towers – A, B, C & D.**



**Figure 8: Photomontage of the development as viewed from Waterloo Road with public plaza and retail/commercial use.**





**Figure 9: Photomontage as viewed from the proposed new road (Note Building A is located behind Building C).**



**Figure 10: Communal open space on the podium level.**

## **6. BACKGROUND**

### **Relevant Background for the Current Development Application**

- Prior to submission of the current DA, an Urban Design Review Panel meeting was held on 3 May 2016 to review the concept plan. The UDRP advised that the quality and the architect's analysis are sound and that the adoption of the central courtyard present a lucid rational for the massing of the development. A further meeting was held on 11 May 2016 with Council's Officers to discuss technical aspects such as the



new road design, the connection between the site and Macquarie Shopping Centre and provision of key worker housing.

- A second UDRP meeting was held on 14 June 2016 to review the changes made to the concept plan. The panel noted that whilst some worthwhile improvements have been made, there was still further refinement required such as improvement/amendment to the access, the undercroft space in the towers, number of lifts serving the apartments, excessive number of units in Tower C and floor plate. The panel also raised concern about the deep soil planting on the upper courtyard and that some apartments have an internalised room or space that can be converted at a later stage to bedrooms.
- The application was submitted to Council on 23 November 2016 and the proposal was advertised and adjoining property owners notified of the proposal. The application was notified from 25 January 2017 to 15 February 2017. The proposal was also referred to the relevant departments and officers for their comments. Two submissions were received – one from Macquarie Shopping Centre and the other from Pro-Invest Hospitality on behalf of Holiday Inn Express at 10 Byfield Street.
- A third UDRP meeting was had on 14 December 2017 (post DA) and a letter dated 2 April 2017 was sent to the applicant. The letter outlined areas of non compliances and comments from other departments such as the UDRP, Roads & Maritime Services, Sydney Trains, Geotechnical Engineer and Council's internal departments. A request for further information and amendments was made.
- Amended plans and additional information were submitted on 28 April 2017. The amended plans were not required to be renotified or advertised as the amendments did not change the height, floor space or the layout/location of the buildings. The amended plans were reviewed by URDP on 17 May 2017 and are discussed in full in Section 8.7 of the report. Further amendments were received on 2 June 2017.

## **7. APPLICABLE PLANNING CONTROLS**

The following planning policies and controls are of relevance to the development:

- Environmental Planning and Assessment Regulation 2000;
- Environmental Planning and Assessment Act 1979;
- Statement Environmental Planning Policy (State & Regional Development) 2011;
- State Environmental Planning Policy No. 55 – Remediation of Land;
- State Environmental Planning Policy (Building Sustainability Index: BASIX);
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development;
- Deemed SEPP - Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- Ryde Local Environmental Plan 2014; and
- City of Ryde Development Control Plan 2014.

## **8. PLANNING ASSESSMENT**

### **8.1 Environmental Planning and Assessment Act 1979**

*Section - 5A Threatened species, populations or ecological communities, or habitats*

This section of the Act requires a range of matters to be taken into account in deciding whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats.

Noting the review undertaken for this development application, the site does not have any ecological attributes which, if lost, would impact upon any threatened species, population, ecological community or habitat.

#### *Section 93F Planning Agreement.*

Council at its Ordinary Meeting of 13 December 2016 accepted the letter of offer by Waterloo Road Development Pty Ltd to enter into a Voluntary Planning Agreement in relation to the Development Application. The Voluntary Planning Agreement will require the Applicant to provide public benefit as summarised above under Section 5 of the report.

### **8.2 Environmental Planning and Assessment Regulation**

This application satisfies Clause 50(1)(a) of the Regulation as it is accompanied by the nominated documentation for development seeking consent for a mixed use development, including:

- A design verification statement from a qualified designer;
- An explanation of the design in terms of the design quality principles set out in Part 2 of State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development; and
- Relevant drawings and montage.

### **8.3 State Environmental Planning Policy (State and Regional Development) 2011**

As the proposed development has a Capital Investment Value of \$206,800,000, the development application is required to be determined by the Sydney North Planning Panel.

### **8.4 State Environmental Planning Policy No 55 – Remediation of Land**

The requirements of State Planning Policy No. 55 – Remediation of Land apply to the subject site. In accordance with Clause 7 of SEPP 55, the consent authority must consider if the land is contaminated. If it is contaminated, is it suitable for the proposed use and if it is not suitable, can it be remediated to a standard such that it will be made suitable for the proposed use.

A Preliminary Site Investigation by STS GeoEnvironmental P/L dated September 2015 was submitted with the application. The report states that soil sampling from 11 locations across the site found it to be suitable for both ongoing commercial/industrial use and also future high-density residential use in its current condition.

The Preliminary Site Investigation also identified that an underground petroleum storage system (UPSS) is located in the south-west corner of the site. Should this UPSS be excavated and removed from the site, validated sampling from the excavated area should be performed in accordance with the “Details strategy for the removal of an Underground Petroleum Storage System (UPSS) and Above Ground Storage Tanks (AGST) Validation Procedure Report” prepared by Douglas Partners P/L dated 19 October 2016. **Condition 85** has been imposed requiring this.

Furthermore, a hazardous building materials survey for 101 Waterloo Road was undertaken by Hazmat Plus P/L. The purpose of the report was to identify asbestos containing

materials, lead paint systems, polychlorinated biphenyl in older style electrical fittings and high risk synthetic mineral fibres within accessible areas of the site. The report found that the existing building has a low risk status.

Council's Environmental Health Officer has reviewed the above reports and has raised no objections. **Conditions 74 & 85** have been imposed requiring compliance with the recommendations contained in the reports.

#### 8.5 **State Environmental Planning Policy (Building Sustainability Index: BASIX)**

The Policy seeks to ensure that new dwellings are designed to use less water and be responsible for fewer greenhouse gas emissions by setting energy and water reduction targets, which are based on the NSW average benchmark. The Policy also sets minimum performance levels for thermal comfort.

This application as lodged was accompanied by a BASIX Assessment Report and amended BASIX Certificate No. 772785M \_02 dated 7 November 2016 which confirmed that required targets would be met.

Appropriate conditions are to be imposed requiring compliance with the BASIX commitments detailed within the Certificate. See **Conditions 5 & 162**

#### 8.6 **State Environmental Planning Policy (Infrastructure) 2007**

The Infrastructure SEPP applies to the subject site as it is adjacent to a rail corridor. In addition, the development is classified as a 'Traffic Generating Development' as it includes more than 75 dwellings for residential use. The table below contains the provisions of the Infrastructure SEPP applicable to this DA:

<b>Infrastructure SEPP</b>	<b>Comments</b>	<b>Comply?</b>
<b>Development likely to affect an electricity transmission or distribution network.</b> <u>Clause 45</u> This clause applies to a development application for development comprising or involving any of the following: (b) development carried out: (i) within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists), or (ii) immediately adjacent to an electricity substation, (2) Before determining a development application (or an application for modification of a consent) for development to which this clause applies, the consent authority must: (a) give written notice to the electricity supply authority for the area in which the development is to be carried out, inviting comments about potential safety risks, and  (b) take into consideration any response to the notice that is received within 21 days after the notice is given.	The proposal is adjacent to two substations located adjacent to the northern boundary. In accordance with Clause 45(2) the proposal was referred to Ausgrid. Via letter dated 31 March 2017 Ausgrid raised no objections subject to conditions. <b>Conditions 21 to 24</b> have been imposed as required.	Yes
<b>Development in rail corridors:</b> <u>Clause 86 Excavation in, Above or Adjacent to Rail Corridors</u>	The proposed development includes works within 25m	Yes



Infrastructure SEPP	Comments	Comply?
<p>This clause applies to development (other than development to which clause 88 applies) that involves the penetration of ground to a depth of at least 2m below ground level (existing) on land:</p> <p>(a) within or above a rail corridor, or</p> <p>(b) within 25m (measured horizontally) of a rail corridor, or</p> <p>(c) within 25m (measured horizontally) of the ground directly above an underground rail corridor.</p> <p>(2) Before determining a development application for development to which this clause applies, the consent authority must:</p> <p>(a) within 7 days after the application is made, give written notice of the application to the chief executive officer of the rail authority for the rail corridor, and</p> <p>(b) take into consideration:</p> <p>(i) any response to the notice that is received within 21 days after the notice is given, and</p> <p>(ii) any guidelines issued by the Secretary for the purposes of this clause and published in the Gazette</p>	<p>(measured horizontally) of a rail corridor. As such the application was referred to Sydney Trains as the relevant rail authority for the rail corridor. Sydney Trains advised Council on 17 July 2017 that it has granted its concurrence to the development application subject to deferred commencement condition and general operational conditions. <b>See Condition Part 1 – (A) 3 and General Conditions Part 2 – 25 to 28, 77 to 84 &amp; 164.</b></p>	
<p><b>Clause 87 – Impact of Rail Noise and Vibration</b></p> <p>Before determining a development application, a consent authority is to take into consideration “<i>Development Near Rail Corridor and Busy Roads – Interim Guidelines</i>”.</p> <p>If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:</p> <p>(a) in any bedroom in the building-35 dB(A) at any time between 10.00 pm and 7.00 am,</p> <p>(b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)-40 dB(A) at any time.</p>	<p><b>Conditions 69 &amp; 70</b> have been imposed requiring compliance with the Australian Standard AS 2107:2000 <i>Recommended design sound levels and reverberation times for building interiors</i> and with <i>Development Near Rail Corridor and Busy Roads – Interim Guidelines</i>”.</p>	<p>Yes</p>

<p><b>Clause 104 Traffic generating development</b></p> <p>The proposed development, being a residential development with more than 300 dwellings, and with access to any road is considered traffic generating development. Before determining a DA for which this clause applies the consent authority must:</p> <p>Take into consideration any submission that the RTA provides in response to that notice within 21 days after the notice was given (unless before the 21 days have passes, the RTA advises that it will not be making a submission),</p> <p>The accessibility of the site concerned, and</p> <p>Take into consideration any potential traffic safety, road congestion or parking implications of the development.</p>	<p>The proposed development is considered 'traffic generating development' and was referred to RMS.</p> <p>RMS initially did not support the application as RMS required a strip of land in front of the site for road acquisition for future road works which include upgraded traffic signals at the intersection of Byfield Street and Waterloo Road.</p> <p>The applicant has amended the proposal to include a strip of land in front of the site for future road works. However, RMS also advised that due to the close proximity that the access will have to the proposed traffic signals at the intersection, they would not support the left turn out access onto Waterloo Road. RMS suggested that vehicular exit be from Talavera Road via the new road at the other end of the road that intersects with Talavera Road (Macquarie Shopping Centre site).</p> <p>RMS was advised that the road at Macquarie Shopping Centre is currently in private ownership and under the Deed of Agreement between Council and Macquarie Shopping Centre; this road will need to be dedicated to Council before the two roads can be connected. The time frame for this occurring is uncertain and it may be some time before this occurs. Therefore the only exit for 101-107 Waterloo Road is the left turn via Waterloo Road, as per the current arrangement.</p> <p>RMS's requirement that there be no left hand access onto Waterloo Road effectively means that the subject site will have no vehicular exit.</p> <p>RMS has now allowed temporary Left-in &amp; Left out access off Waterloo Road until the access road is connected to Talavera Road.</p> <p>Via letter dated 27 March 2017</p>	<p>Yes</p>
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	RMS has advised that there are no objections to the proposal subject to conditions. See <b>Conditions 7 to 9 &amp; 173.</b>	
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## 8.7 **State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development**

This policy aims to improve the design quality of residential flat development in NSW. It recognises that the design quality of residential flat developments is of significance for environmental planning for the State due to the economic, environmental, cultural and social benefits of high quality design.

This proposal has been assessed against the following matters relevant to SEPP 65 for consideration:

- Urban Design Review Panel;
- The SEPP 65 Design Quality Principles; and
- Apartment Design Guide.

### **Urban Design Review Panel (UDRP)**

Four UDRP meetings were held to discuss the development – two meetings prior to the lodgement of the application and two post submission.

The fourth UDRP was held on 17 May 2017 and reviewed amended plans of 1 May 2017. As a result of the comments made by the UDRP meeting of 17 May 2017, additional information and revisions (received 2 June 2017) have been made to the scheme as follows:

- Units 0102 and 0103 within Building A which previously faced the pedestrian link have been deleted;
- The pool and gymnasium area have subsequently been relocated to provide a buffer to the pedestrian link and the north western side boundary;
- A new two-bedroom Unit 0102 within Building A is proposed adjacent to the gym which has a large façade fronting the communal open space;
- A new two-bedroom Unit 0103 is proposed on the northern side of the pool where a greater separation between the balcony and the existing car park of the Macquarie Centre can be achieved;
- Further façade detailing is proposed for the south eastern elevation of Building C to delineate more clearly the separate ‘podium’ and ‘tower’ elements of the building (noting further development to occur during detailed design phase) and
- An additional landscape design statement has been prepared by Arcadia to provide explanation of the rationale behind the landscape design of the communal open space

A response to each of the comments raised at the 17 May meeting is provided within Table 1 below.



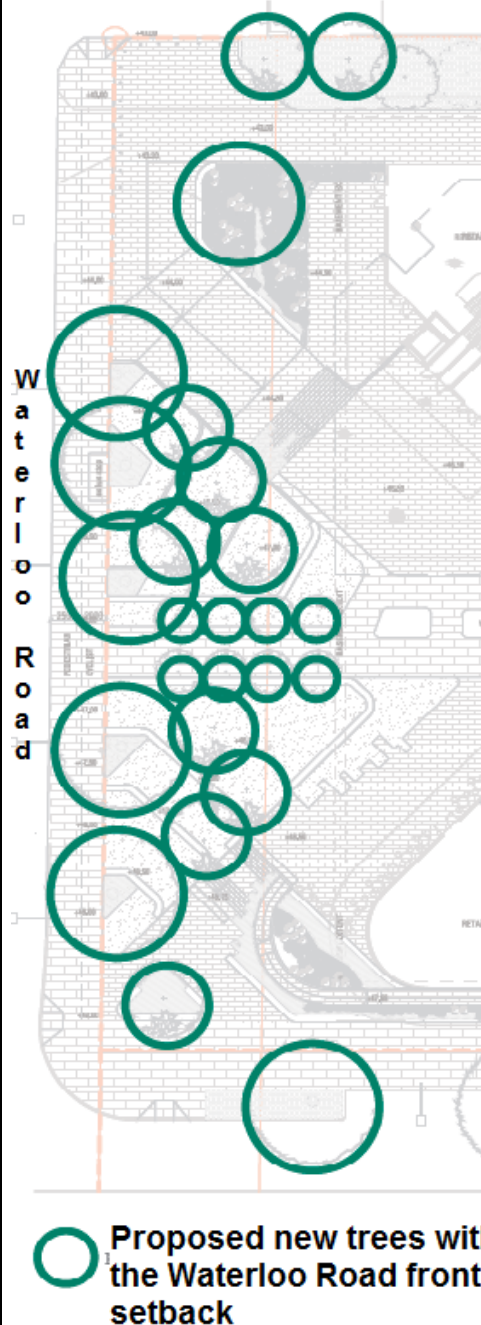
SEPP 65 – Design Quality of Residential Flat Buildings	
<p><b>Context and Neighbourhood Character</b></p> <p>Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes 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><u>UDRP Comments:</u></p> <p>Since the last meeting, the following amendments were made and partially address the previous UDRP recommendations:</p> <ul style="list-style-type: none"> <li>– Landscape design and levels for the plaza entry and Waterloo Road frontage.</li> <li>– Podium landscape design in relation to undercroft space and functionality.</li> <li>– Pedestrian link to shopping centre – activation, safety and sight lines</li> <li>– Podium level apartment in Building A</li> <li>– Building entry and lift lobby to Building C</li> </ul> <p>These modifications are addressed in the following report. It is noted that Council has adopted a VPA agreement which establishes an FSR of 3.3:1 for the site.</p> <p><u>Planner's Comments</u></p> <p>The site is located within the Macquarie University Station (Herring Road) Priority Precinct. It is envisaged that this precinct will be transformed into a vibrant, mixed use and transit orientated centre. The plans are consistent with the desired future character for the precinct as identified in the recent amendment to RLEP 2014.</p>
<p><b>Built Form and Scale</b></p> <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, 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><u>UDRP Comments:</u></p> <p>The coordination of the pedestrian link with the shopping centre is a positive advancement to the design. Previously the Panel recommended that the link be made inviting and desirable to use with clear sight lines and active retail uses along the link.</p> <p>The proponent has improved sight lines to the escalators and link from the street plaza.</p> <p>While the Panel understands the location of the shopping centre entry is fixed and results in a kinked bridge alignment, the concern with the proximity of the bridge to adjacent apartments remains. The angle of the bridge and the screening to the eastern side limits outlook from adjacent apartments A0101, A0102 and A0103. The impact on the amenity of these units is compounded by their south-eastern orientation, proximity to Tower A and adjacency to the pedestrian link. The Panel does not support these units for residential use and strongly recommends this space be allocated to communal uses. Previous comments suggested that creating wide and shallow larger apartments could improve the amenity. The current narrow frontage and number of apartments in this location is not supported.</p> <p>The proposal to activate Level 1 of Tower D adjacent the pedestrian link is supported. It is not yet clear how the vision for this space will be enabled and it is noted that the space</p>

SEPP 65 – Design Quality of Residential Flat Buildings	
	<p>will require careful curation to keep the space active, particularly when the link to the shopping centre is open.</p> <p>The street edge has been amended to enable a 1m road reservation widening. The space has been reconfigured to provide direct access and clear sight lines between the street and the plaza. Level changes are revised and DDA compliant. While level changes have impacted on existing trees, the proposal incorporates significant planting along Waterloo Road. (refer to Landscape Plan)</p> <p>Access to retail tenancies along the new street has been revised.</p> <p>The expressive structural supports to Tower A have been reviewed and amended.</p> <p>The Panel understands that Council does not support any height variation if it results in exceeding the height control. Variation in height (with no increase in floor space) between towers remains desirable from an urban design perspective.</p> <p><u>Planner's Comments</u></p> <p>The applicant has advised that the pedestrian link will:</p> <ul style="list-style-type: none"> <li>- match the internal finishes of the retail development in quality and appearance to generate a seamless transition from street level to the interior of the adjacent retail development;</li> <li>- have a glazed facade facing the adjacent retail development to provide a visual connection to the streetscape and access to daylight. A solid facade (propose textured metal cladding) is facing the proposed apartments to protect privacy and amenity of the adjacent units;</li> <li>- is well lit and of a high level of finishes;</li> <li>- have glazed sliding doors which will close off the retail centre behind the property boundary;</li> <li>- have a gate at the start of the ramp into the link to prevent the public entering the link after trading hours</li> <li>- Clearly illustrate opening hours of the adjacent centre at the bottom of the escalator at ground level to prevent people from entering the link after hours.</li> </ul> <p>The impact to the amenity of adjoining units has been addressed as Units 0102 and 0103 within Building A which previously faced the pedestrian link have been deleted with this area now used as a communal area (gym for residents) as recommended by the Panel and is considered satisfactory. Revision L of the Level 1 Floor Plan has amended as shown below.</p>

<p><b>SEPP 65 – Design Quality of Residential Flat Buildings</b></p>	<div data-bbox="668 210 1596 703" data-label="Image"> <p>The image is a detailed architectural site plan. A diagonal line labeled 'Pedestrian link' runs from the top left towards the center. To the right of this link, a red dashed line outlines a specific area. Within this area, a red 'X' marks a location. A red text label 'Units deleted with gym proposed' points to this area. The plan also shows various building footprints, including one labeled 'SPA' and another 'COMMUNAL TERRACE'. Other labels include 'EX SUBSTATION', 'GAS METER', 'CYCLE', 'AVENUE BELOW', and 'FUTURE LINK TO MACQUARIE CENTRE'. Elevation markers like 'RL 43.81', 'RL 42.00', and 'RL 42.90' are present. A north arrow is located in the top right corner.</p> </div> <p><b>Figure 11: Revised amendments to delete two apartments facing the pedestrian link and use the area for a gym.</b></p> <p>Whilst the proposal does not comply with the maximum floor space ratio allowed, the proposal is considered to achieve appropriate built form and scale. The development has provided articulated, angled tower forms with the buildings well-spaced apart, reducing the perception of scale and bulk. The applicant has taken on board the recommendations of the UDRP in terms of improving amenity to apartments and good design. Accordingly the proposal is considered appropriate in terms of bulk and scale.</p>
<p><b>Density</b></p> <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. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.</p>	<p><u>UDRP Comments:</u></p> <p>Complies with the VPA</p> <p><u>Planner's Comments</u></p> <p>The proposal will exceed the floor space by 5,663.4m<sup>2</sup> which equates to a non-compliance with the development standard by 11%. A Clause 4.6 request to justify the contravention of the FSR development standard was submitted and is discussed in full in Section 8.8 below. Despite the breach in the FSR control, the development still achieves a high level of amenity for residents as well as providing improved infrastructure to the locality.</p>

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<p><b>Sustainability</b></p> <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 soil zones for groundwater recharge and vegetation.</p>	<p><u>UDRP Comments:</u></p> <p>It is assumed that current sustainable best-practice design and materials and fittings selections will be adopted.</p> <p><u>Planner's Comments</u> A BASIX certificate has been submitted with the application which complies with the set targets. In addition a Deemed to Satisfy Assessment report (for Sections J1 Building Fabric and J2 Glazing of the Building Code of Australia) for the commercial/retail portion has been submitted. The report, prepared by Northrop, outlines the building fabric and glazing requirements. <b>Condition 75</b> has been imposed requiring compliance with the recommendations in the report.</p> <p>Solar access drawings demonstrate that 70% of the apartments will achieve at least 2 hours of solar access and 174 apartments out of 289 within the first nine floors will achieve cross ventilation in accordance with the requirements of the ADG.</p>
<p><b>Landscape</b></p> <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, coordinating 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, and respect for neighbours' amenity and provides for practical establishment and long term management.</p>	<p><u>UDRP Comments:</u></p> <p>As noted above, the Waterloo Road frontage has been amended to improve site access for pedestrians and will replace existing trees. The proposal results in significant tree loss. New tree planting should include large, established trees to take full advantage of the deep soil.</p> <p>The undercroft space beneath Tower A remains a concern. While the design of the space has been amended to include additional uses such as ping pong tables, the Panel remains concerned with the extent of undercroft space, its amenity and realistic use.</p> <p><u>Planner's Comments</u> 25 new trees are proposed along the Waterloo Road frontage and Council's Consultant Landscape Architect has no objections to the replacement trees along Waterloo Road frontage. Revised landscape plans have been submitted with the open space located and designed to maximise solar access to optimise usability, privacy and opportunities for social interaction. <b>Figure 12</b> demonstrates the proposed tree planting within the Waterloo Road frontage.</p> <p>Council's Consultant Landscape Architect has advised " <i>comments and concerns raised by the Panel have been addressed with regards to the open space arrangements to the Waterloo Road frontage, entries and under croft areas of Tower A. Based on the revised plans submitted, the design now includes a number of amusement/activity tables including table tennis and foosball. Additionally, the minor changes to the building layout have result in amended paved areas and raised landscape planters. This is considered acceptable and satisfactorily activates the existing space</i>".</p>

The northern end of the podium landscape contains the most activity zones and more than 50% of this area will receive more than 2 hours of direct sunlight. The design ensures access and circulation is fluid across the site with level changes with grading that utilises deep soil to create continuous vegetative cover.



**Figure 12: Proposed tree planting within the front setback along Waterloo Road.**

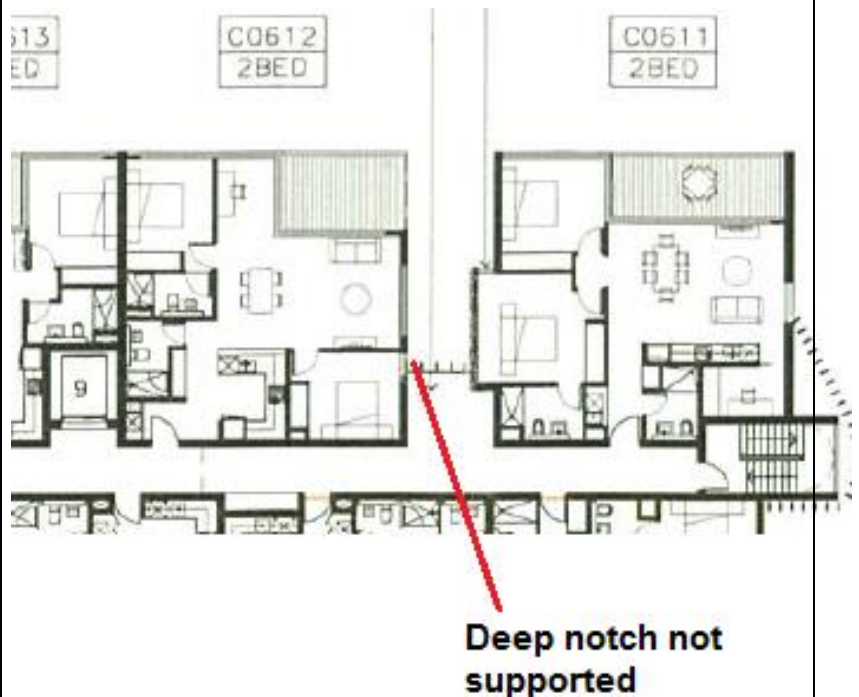


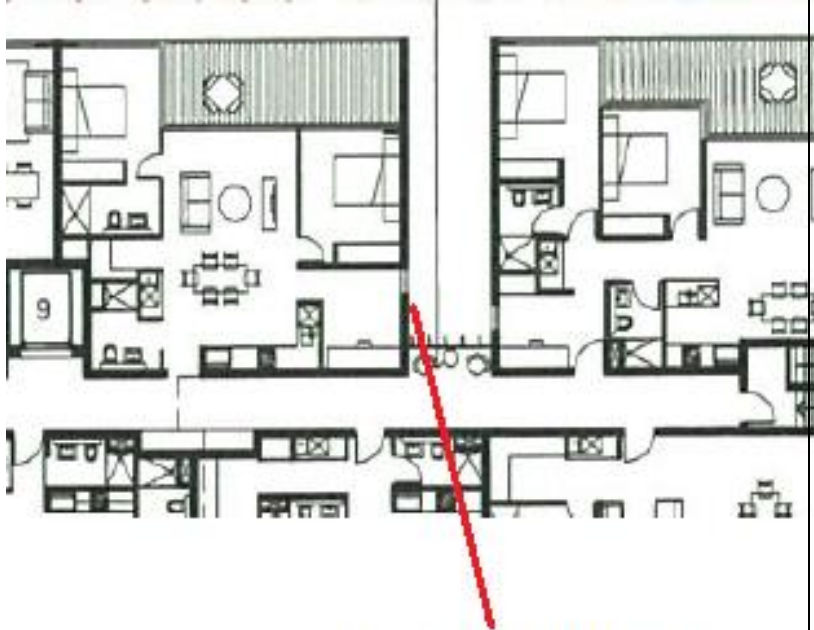
SEPP 65 – Design Quality of Residential Flat Buildings	
<p><b>Amenity</b></p> <p>Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well-being.</p> <p>Good amenity combines appropriate 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><u>UDRP Comments:</u></p> <p>The following amenity concerns remain:</p> <ul style="list-style-type: none"> <li>• Limited outlook and acoustic privacy impacts between the pedestrian link and adjacent residential apartments (Units A0101, A0102, A0103)</li> <li>• Acoustic impacts of AMP plant rooms on future residential uses must be resolved. It is understood that this is being addressed separately with Council and AMP.</li> <li>• Tower C is almost 100m long at lower levels with a very long corridor and a counter-intuitive split core. Visibility of lifts within the lobby from the street is poor. There is an opportunity to provide two clear entries and lobbies with separate cores. This would enable increased activation along New Street and the potential for lobbies to be colocated with daylight and outlook. The proponent has chosen to make one large lobby entry. The Panel reiterates the previous recommendation for ground level points of address, and two separate lift lobbies.</li> <li>• Deep notches to habitable room windows including bedrooms are not supported in the ADG. These appear to have been converted to studies in the latest modification. The Panel expects these spaces would not be configured in a manner that allows for their possible conversion to habitable rooms in the future.</li> </ul> <p><u>Planner's Comments</u></p> <p>Units A0101, A0102, A0103 have been revised to address the above concerns. A0101 will have no overlooking to/from the pedestrian link. A0102 has been revised to be a single aspect unit with no connection or overlooking from the link. Unit A0103 has been relocated to the northern end of the pool area, away from the pedestrian link. The area overlooking the pedestrian link is now a communal space – gym.</p> <p>Acoustic impacts have been resolved and noise <b>Conditions 66 to 68</b> have been imposed. This has been discussed in greater detail further in the report.</p> <p>The applicant does not support the splitting of ground level lobbies for Building C. The applicant has advised that the provision of a singular ground floor lobby for Building C is appropriate as it provides multiple lift opportunities and a consolidated entrance with clear legibility. A Lift Traffic Analysis Report by Schindler has been provided. The report states <i>“Residential lifts require a handling capacity (HC) of between 6% to 8% and a waiting time (WT) of between 40 seconds to 80 seconds. In all four buildings these parameters are met and exceeded.”</i></p> <p>Note: Handling Capacity (HC) refers to persons transported in an observed time period (average within 5 minutes) and the percentage of the population of the floors serviced by the lift. In Buildings A the HC and WT is 6.1% and 7.2 second and Buildings B, C &amp; D the HC is 7% and 64.2, 48.4 &amp; 58.9 seconds respectively. This is deemed acceptable.</p>

However, the design of the singular lobby core has been revised to provide greater visibility to the lifts (the stair well and corner of Unit C0001 shaved off to provide greater visibility). In addition, the corridor of Building C has:

- Several openings for natural light and ventilation
- Seating and ‘break out’ areas at various points within the corridor;
- Suitable lift traffic level of service and
- interior design strategies that can be utilised to provide varying ‘characters’ to the corridors, including various interior finishes, internal furniture to create points of interest, and landscaping. **Condition 1(b)** has been imposed requiring this.

With regard to the deep notches, the comment refers to Tower C. – the affected apartments have been amended with no deep notches to any bedroom. The room has been amended to a study area, the size or dimensions of which are not capable of being converted to habitable rooms such as bedrooms. Furthermore, **Condition 1(c)** has been imposed requiring all study areas to be provided with a built in desk and not to be used as a bedroom.

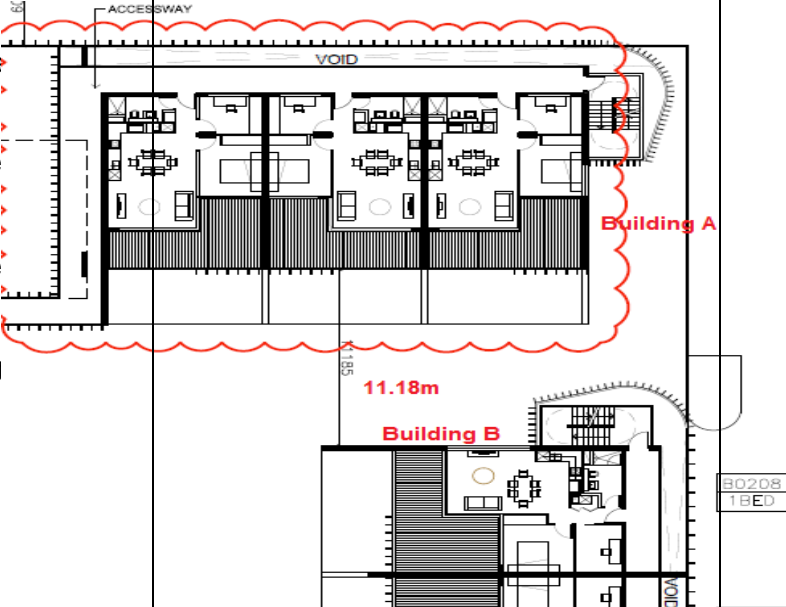


SEPP 65 – Design Quality of Residential Flat Buildings	
	 <p data-bbox="1027 842 1442 931"><b>Amended - internal changes, not bedroom</b></p> <p data-bbox="671 987 1442 1055"><b>Figure 13: Amendment to internal layout to change the bedroom to a study.</b></p>
<p data-bbox="213 1088 304 1122"><b>Safety</b></p> <p data-bbox="213 1140 644 1711">Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.</p>	<p data-bbox="671 1088 916 1122"><u>UDRP Comments:</u></p> <p data-bbox="671 1140 1469 1240">Better activation and surveillance along the pedestrian link is still warranted. With limited activation, lighting at night and security out of hours is required.</p> <p data-bbox="671 1258 1453 1326">Bicycle parking access is controlled by security doors at the plaza edge.</p> <p data-bbox="671 1386 948 1420"><u>Planner's Comments</u></p> <p data-bbox="671 1438 1469 1711">The applicant has advised that the detailed design of the link will include appropriate lighting and mechanical surveillance. The pedestrian link will be glazed on the southern façade ensuring visibility and surveillance. Further, the upper level of retail Tenancy 1 is provided adjacent to the link providing casual surveillance during operating hours. <b>Conditions 92 &amp; 175</b> have been imposed requiring appropriate light, surveillance and maintenance of the pedestrian link.</p>

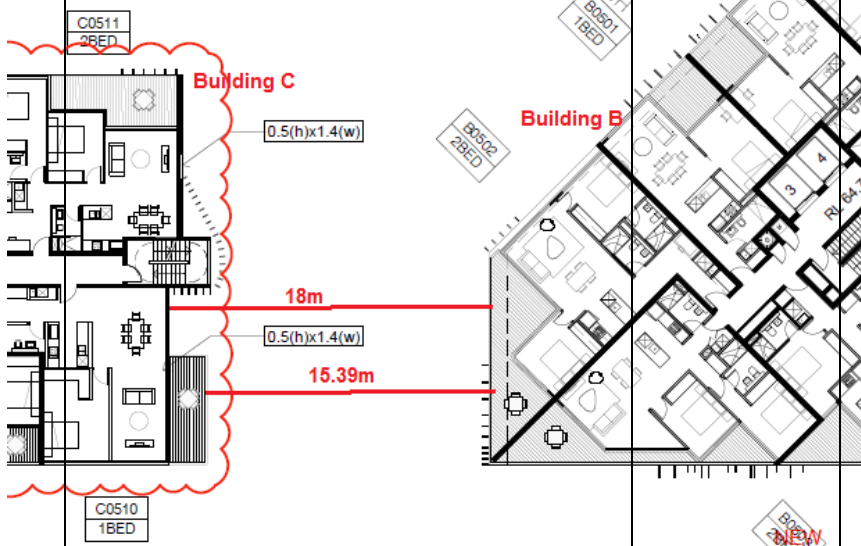
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<p><b>Housing Diversity and Social Interaction</b></p> <p>Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.</p> <p>Well-designed apartment developments respond to 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><u>UDRP Comments:</u></p> <p>3% key worker housing has been included in the VPA. The proponent stated these apartments will be 'salt and peppered' within the development.</p> <p>The Panel encourages the applicant to nominate specific key worker apartments with comparable amenity and an equivalent mix of apartment types as 'market' apartments.</p> <p><u>Planner's Comments</u></p> <p>The proponent has nominated 21 key workers units as part of the VPA offer. Council, on 13 December 2016 (via Council Meeting), endorsed an offer to enter into a VPA which included 21 key worker housing apartments).The location of the apartments is spread across Buildings B, C &amp; D with 10 x 1 bed, 10 x 2 bed and 1 x 3 bedrooms. The proposed 21 key workers units are acceptable to Council.</p>
<p><b>Aesthetics</b></p> <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><u>UDRP Comments:</u></p> <p>Refinement of façade design to clarify the built form expression between podium and towers is recommended. Details that add scale to lower levels would be beneficial on such a large project.</p> <p><u>Planner's Comments</u></p> <p>The applicant has advised that further façade detailing is proposed for the south eastern elevation of Building C to delineate more clearly the separate 'podium' and 'tower' elements of the building (noting further development to occur during detailed design phase). <b>Condition 1(d)</b> has been imposed requiring this.</p>

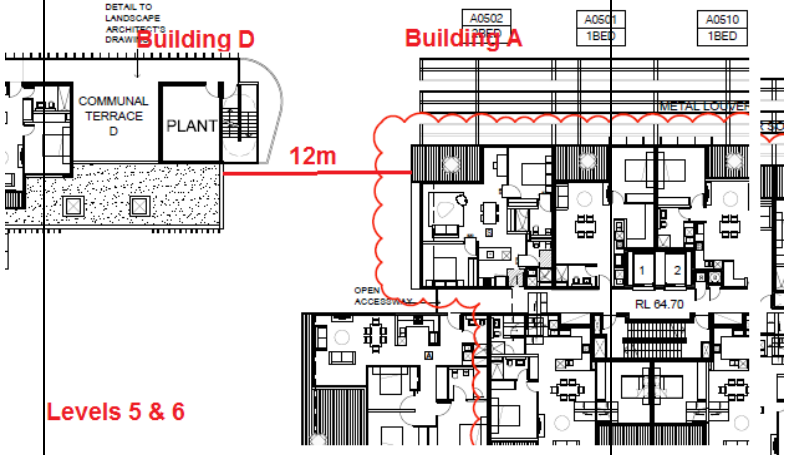
The SEPP requires consideration of the Apartment Design Guide which supports the 9 design quality principles by giving greater detail as to how those principles might be achieved. Assessment of the proposal against the matters in the ADG is provided below.

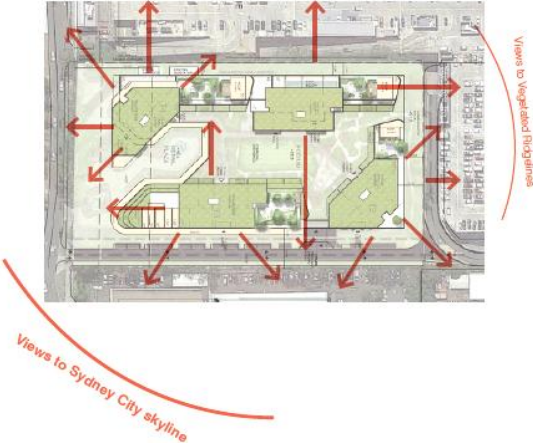
Part 2 Development the controls		
	Considerations	Consistent
<p><b>Building Depth</b></p> <p>Use a range of appropriate maximum apartment depths of 12-18m from glass line to glass line.</p>	<p><u>Building A</u> The building depth ranges from 15m to 21.5m</p> <p><u>Building B</u> The building ranges in depth from 17.5m to 25m</p> <p><u>Building C</u> 21.5m</p> <p><u>Building D</u> Ranges in depth from 12m to 25.</p>	<p>No – variation acceptable.</p>

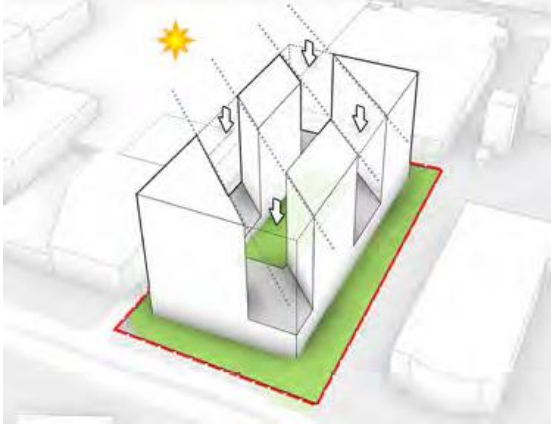
	<p>Notwithstanding the proposed depth variations above 18m, the proposal provides for acceptable levels of cross ventilation (60.6% of units on levels 1 to 9). 70.1% of the units will receive a minimum of 2 hours solar access in midwinter. In addition to the above, a high level of amenity is achieved throughout this project with larger than minimum size apartments, large communal open spaces and facilities such as a gym, swimming pool and roof top gardens.</p> <p>The UDRP raised no concerns and the proposed building depth is considered reasonable.</p>	
<p><b>Building Separation</b> Minimum separation distances for buildings are:</p> <p><i>Up to four storeys (approx 12m):</i></p> <ul style="list-style-type: none"> <li>- 12m between habitable rooms/balconies</li> <li>- 9m between habitable and non-habitable rooms</li> <li>- 6m between non-habitable rooms</li> </ul> <p><i>Five to eight storeys (approx. 25m):</i></p> <ul style="list-style-type: none"> <li>- 18m between habitable rooms/balconies</li> <li>- 12m between habitable and non-habitable rooms</li> <li>- 9m between non-habitable rooms</li> </ul> <p><i>Nine storeys and above (approx. 25m):</i></p> <ul style="list-style-type: none"> <li>- 24m between habitable rooms/balconies</li> <li>- 18m between habitable rooms</li> <li>- 12m between non-habitable rooms</li> </ul>	<p>The building separation is provided as follows:</p> <p><u>Between Buildings A &amp; B</u> Require: 1 to 4 storeys – 12m Proposed: 11.18m. Shortfall of 820mm. Levels 2 &amp; 3 of Building B, apts B0208 &amp; B0308 have dining/living room window facing the balconies opposite in Building A. The balconies in Building A have been provided with privacy screens to ensure that privacy between the apartments is maintained. However the privacy screen does not extend for the full length of the balcony therefore <b>Condition 1(e)</b> has been imposed requiring privacy louvers to be provided outside Building B living room windows..</p>  <p><b>Figure 14: Area of non compliance b/w Buildings A &amp; B.</b></p>	<p>No – variation acceptable.</p>

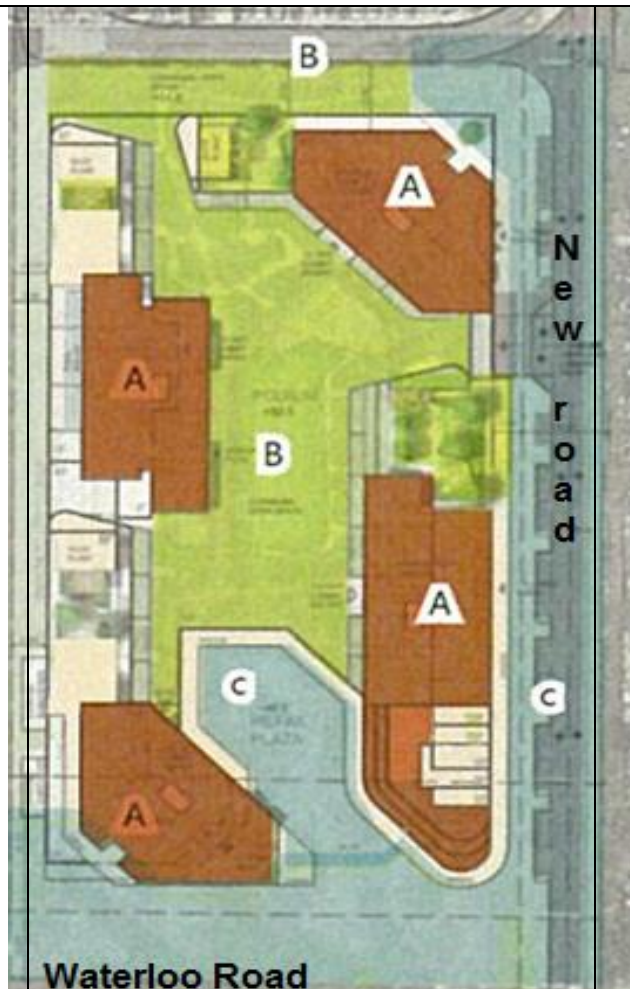


	<p>Levels 5 to 8 require: 18 m Proposed: 23.9m</p> <p>Levels 9 &amp; above require: 24m Proposed: 23.9m. Variation is 100mm which is very minor and considered acceptable.</p> <p><u>Between Buildings B &amp; C</u> Require: 1 to 4 storeys – 12m Proposed: 15.3m to 18m</p> <p>Levels 5 to 8: Require: 18m Proposed: Levels 5 &amp; 6 – 15.3m as shown below, Level 7 &amp; 8 – greater than 18m</p> 	<p>Yes.</p> <p>No - very minor variation</p> <p>Yes</p> <p>No – variation acceptable.</p>
	<p><b>Figure 15: Area of non compliances b/w Buildings B &amp; C.</b> On Level 5 the section where it is less than the required 18m privacy louvers are provided along the balcony edge. This is considered satisfactory however Level 6 has not been provided with any privacy louvers. <b>Condition 1(e)</b> has been imposed requiring this.</p> <p>Levels 9 &amp; above require: 24m Proposed: 30.24m</p> <p><u>Between Buildings C &amp; D</u> Require: 1 to 4 storeys – 12m Proposed: 15m</p> <p>Levels 5 to 8: Require: 18m Proposed: 18m and greater</p> <p>Levels 9 &amp; above require: 24m Proposed: 25m and greater</p> <p><u>Between Buildings D &amp; A</u></p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

	<p>Require: 1 to 4 storeys – 12m Proposed: N/a – podium levels with Buildings A &amp; D connected for the first 4 levels from the podium level. UDRP supported the buildings layout.</p> <p>Levels 5 to 8: Require: 18m for habitable to habitable and 12m for habitable and non-habitable rooms.</p> <p>Proposed: For levels 5 &amp; 6 – 12m for non habitable to habitable (see below). Levels 7- to 8 – 29.4m and greater.</p>	Yes
	 <p><b>Figure 16: Building separation for Levels 5 &amp; 6</b></p>	
	<p>Levels 9 &amp; above require: 24m Proposed: 29.4m and greater</p> <p><u>Between Buildings C &amp; D</u> Require: 1 to 4 storeys – 12m Proposed: 15m</p> <p>Levels 5 to 8: Require: 18m Proposed: 18m and greater</p> <p>Levels 9 &amp; above require: 24m Proposed: minimum 25m and greater</p> <p><u>Between Buildings A &amp; C</u> Require: 1 to 4 storeys – 12m Proposed: 25.8m</p> <p>Levels 5 to 8: Require: 18m Proposed: 25.8m</p> <p>Levels 9 &amp; above require: 24m Proposed: 25.8m</p> <p><u>External</u></p> <p>Between Macquarie Shopping Centre and subject Buildings A, B &amp; D. The separation required for non habitable to habitable is 9m for the 1<sup>st</sup> 4 levels, 12m</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

	<p>for levels 5 to 8 and 18m for level 9 and above. 12m between non-habitable rooms</p> <p>To the northeast (rear) and northwest of the site is Macquarie Shopping Centre. Immediately adjoining the northwest boundary are parking ramps for the centre and a row of trees just inside the subject site. Adjacent to the northeast boundary is a recently completed road that leads to the back of house facility for Macquarie Shopping Centre.</p> <p>Proposed setback: 6m setback from the north western boundary and 9m from the north eastern boundary. Therefore the proposal complies with half the minimum separation distance.</p>	Yes
<p><b>Front, Rear &amp; Side Setbacks</b> See discussion under the relevant Development Control Plan.</p>	<p>A 10m front setback is required along Waterloo Road. The proposal has provided more than 10m front setback and is considered satisfactory.</p> <p>The other setbacks as per building separation requirement</p>	Yes
<b>Part 3 Siting the development</b>	<b>Consideration</b>	<b>compliance</b>
<p><b>Design criteria/guidance</b></p> <p><b>3B Orientation</b> Building types and layouts respond to the streetscape and site while optimising solar access and minimising overshadowing of neighbouring properties in winter.</p>	<p>The proposed towers have been designed to:</p> <ul style="list-style-type: none"> <li>-Maximise distant views (Figure 17)</li> <li>-Increase solar access between the Buildings (Figure 18)</li> <li>-Lessen the impact of wind between the towers, resulting in better environmental conditions at the high level balconies as well as greater pedestrian comfort at the ground level</li> </ul>  <p><b>Figure 17 – views outlook</b></p>	Yes

	 <p><b>Figure 18 – solar access</b></p> <p>The Buildings have been designed to respond to the streetscape – Waterloo Road and to the new road, whilst optimising solar access within the development.</p>	
<p><b>3C Public domain interface</b> Transition between private &amp; public domain is achieved without compromising safety and security and amenity of the public domain is retained and enhanced.</p>	<p>A public plaza leading to the retail and communal terrace area is provided along Waterloo Road frontage. The plaza will activate and enhance the quality of the public domain.</p> <p>Street activation is also promoted along the corner of Waterloo Road and the new road with retail tenancies located at this corner and for part of the new road.</p> <p>Ground floor apartments are also proposed off the new road with separate entries to each of the apartments.</p> <p>The development has provided an appropriate transition between public and private domain.</p> <p>Separate street entries to Buildings B &amp; C are provided from the new street.</p> <p>Public escalators and podium lift are located at the south west corner, providing a connection to the adjacent Macquarie Shopping Centre.</p>	<p>Yes</p>
<p><b>3D Communal &amp; public open space</b> Provide communal open space to enhance amenity and opportunities for landscaping &amp; communal activities.</p> <p><b>Design Criteria</b> Provide communal open space with an area equal to 25% of site;</p> <p>Minimum 50% of usable rea of communal open space to receive direct sunlight for a minimum of 2 hours between 9 am and 3 pm on 21 June.</p>	<p>Communal Open space is proposed to be combined for all buildings in the form of a large landscaped podium area on Level 1. See <b>Figure 19</b>.</p> <p>4078m<sup>2</sup> communal space which is 24% of the site area. The proposed is short of the required communal open space by 212m<sup>2</sup>, which is relatively minor in comparison to the size of the development. A communal roof space is provided on each the buildings and other communal facilities such as a gym and swimming pool have been provided. These facilities will provide enhanced amenities to future residents.</p>	<p>No – variation acceptable.</p>



- A. Private
- B. Communal
- C. Public

**Figure 19 –communal open space area**

- Direct solar access is provided to over 50% of the Level 1 (podium) communal open space for 3.0 hours.
- Direct solar access is provided to over 50% of the ground floor public open space for 4.0 hours.
- Direct solar access is provided to over 50% of the Buildings Levels 5/7 communal open space terraces for 4.5 hours.

### 3E Deep Soil Zone

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.

Proposal complies with deep soil area for the entire site, a total of 2543m<sup>2</sup> of deep soil zone has been provided, equating to 15% of the site area.

Yes



<p><b>Design criteria</b> Deep soil zones are to be provided equal to 7% of the site area and with min dimension of 3m – 6m.</p>	<p>The deep soil area will have minimum dimension of 3 to 6m.</p>													
<p><b>3F Visual Privacy</b> Building separation distances to be shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy.</p> <p><b>Design Criteria</b> Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:</p> <table border="1" data-bbox="204 703 703 1048"> <thead> <tr> <th>Building Height</th><th>Habitable rooms &amp; balconies</th><th>Non habitable rooms</th></tr> </thead> <tbody> <tr> <td>Up to 12m(4 storeys)</td><td>6m</td><td>3m</td></tr> <tr> <td>Up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr> <tr> <td>Over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr> </tbody> </table> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>Separation distances between buildings on the same site should combined required buildings building separations depending on the type of room (see Figure 3F.2)</li> </ul>	Building Height	Habitable rooms & balconies	Non habitable rooms	Up to 12m(4 storeys)	6m	3m	Up to 25m (5-8 storeys)	9m	4.5m	Over 25m (9+ storeys)	12m	6m	<p>The proposal provides appropriate building separation distances to facilitate visual privacy between the buildings.</p> <p>The UDRP has reviewed the proposed building separation and has raised no objections with regard to overlooking concerns.</p>	<p>Yes</p>
Building Height	Habitable rooms & balconies	Non habitable rooms												
Up to 12m(4 storeys)	6m	3m												
Up to 25m (5-8 storeys)	9m	4.5m												
Over 25m (9+ storeys)	12m	6m												
<p><b>3G Pedestrian Access &amp; entries</b> Pedestrian Access, entries and pathways are accessible and easy to identify.</p> <p>Large sites provide pedestrian links for access to streets and connection to destinations.</p>	<p>Buildings B &amp; C have their own building entry on the ground floor from the new road plus a building entrance from the communal podium terrace area. Building A's entry is from the communal terrace podium level. Building D entry is from the ground floor level along Waterloo Road. These entries have been located to provide a street address either via the street or Level 1 entry through podium link. All entries can be accessible from the public domain. Signage directing the visitors to their destination will be provided.</p> <p>A pedestrian link connecting from the public plaza to the Macquarie Shopping Centre is proposed through the site. As part of the Macquarie Park DCP, a pedestrian link from the site to the adjoining shopping centre is required to be provided – this has been provided at</p>	<p>Yes</p>												

	<p>the western section of the site on Level 1, in consultation with Macquarie Shopping Centre.</p> <p>Note: This link will not be completed until Macquarie Shopping Centre achieves development consent for major retail works as part of their Concept Approval.</p>	
<p><b>3H Vehicle Access.</b></p> <p>Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.</p>	<p>Vehicle access to the basement car park is via the new road. Council's Traffic Engineer and Senior Coordinator Development Engineering Services have raised no objections to the proposed vehicle access.</p>	Yes
<p><b>3J Parking Provisions.</b></p> <p><b>Car parking:</b></p> <p>For development in the following locations:</p> <ul style="list-style-type: none"> <li>• on sites that are within 800 metres of a railway station; or</li> <li>• within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre,</li> </ul> <p>The minimum parking for residents and visitors to be as per RMS Guide to Traffic Generating Developments, or Council's car parking requirement, whichever is less.</p> <p>RMS Guide states: The recommended minimum number of off-street visitor parking spaces is one space for every 5 to 7 dwellings. Councils may wish to reduce this requirement for buildings located in close proximity to public transport, or where short term unit leasing is expected.</p>	<p>The RMS and Council's DCP residents' car parking rate are the same except for the visitors' car parking rates. The RMS visitors rate is one per/ 5 unit whilst Council's DCP is 1 per/ 10 which is a lesser therefore Council's DCP rates applies.</p> <p>See discussion under Part 4.5 – Macquarie Park Corridor.</p> <p>The proposal provides 689 car spaces which is one over the maximum allowed which is: 587 residents, 68 visitors, 21 commercial and 12 car spare = 688 spaces. <b>Condition 209</b> has been imposed requiring a maximum of 688 car spaces being provided and their allocation.</p>	Yes
<p><b>Bicycle Parking:</b></p> <p>Provide adequate motorbike, scooter and bicycle parking space (undercover).</p>	<p>Require 10% of the required parking spaces (68 spaces).</p> <p>It is proposed to provide 60 spaces within the ground floor parking area and 104 motorcycle spaces across 3 levels. The proposal is short of 8 bicycle spaces however the proposal provides for 104 motorcycle spaces, which is more than sufficient therefore it is possible to convert some of the motorcycles to bicycle parking (additional 8 bicycle spaces). <b>Conditions 1(a) &amp; 209</b> have been imposed requiring allocation of 68 bicycle parking spaces.</p>	No – can condition to comply.

**Basement Design for parking:**

Basement car park not to exceed 1m above ground (use stepped/ split level).

Natural ventilation to be provided for basement car parks. Any ventilation grills/ screening device to be integrated into the façade and landscape design.

Four levels of car parking are proposed with 2 levels below ground (Basement 1 & 2) and two levels above ground. The two levels above ground – the ground floor and mezzanine levels will contain 210 car parking spaces plus motorcycle and bicycle parking.

Adjoining the site to the north and west is the Macquarie Shopping Centre which has car parking levels at approximately the same level as the proposed above car park. Therefore from a design aspect, the proposed above ground car park is in response to the existing adjacent car parking area of the shopping centre. The above ground car park area will not be visible from Waterloo Road or the new road as the car parking is sleeved behind the shop street front.

Along the northern and western elevation where it is adjacent to the Macquarie Shopping centre car parking levels, metal louvres are proposed to minimise the visual impact. This will help reduce the visual impact to/from the adjoining carpark.

No – variation acceptable.



Metal louvres to screen the car park from the Macquarie Shopping Centre

**Figure 20 Louvres to screen the car park from the adjacent Macquarie Shopping Centre.**

The Urban Design Review Panel has not raised any objections with regard to the above ground car parking levels.

Ventilation of the basement has not been shown on the plans. **Condition 111** has been imposed.





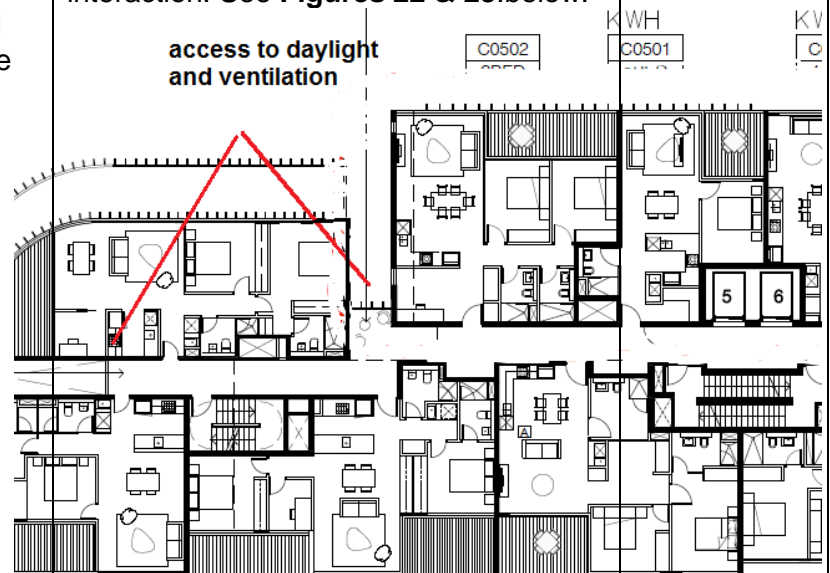
<b>4C Ceiling Heights</b> Ceiling height achieves sufficient natural ventilation and daylight access. The following is required as a minimum:	A minimum floor to ceiling height of 2.7m is proposed in all residential levels to habitable and non-habitable rooms respectively.	Yes												
<table><tr><td colspan="2">Min ceiling height for apartment &amp; mixed use buildings</td></tr><tr><td>Habitable rooms</td><td>2.7m (3.1m floor to floor)</td></tr><tr><td>Non Habitable</td><td>2.4m</td></tr><tr><td>2 storey apts</td><td>2.7m for main living area , 2.4m for 2<sup>nd</sup> floor</td></tr><tr><td>Attic spaces</td><td>1.8m at edge of room</td></tr><tr><td>Mixed used zone</td><td>3.3m for ground &amp; 1<sup>st</sup> floor to promote future flexibility of use.</td></tr></table>	Min ceiling height for apartment & mixed use buildings		Habitable rooms	2.7m (3.1m floor to floor)	Non Habitable	2.4m	2 storey apts	2.7m for main living area , 2.4m for 2 <sup>nd</sup> floor	Attic spaces	1.8m at edge of room	Mixed used zone	3.3m for ground & 1 <sup>st</sup> floor to promote future flexibility of use.	Ground floor apartments will have the minimum of 3.3m from finished floor to finished ceiling height.	
Min ceiling height for apartment & mixed use buildings														
Habitable rooms	2.7m (3.1m floor to floor)													
Non Habitable	2.4m													
2 storey apts	2.7m for main living area , 2.4m for 2 <sup>nd</sup> floor													
Attic spaces	1.8m at edge of room													
Mixed used zone	3.3m for ground & 1 <sup>st</sup> floor to promote future flexibility of use.													
	The ground floor retail tenancy has a minimum floor to ceiling height of 4m.													
<b>4D Apartment size and layout</b> Apartments are required to have the following minimum internal areas with one bathroom: <ul style="list-style-type: none"><li>– Studio = 35m<sup>2</sup>;</li><li>– 1 bedroom = 50m<sup>2</sup>;</li><li>– 2 bedroom = 70m<sup>2</sup>;</li><li>– 3 bedroom = 90m<sup>2</sup>;</li><li>– 4 bedroom = 102m<sup>2</sup>.</li></ul> <u>Note:</u> Additional bathrooms increase the minimum internal area by 5m <sup>2</sup> ;	The range of apartment sizes is as follows: 1 Bed = 50 ~ 65m <sup>2</sup> 2 Bed 1 Bath = 72 ~ 79m <sup>2</sup> 2 Bed 2 Bath = 75 ~ 95m <sup>2</sup> 3 Bed 1 & 2 Bath= 95 ~ 138m <sup>2</sup> 4 Bed 2 & 3 Bath = 139 – 159m <sup>2</sup>	Yes												
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.	Window and door openings have been sized to allow the ADG minimum recommendations for daylight to be achieved.	Yes												
	All habitable rooms have direct access to a window opening that achieves a minimum of 10% of the room area. No borrowed daylight and air is proposed.													
Habitable room depths are limited to a maximum of 2.5 x the ceiling height. In open plan layouts – habitable room (where the living, dining and kitchen are combined) be maximum depth of 8m from a window.	Require 2.5 x 2.7 = 6.7m. Bedroom depths are less than 6.7m.	Yes												
	The apartments achieve the 8m maximum room depth for open plan layouts.													
Master bedrooms - minimum area of 10m <sup>2</sup> (excluding wardrobe space).	The master bedrooms are 10m <sup>2</sup> or over.	Yes												
Bedroom - minimum dimension of 3m (excluding wardrobe space)	All bedrooms have minimum dimension of 3m.	Yes												
Living rooms or combined living/dining rooms have a minimum width of: <ul style="list-style-type: none"><li>• 3.6m for studio and 1 bedroom apartments;</li><li>• 4m for 2 and 3 bedroom apartments.</li></ul>	Minimum 4m width.	Yes												

<p>The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.</p>	<p>The width of cross-through apartments is a minimum of 4m.</p>	<p>Yes</p>															
<p><b>4E Private Open Space and balconies</b>          Apartments must provide appropriately sized private open space and balconies to enhance residential amenity.</p> <p><b><u>Design criteria</u></b>          1. All apartments are required to have primary balconies as follows:</p> <table border="1" data-bbox="204 651 692 815"> <thead> <tr> <th>Dwelling type</th><th>Minimum area</th><th>Min. depth</th></tr> </thead> <tbody> <tr> <td>Studio apartments</td><td>4m<sup>2</sup></td><td>N/A</td></tr> <tr> <td>1 bedroom</td><td>8m<sup>2</sup></td><td>2m</td></tr> <tr> <td>2 bedroom</td><td>10m<sup>2</sup></td><td>2m</td></tr> <tr> <td>3+ bedroom</td><td>12m<sup>2</sup></td><td>2.4m</td></tr> </tbody> </table>	Dwelling type	Minimum area	Min. depth	Studio apartments	4m <sup>2</sup>	N/A	1 bedroom	8m <sup>2</sup>	2m	2 bedroom	10m <sup>2</sup>	2m	3+ bedroom	12m <sup>2</sup>	2.4m	<p>All of the balconies comply with minimum size requirements.</p> <p>All balconies achieve the recommended widths of 2m for 1 and 2 bedroom apartments and 2.4m for 3 bedroom apartments.</p>	<p>Yes</p>
Dwelling type	Minimum area	Min. depth															
Studio apartments	4m <sup>2</sup>	N/A															
1 bedroom	8m <sup>2</sup>	2m															
2 bedroom	10m <sup>2</sup>	2m															
3+ bedroom	12m <sup>2</sup>	2.4m															
<p>2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m<sup>2</sup> and a minimum depth of 3m.</p>	<p>The apartments on the podium level have been provided with private open area that is equal to or greater than the required 15m<sup>2</sup> and depth of 3m. However the three ground floor 2 bedroom apartments, whilst having minimum area greater than 15m<sup>2</sup> (22.5m<sup>2</sup>) will only have a minimum depth of 2.5m. This variation can be supported as it is only for three apartments and the size of the terrace area is sufficient to be a usable area.</p>	<p>Yes for the podium apartments.</p> <p>No for the ground floor apartments however variation is considered acceptable.</p>															
<p><b>4F Common circulation and spaces.</b>  <b><u>Design criteria</u></b>          1. The maximum number of apartments off a circulation core on a single level is 8.          2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.</p> <p>Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level.</p> <p><b><u>Note:</u></b>          Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:</p>	<p><b><u>Circulation Core:</u></b>  <b><u>Building A:</u></b>          Levels 2 &amp; 3 – 6 &amp; 7 apts - complies          Levels 4 &amp; 5 – 12 &amp; 10 apts – complies          Levels 6 to 19 – 9 apts – complies          Level 20 -5 apts – complies</p> <p><b><u>Building B:</u></b>          Levels 2 to 4 – 8 apts – complies          Levels 1 &amp; 5 – 7 apts – complies          Levels 6 to 20 -8 apts – complies.</p> <p><b><u>Building C</u></b>          Levels 1 to 6 – 14 apt – no          Levels 7 to 19 – 9 apts – complies          Level 20 – 4 apts – complies</p> <p><b><u>Building D</u></b>          Level 3 – 10 apts – complies          Level 4 – 9 apts – complies          Level 5 – 7 apts – complies          Levels 6 to 20 – 8 apts – complies.</p>	<p>Yes</p> <p>Yes</p> <p>No – variation acceptable.</p> <p>Yes</p>															

- sunlight and natural cross ventilation in apartments
- access to ample daylight and natural ventilation in common circulation spaces
- common areas for seating and gathering
- generous corridors with greater than minimum ceiling heights
- other innovative design solutions that provide high levels of amenity
- Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level.

For Buildings A & C natural daylight and ventilation are introduced to the common circulation spaces to provide a high level of amenity as per the ADG. In Building C, there are 3 areas along the corridor where there is access to daylight and ventilation and two seating areas. For Building A there is access to daylight and ventilation at end of the corridor and the corridor is articulated to break up the length. In addition **Condition 1(b)** has been imposed for interior design strategies to provide interests and social interaction. See **Figures 22 & 23**.below.

No – variation acceptable.



**Figure 22: Building C – daylight and ventilation access along the corridor.**



**Figure 23: Building A – articulated corridor to break up the length.**

The maximum number of apartments sharing a single lift is as follows

Building A:

172 apartments between 2 lifts = 86 per lift.

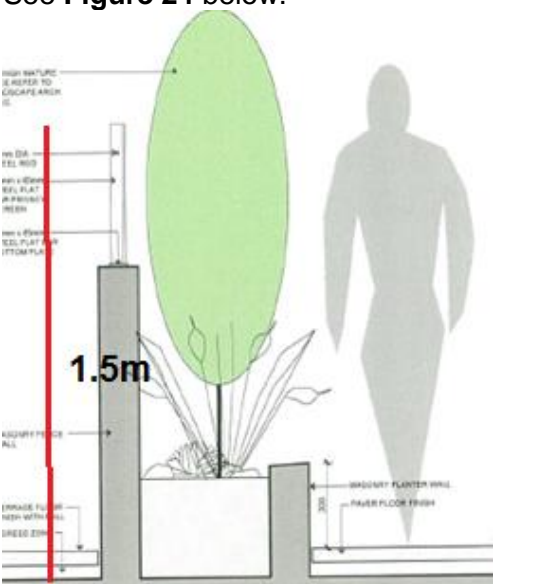
Building B:


158 apartments between 2 lifts = 79 per

<p>Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled.</p>	<p>lift. <u>Building C:</u> 208 apartments between 3 lifts = 69 per lift. <u>Building D:</u> 142 apartments between 2 lifts = 71 per lift.</p> <p>A Lift Assessment Report prepared by Schindler has been submitted with the DA which states <i>residential lifts requires a handling capacity of between 6% to 8% and a waiting time of between 40 seconds to 80 seconds. In all four buildings these parameters are met and exceeded. Long wait time will only occur during the peak periods of the building, early morning exit times and afternoon arrival times. See full discussion on page 24 of the report with regard to amenity.</i></p> <p>Accordingly, the analysis concludes that the proposed number of lifts will result in a high quality of services suited to owner occupiers and luxury type developments.</p> <p>No living room or bedroom windows open directly onto the common circulation area.</p>	<p>No – variation acceptable.</p>										
<p>Common circulation spaces promote safety and provide for social interaction between residents.</p>	<p>Lobbies are provided at street level and at the podium level with clear sight line. The entries at podium level provide central meeting points for waiting/meeting area for visitors and residents.</p>	<p>Yes</p>										
<p><b>4G Storage</b> Adequate, well designed storage is to be provided for each apartment. <b>Design criteria</b> 1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is to be provided:</p> <table><tr><th>Dwelling type</th><th>Storage size volume</th></tr><tr><td>Studio</td><td>4m<sup>3</sup></td></tr><tr><td>1 bedroom apt</td><td>6m<sup>3</sup></td></tr><tr><td>2 bedroom apt</td><td>8m<sup>3</sup></td></tr><tr><td>3 + bedroom apt</td><td>10m<sup>3</sup></td></tr></table> <p>At least 50% of the required storage is to be located within the apartment.</p>	Dwelling type	Storage size volume	Studio	4m <sup>3</sup>	1 bedroom apt	6m <sup>3</sup>	2 bedroom apt	8m <sup>3</sup>	3 + bedroom apt	10m <sup>3</sup>	<p>The architectural plans are unclear as to where the required storage areas are in each apartment however the submitted compliance table states that each apartment will meet the minimum requirements for storage as outlined and that 50% of the required storage will be located within the apartment.</p> <p><b>Condition 87</b> has been imposed requiring compliance with the requirement in the ADG.</p>	<p>Yes – to be conditioned.</p>
Dwelling type	Storage size volume											
Studio	4m <sup>3</sup>											
1 bedroom apt	6m <sup>3</sup>											
2 bedroom apt	8m <sup>3</sup>											
3 + bedroom apt	10m <sup>3</sup>											



<p><b>4H Acoustic privacy</b></p> <p>Noise transfer is minimised through the siting of buildings, building layout, and acoustic treatments.</p> <p>Plant rooms, services and communal open space and the like to be located at least 3m away from the bedrooms.</p> <p>Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.</p>	<p>Retail and residential zones are kept separate with retail areas interacting with the ground floor and public domain along Waterloo Road and the corner of the new road.</p> <p>In addition, There are no apartments located above the entry to the carpark driveway.</p> <p>To minimise the impact of noise from Macquarie Shopping Centre carpark along the north &amp; western boundaries, landscape design has been used to reduce the perception of noise and to act as a filter for air pollution generated by traffic. Application of privacy screens is also proposed to the north and western elevations to the lower levels of the buildings to minimise the impact of noise and headlights caused by the neighbouring carpark.</p> <p>Loading and waste collection is located in the basement away from the residences.</p> <p>The Acoustic Assessment Report prepared by EMM Consulting submitted with the application states that the proposed site is capable of complying with all relevant acoustic criteria through means of standard acoustic treatment and management. The acoustic treatment and management method as suggested in this report include:</p> <ul style="list-style-type: none"> <li>• Glazing, (windows and doors)</li> <li>• Mechanical Ventilation, and</li> <li>• Construction management.</li> </ul> <p>A Peer Review of the Acoustic Report by GHD P/L has reviewed the EMM report and has provided the recommended conditions for noise levels for internal and external areas. See <b>Conditions 66 &amp; 67.</b></p>	<p>Yes</p>
<p><b>4K Apartment mix</b></p> <p>A range of apartment types with different number of bedrooms (1bed, 2 bed, 3 bed etc) should be provided.</p>	<p>A mix of 1, 2, 3 &amp; 4 bedroom apartments have been provided:-</p> <p>1 bedroom – 177 (26%)</p> <p>2 bedrooms – 447 (65.7%)</p> <p>3 bedrooms – 49 (7.2%) &amp;</p> <p>4 bedrooms – 7 (1%)</p> <p>This unit mix provides a range of apartment types spread throughout the buildings.</p>	<p>Yes</p>
<p><b>4L Ground floor apartments</b></p> <p>Building facades to provide visual interest, respect the character of the local area and deliver amenity and</p>	<p>3 ground floor apartments are proposed in Tower C with direct street access to the new road. Private entries and courtyard access is provided from the</p>	<p>Yes</p>

<p>safety for residents.</p>	<p>proposed new road/street, The front courtyard area will be suitably screened by a 1.5m high fence to provide privacy but still allowing for casual surveillance. See <b>Figure 24</b> below.</p>  <p><b>Figure 24: Front fence along the new road.</b></p>	
<p>Building functions are expressed by the façade.</p>	<p>Buildings D &amp; C provide for a mixed use with retail on the ground floor facing Waterloo Road and the corner of the new road. The design and size of the tenancy reflects the proposed use with openings to the public plaza area and wrapping around the southern corner of the site, activating the streetscape. The UDRP considers the proposal to be compatible with the desired future character of the area.</p>	<p>Yes</p>
<p><b>4N Roof design</b> Roof treatments are integrated into the building design and positively respond to the street.</p>	<p>Roof elements are integrated into the building design, including roof gardens.</p>	<p>Yes</p>
<p>Opportunities to use roof space for residential accommodation and open space are maximised.</p>	<p>Private roof garden/terrace areas have been integrated into each of the buildings on Level 5 and on the penthouse level of each of the buildings.</p>	<p>Yes</p>
<p>Roof design incorporates sustainability features.</p>	<p>The provision of two storey penthouse apartment allows for better natural ventilation and sunlight to these apartments.</p>	<p>Yes</p>
<p><b>4O Landscape design</b> Landscape design contributes to the streetscape and amenity. Landscape design is viable and sustainable</p>	<p>The development provides for landscaping throughout the site. Detailed landscape plans by Arcadia have been submitted with the application which covers the viability of the landscape design as part of the application. Council's Consultant Landscape Architect has reviewed the plan and has advised that the plan is of a quality landscape design with appropriate species.</p>	<p>Yes</p>

	 <p><b>Figure 25: Overview of the landscaping for the site.</b></p>	
<p><b>4P Planting on structures</b> Appropriate soil profiles are provided.</p>	<p>The proposed development includes deep soil planting at ground level and mounded planting at the communal podium level and on the roof top terrace.</p> <p>To ensure that the soil provision complies with the recommended soil profiles, a condition on the consent has been imposed requiring compliance with the relevant soil depth. See <b>Condition 108.</b></p>	Yes
<p><b>4Q Universal design</b></p> <p>Development achieves a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level of universal design features. Universal design features are included in apartment design to promote flexible housing for all community members. A variety of apartments with adaptable designs are to be provided.</p>	<p>The applicant has advised that 136 apartments (inclusive of the adaptable apartments) meet the silver level of the Livable Housing Guidelines.</p> <p>The proposed adaptable units meet the minimum RDCP requirement of 10% of the total units. The 68 (10% of the total) adaptable apartments comprise 41 x 2 bed &amp; 27x 3 bed.</p> <p>A variety of apartment types with adaptable design have been provided within the development.</p>	Yes
<p><b>4R Adaptive reuse</b> New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place. Adapted buildings provide residential amenity while not precluding future adaptive reuse.</p>	<p>New building.</p>	N/A
<p><b>4S Mixed Use</b> Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.</p>	<p>Active uses are proposed along the ground floor frontage to Waterloo Road and the corner of Waterloo Road and the new road to promote activation of the ground floor. Also the ground floor apartments of Tower C facing the new road have separate entrances which integrate with the street frontage.</p>	Yes
<p><b>4T Awnings and signage</b> Awnings are well located and complement and integrate with the building design.</p>	<p>Awnings and covered areas are provided over building entries for building address and public domain amenity.</p>	Yes

<b>4U Energy efficiency</b> Development incorporates passive environmental design measures – solar design, natural ventilation etc.	Complies with BASIX. <b>Condition 6</b> imposed with regard to the commercial tenancies.	Yes
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The development is considered to be satisfactory in terms of the Apartment Design Guide.

## 8.8 Ryde Local Environmental Plan 2014

The following is an assessment of the proposed development against the applicable provisions from the Ryde Local Environmental Plan 2014.

### Clause 2.2 - Zoning

The site is zoned B4 Mixed Use under the provisions of the RLEP 2014. The development is permitted in this zoning.

### Clause 2.3 – Zone Objectives

The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone. The objectives for the B4 Mixed Use are as follows:

- To provide a mixture of compatible uses.
- To integrate suitable business, office, residential, retail and other development in accessible location so as to maximise public transport patronage and encourage walking and cycling.
- To ensure employment and educational activities within the Macquarie University campus are integrated with other businesses and activities.
- To promote strong links between Macquarie University and research institutions and businesses within the Macquarie Park corridor.

The development complies with the above objectives. It will be consistent with the desired future character for the precinct by introducing mixed use buildings consisting of residential and retail uses. The subject site is located within walking distance of bus services, retail and commercial services and is therefore considered to be a suitable location for this development. All of these uses are permitted in the B4 zoning and will contribute to the development being a genuine mixed use development.

The massing and scale of the development has been assessed by the UDRP as appropriate in terms of the future built environment. The built form contributes to the character and public domain of the area. Public transport patronage, walking and cycling will be encouraged through the provision of residential development.

### Clause 4.3 Height

The height control map show the maximum height allowed is 65m. This is demonstrated in the extract from RLEP 2014 (**Figure 25** below). The four towers are all within the height limit.

### Clause 4.4 Floor Space Ratio

The floor space ratio of a building is not to exceed the maximum floor space ratio as specified on the Floor Space Ratio Map. The map identifies the site as having a floor space ratio of 3:1. This is demonstrated from the following extract from RLEP 2014 (**Figure 27** below).

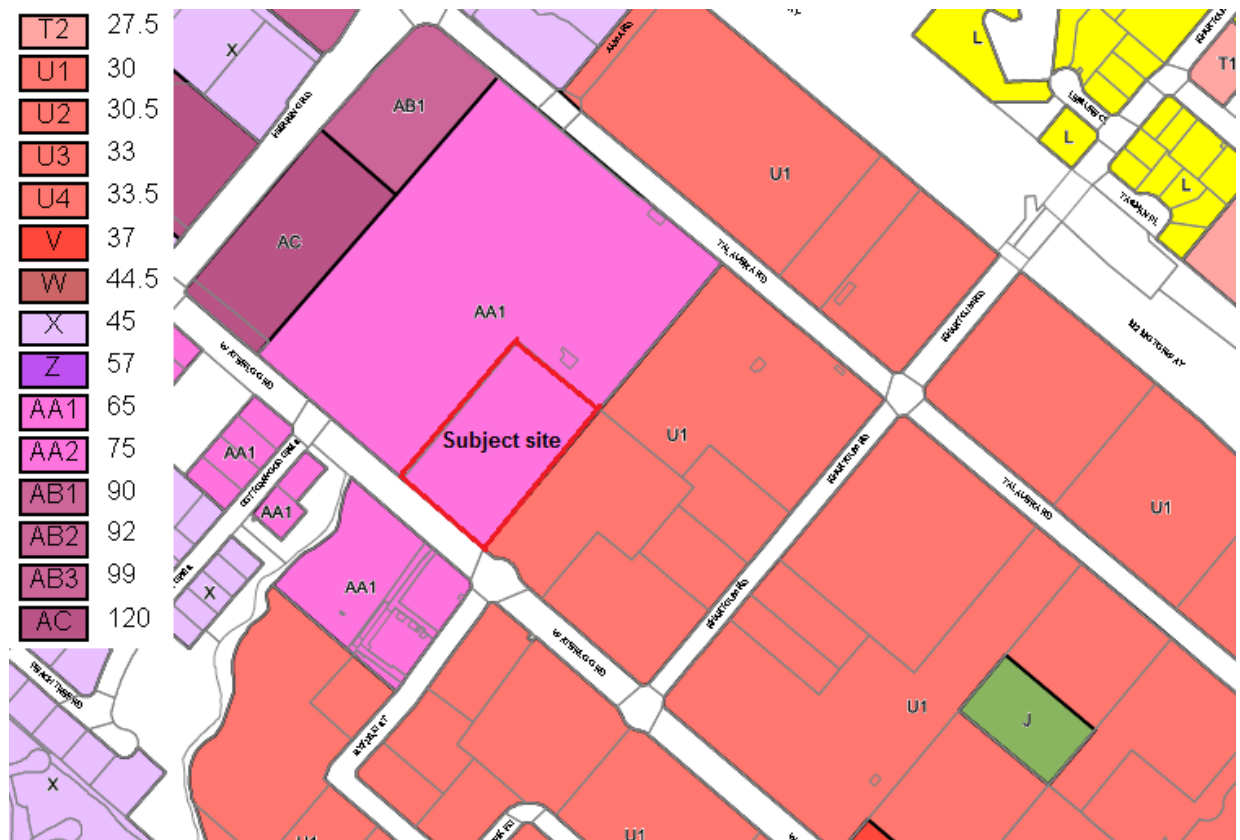


Figure 26: Extract from the Building Heights Map. The height control for the site is 65m.

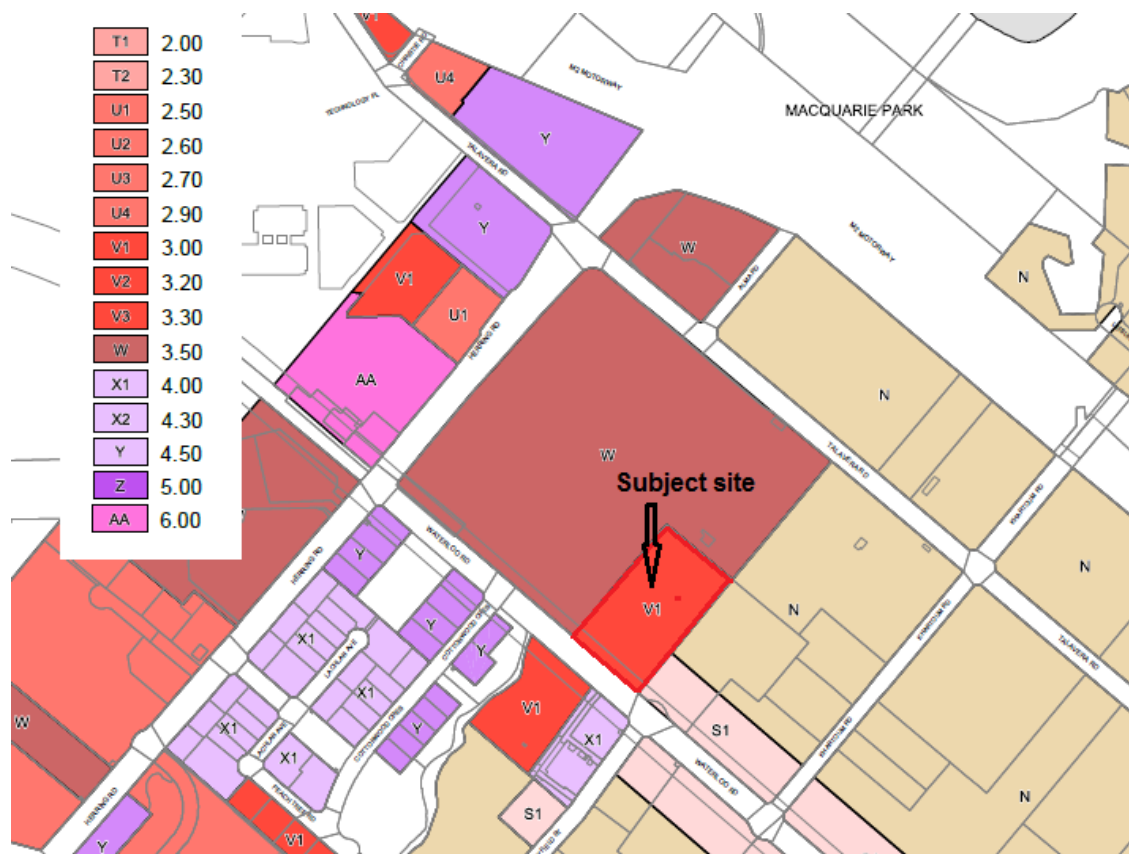


Figure 27: Extract from Floor Space Ratio Map. The site has a maximum floor space of 3.3:1.



The maximum FSR allowed is 3:1 (51,483m<sup>2</sup>) however the proposal will have a FSR of 3.3:1 – 57,146.4m<sup>2</sup> which is over the maximum by 5,663.4m<sup>2</sup>. The variation equates to a non-compliance with the development standard by 11%.

Clause 4.6 of RLEP 2014 allows some degree of flexibility in certain standards to particular development. However, consent cannot be granted for a development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify contravening the development standard. The consent authority must be satisfied that the applicant's written request has satisfied the above criteria and that the proposed development will be in the public interest as it is consistent with the zone objectives as well as the objectives of the particular development standard. In addition, consent cannot be granted unless the concurrence of the Director-General has been obtained. These matters are discussed below.

1. Written request provided by the applicant.

The applicant has provided a written request, prepared by Urbis P/L seeking to justify the variation to the development standard. A copy of this Clause 4.6 Variation has been attached to this report - **Attachment 2**.

2. Whether compliance with the development standard would be unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify contravening the development standard.

Applying the tests established by Chief Justice Preston in *Wehbe v Pittwater Council* [2007] NSWLEC 827 and more recently in the decisions of *Four2Five Pty Ltd v Ashfield Council* [2015] NSWLEC 1009, a number of tests that need to be satisfied are as follows:

1. *"The applicant must satisfy the consent authority that "the objection is well founded," and compliance with the development standard is unreasonable or unnecessary in the circumstances of the case;*
2. *The consent authority must be of the opinion that granting consent to the development application would be consistent with the policy's aim of providing flexibility in the application of planning controls where strict compliance with those controls would, in any particular case, be unreasonable or unnecessary or tend to hinder the attainment of the objects specified in s 5(a) (i) and (ii) of the Environmental Planning & Assessment Act 1979; and*
3. *It is also important to consider:*
  - a. *Whether non-compliance with the development standard raises any matter of significance for State or regional planning; and*
  - b. *The public benefit of maintaining the planning controls adopted by the environmental planning instrument."*

Consideration must also been given to the findings of *Four2Five Pty Ltd v Ashfield Council* [2015] NSW LEC. This case found that a Clause 4.6 must demonstrate the following:

- *That there are sufficient environment planning grounds, particular to the circumstances of the proposed development (as opposed to general planning grounds that may apply to any similar development occurring on the site or within its vicinity); and*

- *That maintenance of the development standard is unreasonable and unnecessary on the basis of planning merit that goes beyond the consideration of consistency with the objectives of the development standard and/or the land use zone which applies to site.*

The applicant's written request has demonstrated that compliance with the development standard would be unreasonable and unnecessary as the development complies with the objectives of the standard. The written request has also considered the environmental planning grounds that are particular to the circumstances of the proposed development.

In part the applicant's submission is as follows:

*"The compliance of the proposed development with the objectives of the FSR standard in Clause 4.4 of the RLEP2014 is demonstrated below.*

*The objectives of Clause 4.4 are as follows:*

- a) to provide effective control over the bulk of future development,*
- b) to allow appropriate levels of development for specific areas,*
- c) in relation to land identified as a Centre on the Centres Map—to consolidate development and encourage sustainable development patterns around key public transport infrastructure.*

*As enhanced throughout the multiple Urban Design Review Panel meetings held in relation to the proposed development, the 'bulk' of the proposal has been revised to include a stepped building podium with low level building breaks, compliant building separation, a significant ground level public domain offering, and compliant communal open space. Further, the proposed tower form includes varied floor plate geometries to offer a dynamic perspective of the development when viewed from key public corridors including the approach on Waterloo Road. The angled tower forms reduce the perception of scale and 'bulk' of the towers.*

*Further the materials and finishes of the towers have been developed by PTW Architects, to increase the façade articulation of the proposed towers and breakdown the scale of the development.*

*The Council requested enclosure of 33 of the balconies that may be affected by noise generated by the existing Macquarie Centre will have little contribution to the perception of bulk and scape of the development especially as viewed from the public domain.*

*Each of these design moves taken on this particular development has reduced the perception of scale of the proposal, which controls the perception of 'bulk' of a development. Further, the development results in appropriate environmental impacts such as building height and overshadowing on the site and surrounding sites. This is partially afforded to the site due to its particular orientation. As such, the proposal results in an appropriate 'bulk' of future development, as intended by the FSR control.*

*The site is located within the Macquarie Park Corridor 'Centre' identified on the Centres Map. The proposal represents an appropriate level of development for the area given the proposal represents a transition of building height and FSR between that is achievable on the adjacent Macquarie Shopping Centre site and properties to the south east located within the 'Macquarie Park Corridor' Precinct Incentive area. This is a particular consideration for the site which is somewhat uniquely positioned between the Macquarie Centre and the*

future priority growth area immediately to the east of the site. The proposal encourages sustainable development in this key Centre by:

- Providing additional dwellings in close proximity to employment and high frequency public transport;
- Providing incentives for active transport encouraging a reduction in certain movements in private transport;
- Exceeding the Apartment Design Guide requirements for deep soil landscaping and communal open space; and
- Achieves all required sustainability targets as mandated within SEPP BASIX and Section J of the BCA.

Further, it is considered that the proposal will remain consistent with the objectives of the B4 zone, being:

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.
- To ensure employment and educational activities within the Macquarie University campus are integrated with other businesses and activities.
- To promote strong links between Macquarie University and research institutions and businesses within the Macquarie Park corridor.

The proposed development is consistent with these objectives because:

- The proposed development provides a mixture of compatible land uses that leverage from surrounding development to provide an increased number of dwellings in close proximity to employment and services.
- Public transport patronage, walking and cycling will be encouraged through the provision of housing adjacent Macquarie University Railway Station and bus interchange and through improved connections throughout the precinct.
- The scheme includes a significant amount of retail frontage and active uses across the ground level of the proposal which not only provides non-residential tenancies within the precinct, but also provides an active retail connection between Waterloo Road, the site, and the Macquarie Shopping Centre.

#### Adequate Grounds for Contravening the Standard:

Clause 4.6 requires the applicant to demonstrate that there are sufficient environmental planning grounds to contravene the development standard. The following demonstrates that the impacts of the variation will be consistent with the external site impacts that may be reasonably expected by a complying development with regard to the following:

#### The current and desired future character of the locality:

The proposal includes a development that represents a high-quality architectural and landscape design that not only improves the interface of the site to Waterloo Road, but also improves the permeability of the site for both vehicles and pedestrians. The development includes significant landscape areas both for the benefit of the future residents of the development and the general public.

The proposal specifically assists in providing a better integration between the public domain, residential units, and businesses by providing ground level retail tenancies around a new public plaza, direct connections between the public plaza and the residential component of the development, and a new direct pedestrian link between the public domain, residential component of the development and the adjacent Macquarie Shopping Centre. This is a particular opportunity afforded to this specific site.

*The proposal is entirely consistent with the anticipated building form within the Macquarie Park Corridor, which includes podium and tower forms. Importantly to note the proposal complies with the maximum height limit applicable to the site, and provides compliant building setbacks and building separation.*

*The preservation of the residential amenity of the site and surrounding developments, with particular regard to overshadowing impact;*

*Despite the contravention to the FSR development standard, the proposal achieves a high level of amenity for the residents of the development as:*

- The proposed towers are orientated and positioned to achieve greater percentage north-east and north-west facing apartments;*
- Only 5% of apartments achieve no direct sunlight;*
- The proposal achieves the required building separation for tall towers, and further provides appropriate screening to ensure acoustic and visual privacy is maintained between dwellings;*
- The proposal meets the Apartment Design Guide requirements for naturally cross ventilated apartments and apartments that achieve solar access for more than 2 hours in mid-winter; and*
- The proposal exceeds the Apartment Design Guide requirements for deep soil landscaping, communal open space, and private open space to the vast majority of apartments.*

*Further, the proposal results in appropriate environmental impacts to surrounding development sites as:*

- The proposal provides two hours of solar access to at least 50% of the property immediately to the south east of the site on 21 June to enable the future redevelopment of that site for potentially residential purposes;*
- The geometry of Tower B results in a narrow and quick moving shadow across properties immediately to the east of the site;*
- The proposal achieves the building setbacks required by the RDCP 2014 and therefore results in appropriate separation between the development and surrounding sites, proposed and existing streets;*
- The proposed traffic generation does not adversely impact the performance of key intersections surrounding the development site; and*
- The proposed development includes a significant new public plaza and new road that will directly benefit the future residents and current occupants of surrounding sites by providing additional public infrastructure.*

*Achieving a high level of policy compliance with other relevant Planning Provisions;*

*A detailed assessment of the proposal has been carried out against the applicable RLEP2014 and RDCP 2014 planning provisions and is included within the Statement of Environmental Effects supporting this development application. The proposal substantially complies with the range of planning objectives and controls and with a design that achieves design excellence and a quality of building form and public domain amenity desired by the planning controls.*

*Will provide significant material public benefits in the immediate vicinity of the site.*

*The application includes a draft VPA which according to Section 79C(1)(a)(iia) is a relevant matter for consideration in determining a development application. The draft VPA will deliver substantial public benefits including:*

- Construction and dedication of a new road which lies within the boundaries of the site.*

- *The delivery of Public Domain Works within Waterloo Road in accordance with the Council Public Domain Manual.*
- *Construction of 21 residential apartments representing 3.1% of the total residential units to be dedicated to Council for use as Key Workers Housing.*
- *The construction of a pedestrian link through the site from Waterloo Road to the adjacent Macquarie Centre.*

*The VPA provides substantial delivery of public benefits that would be carried out as part of the development and therefore implemented immediately to benefit the community and serving the public interest.*

#### Planner's Comments:

Agreed - The proposal is not considered to detrimentally impact the objectives of Clause 4.4. It is considered that the density, scale and intensity of the proposal are appropriate. The proposal complies with the maximum height, solar access and over shadowing.

The site is in a highly accessible area, within the Macquarie University (Herring Road) Station Precinct (MUSP). The locality is rapidly transitioning from a commercial character to greater mixed-use development. Ryde Local Environmental Plan 2014 has rezoned land within the precinct to B4 Mixed Use, increased maximum building heights and increased permissible floor space ratios.

The site adjoins Macquarie Shopping Centre which has a permissible FSR of 3.5:1 and has concept approval for four residential towers of up to 37 storeys. Therefore the proposal will present as a transition of building height and FSR between that achievable on the adjacent Macquarie Shopping Centre site and the adjoining eastern site. In addition, when the adjoining eastern site is redeveloped, future developments may apply for incentive uplifts which will provide the adjoining site with comparable building forms to this development,

The proposed floor space calculation includes enclosure of 33 balconies that are located adjacent to the Macquarie Shopping Centre loading docks. To minimise adverse noise impact, Council requested the enclosure of these balconies. The proposal originally exceeded the floor space by 5,096m<sup>2</sup> having a total floor space of 56,579m<sup>2</sup>, a variation of 9.9% variation. However the provision of the 33 balconies as winter garden has increased the floor space by additional 566.6m<sup>2</sup> bringing the total floor space to 57,146.4m<sup>2</sup>, variation of 11%. It is considered that the enclosures of the balconies will not significantly add to the bulk and scale of the building (Building B) however the enclosure will provide better amenity for the residents of these apartments.

The proposal is consistent with the desired future character of the precinct, the principles of urban consolidation and will lead to an efficient use of the land and surrounding infrastructure.

The zone objectives have already been identified in an earlier section of the report and as previously concluded, the development complies with the objectives of the zone. Whilst the development exceeds the floor space control, modulation of the overall built form reduces any potential visual dominance and the design ensures acceptable scale, articulation and visual interest. The proposed FSR variation will result in minimal discernible change to the building size in comparison with the adjoining developments and is not considered to result in any significant adverse impacts.

In addition, the development provides significant public benefits including the provision of a new 14.5m wide road from Waterloo Road and a pedestrian link from Waterloo Road to the



Macquarie Shopping Centre. The road is designed to eventually connect to a road on the eastern boundary of the Macquarie Shopping Centre site to the north. When the two roads are connected and dedicated to Council the road will provide access between Waterloo Road and Talavera Road. The pedestrian link will provide connectivity between the subject site/surrounding properties and Macquarie Shopping Centre thus improving the permeability of the site for both vehicles and pedestrians.

The development also proposes to transfer Key Workers Housing units to Council, which will help increase the supply of affordable dwellings in close proximity to employment and high frequency public transport.

Despite the departure from the standard, the proposed development is considered consistent with its objectives and the additional floor space will not have adverse environmental impact. The proposal also provides significant public benefits through the dedication of land and encumbrances for the purposes of a new public road.

It is therefore considered that the applicant has demonstrated that compliance with the development standard would be unreasonable and unnecessary in the circumstances of the case.

3. The proposed development is in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out.

An assessment against the specific objectives of clause 4.4 and zone objectives are provided above and the justifications are considered well founded. It is therefore considered that compliance with the development standard would be unreasonable and unnecessary in the circumstances of the case.

4. Concurrence of the Director General has been obtained.

Circular PS 08-003 issued on 9 May 2008 informed Council that it may assume the Director-General's concurrence for exceptions to development standards.

### Conclusion

The applicant has satisfactorily demonstrated that the development complies with the objectives of the FSR standard and the objectives of the B4 zoning. In this instance the proposed development is considered to be in the public interest and that strict compliance with the standard would be unreasonable and unnecessary.

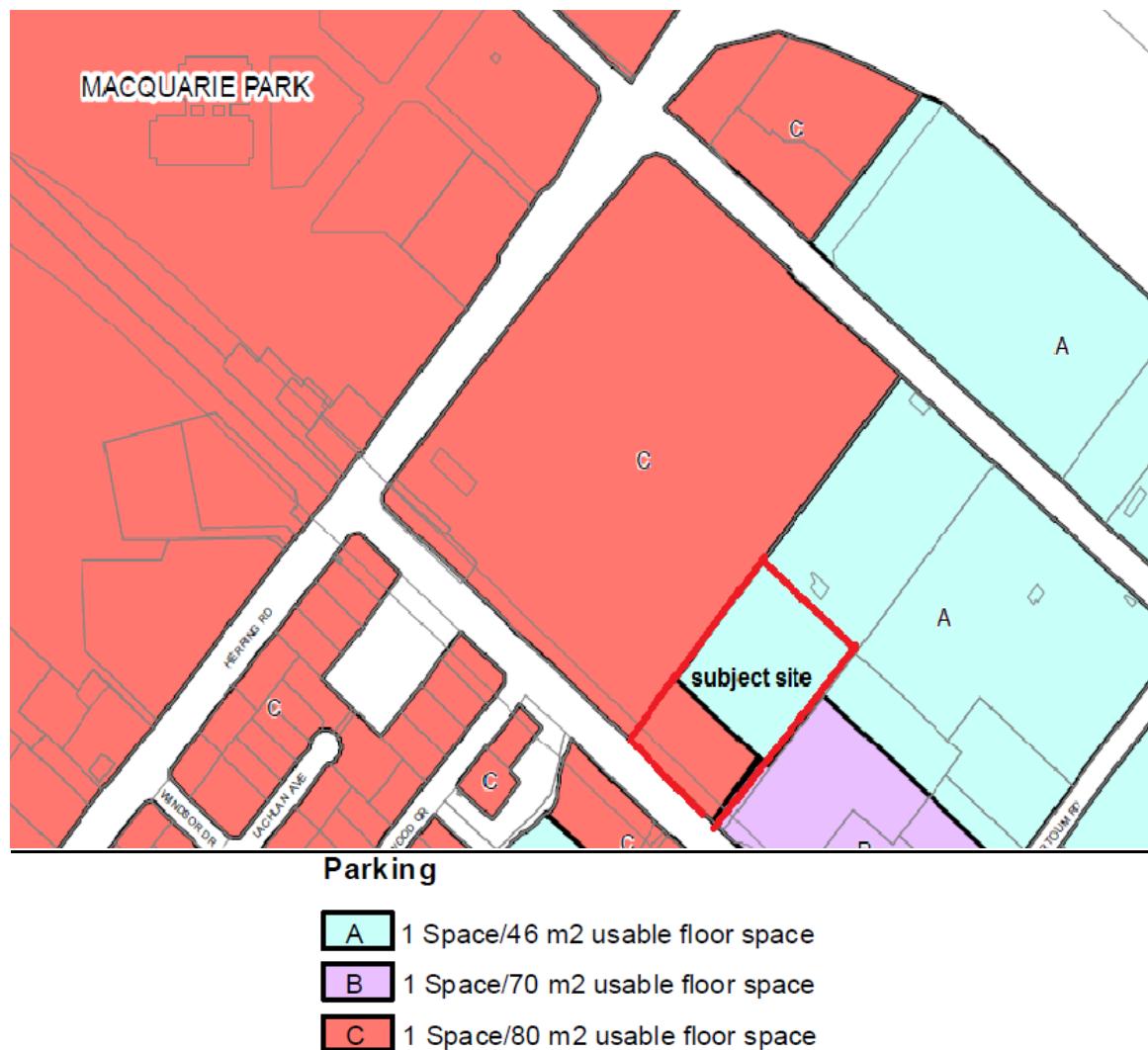
There are sufficient environmental planning grounds to justify contravening the development standard. These grounds are particular to the circumstance of the proposed development on this site. To accept a departure from the development standard in this context would promote the proper and orderly development of land as contemplated by the controls applicable to the B4 zoned land and the objectives of the EP&A Act.

The variation to the floor space standard is supported.

### **Clause 4.5B Macquarie Park Corridor**

The provisions of this clause were amended on 21 April 2017 to reduce the extent of on site car parking in Macquarie Park. However as the DA was submitted in November 2016 prior to the gazettal date, the previous controls are applied.

The maximum number of off street parking spaces for commercial and industrial development in the Macquarie Park Corridor is the number identified on the Macquarie Park Corridor Parking Restriction map. The subject site has two rates as illustrated in **Figure 28** below. However as the commercial component is located within the red section (Part C), the rate of 1 space/80m<sup>2</sup> usable floor space will be applied.



**Figure 28: Macquarie Park Corridor Parking Restriction Map.**

It is proposed to provide 1674.8m<sup>2</sup> of retail/commercial floor space around the perimeter of the plaza area. Based on the above rate 20.9 (21) commercial parking spaces are required to be provided. 21 commercial parking spaces are provided on the ground floor parking area.

### **Clause 6.1 Acid sulfate soils**

The site is not impacted by acid sulfate soils.

### **Clause 6.2 Earthworks**

Development consent is required for the earthworks associated with the development. Before granting consent for earthworks the consent authority must consider the following matters:

- The likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality.

- The effect of the proposed development on the likely future use or redevelopment of the land.
- The quality of the fill or the soil to be excavated, or both.
- The effect of the proposed development on the existing and likely amenity of adjoining properties.
- The source of any fill material and the destination of any excavated material.
- The likelihood of disturbing relics.
- Proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.
- Any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The proposed development includes excavation for a two level basement car park. Council's Senior Coordinator Development Engineering Services requires that a number of conditions be included in the consent to address engineering issues such as a sediment and erosion control plan to be submitted prior to any works commencing on the site. See **Conditions 45 & 105**

The site is not known to contain any relics or any other item of heritage significance.

Subject to the imposition of the recommended conditions of consent, the development is considered satisfactory in respect of the provisions of clause 6.2.

## **8.9 Any proposed instrument (Draft LEP, Planning Proposal)**

There are no relevant Draft Environmental Planning Instruments for the subject site.

## **8.9 City of Ryde Development Control Plan 2014**

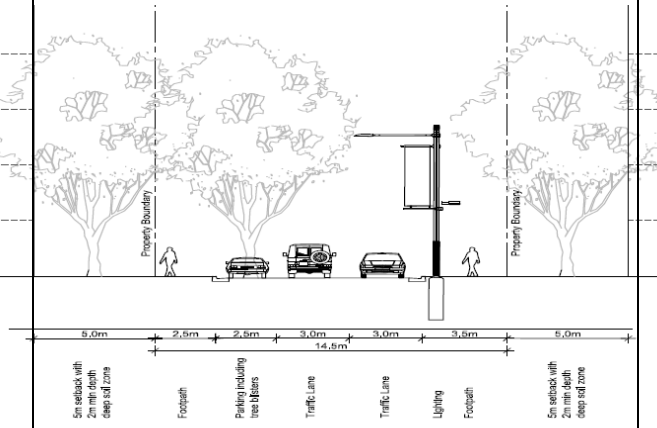
The following sections of DCP 2014 are relevant to the proposed development.

Part 4.5 – Macquarie Park Corridor  
 Part 7.1 - Energy Smart, Water Wise  
 Part 7.2 - Waste Minimisation and Management  
 Part 8.2 - Stormwater Management  
 Part 9.2 - Access for People with Disabilities  
 Part 9.3 – Car Parking

With regard to Parts 7.1 to 8.3, noting the advice received from the various technical departments within Council and the consideration of issues previously in this report, the proposal is satisfactory in relation to the above matters.

### **Part 4.5 Macquarie Park Corridor**

This part of the DCP provides a framework to guide future development in the Macquarie Park Corridor, North Ryde. The DCP specifies built form controls for all development within the Corridor and sets in place urban design guidelines to achieve the vision for Macquarie Park as a vibrant community, as a place to live, work and visit. The applicable clauses include the following:

Control	Comments	Comply
<b>4.0 Access Network</b>		
<p><b>Streets</b> Provide new public streets and pedestrian connections in accordance with Access Structure Plan New Streets are to be dedicated to the Council. New streets are to be maintained by the landowner until dedicated to Council.</p> <p><b>Pedestrian Connections</b> Provide pedestrian connections in accordance with Access Structure Plan</p> <ul style="list-style-type: none"> <li>• Pedestrian connections are to</li> <li>• Be a minimum of 6m wide comprising 4m wide paving and 2m wide soft landscaping as shown in Figure 4.2.1 (or as determined by Council).</li> <li>• Be designed with a 2m setback to any building</li> <li>• Be publically accessible at all times;</li> <li>• Provide a clear sightline from one end to the other for surveillance and accessibility;</li> <li>• Maximise active frontages pedestrian connections</li> <li>• Be designed to consider pedestrian safety and the security of adjacent businesses, particularly at night.( For example, where pedestrian through-site links are provided between buildings, windows are to be provided between the internal ground floor space of the building and the pedestrian link)</li> <li>• Extend and enhance the public domain and have a public domain character. Note: Where pedestrian through-site links are adjacent a courtyard or public space, the design of the pedestrian link is to be integrated with the design of the open space, and access is provided between the two spaces.</li> </ul>	<p>The Access Network Map identifies a new 14.5m wide road to be provided on the eastern side of the subject site. The road is to run from south –north from Waterloo Road to connect to Macquarie Shopping Centre to Talavera Road.</p>  <p>Figure 4.1.3 14.5m Wide Streets - Typical section</p> <p><b>Figure 29. 14.5m street – typical section.</b></p> <p>A new 14.5m wide street is proposed along the site in accordance with the above requirement and has been designed to connect to the existing road on the eastern boundary of the Macquarie Shopping Centre site to the north. Council's City Works &amp; Infrastructure – Public Domain and Traffic Engineer have raised no objections to the proposed road design. The proposed road will be dedicated to Council. <b>Condition 172</b> has been imposed requiring this.</p> <p>A new pedestrian link through the site from Waterloo Road to the adjacent Macquarie Shopping Centre is proposed. The location of the pedestrian link is not in accordance with the Access Network map, which located the link at the rear of the site. However, this would locate the link within the Macquarie Shopping Centre car park.</p> <p>Therefore, it is proposed to provide the pedestrian link at the south western corner of the site with access from the proposed new communal plaza area by way of either direct access to Tower D via a ground floor lobby adjacent to Waterloo Road. This has been prepared in consultation with AMP the owner of the Macquarie Shopping Centre. AMP has raised no objections to the proposed location of the pedestrian link.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>

Control	Comments	Comply
<ul style="list-style-type: none"> <li>Be in accordance with Part 9.2 of this DCP Access for People with Disabilities and designed to provide barrier-free access in accordance with AS1428 and the Disability Discrimination Act 1992;</li> <li>Paving shall be in accordance with the Macquarie Park Public Domain Technical Manual.</li> <li>Remain in private ownership and be created as Rights-of-Way in favour of Council or similar mechanism.</li> </ul> <p><u>Bicycle Network</u> Provide dedicated cycle access in accordance with Ryde Bicycle Strategy 2014. Sustainable Transport. The Regional Bicycle network is to be implemented as off street shared cycleways.</p> <p><u>Sustainable Transport</u> A Framework Travel Plan. (FTP) is required to be submitted to Council for approval for all development that exceeds 10,000sqm new floor space.</p> <p><u>Parking Rates</u> Bicycle parking in accordance with Ryde DCP 9.3 Parking. - In every new building, where the floor space exceeds 600m<sup>2</sup> GFA (except for dwelling houses and multi unit housing) provide bicycle parking equivalent to 10% of the required car spaces or part thereof.</p> <p>Car Parking within residential development to be provided in accordance with DCP Part 9.3</p> <p>Car Share Parking: All parking spaces for car share schemes are to be: i. Publicly accessible 24 hours a day seven days per week</p>	<p>The UDRP has reviewed the location of the pedestrian link and the concerns raised by the Panel with regard to residents' amenity and security have been addressed, see discussion in ADG table.</p> <p>The pedestrian link is a covered walkway from Tower D via the ground floor lobby from Waterloo Road or from the communal terrace/plaza area (Level 1) to the walkway. Whilst the pedestrian link is a public walkway it will only be accessible during the hours of the Macquarie Shopping Centre. This is considered reasonable and <b>Condition 174</b> has been imposed requiring a Right of Way for public access to be created over the pedestrian through site link. The link is adjacent to an open viewing area with tables and chairs for casual seating area.</p> <p>Waterloo Road is part of the regional bicycle network and currently in front of the site are line markings for bicycles. <b>Condition 90 (g)</b> has been imposed for the shared bicycles pathway to be reinstated.</p> <p>A Framework Travel Plan prepared by Traffix and accompanies the Traffic and Parking Assessment. Council's Senior Co-ordinator – Transport and Environment has reviewed the Travel Plan and has advised that further refinements are required but this can be condition to be submitted prior to Occupation Certificate.</p> <p>68 bicycle spaces are required as part of the development. The proposed development provides 60 dedicated bicycle spaces plus 108 motorcycle parking. Given that more than enough motorcycle is proposed, a condition can be imposed requiring the provision of 68 bicycle spaces. See <b>Condition 1(a) &amp; 209</b></p> <p>See full discussion below under Part 9.3 Car Parking.</p> <p>Require: Car share – 587 residents spaces/50 = 11.7 (12) car share. Proposed: 12 car share spaces.</p>	<p>Yes</p> <p>Yes - See <b>Condition 90 (g)</b></p> <p>Yes - See <b>Condition 169.</b></p> <p>No – See <b>Conditions 1(a) &amp; 209.</b></p> <p>Yes</p>



Control	Comments	Comply
<p>ii. Located together in the most convenient locations</p> <p>iii. Located near and with access from a public road and integrated with the streetscape through appropriate landscaping where the space is external</p> <p>iv. Designated for use only by car share vehicles by signage</p> <p>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</p>		
<b>5.0 Public Domain</b>		
<p><u>Open Space Network</u> Provide public open space as shown in Figure 5.1.1 Open Space Network.</p> <p><u>Street Trees, Front Setback Tree Planting and Significant Trees.</u> Street trees and front setback must be provided in accordance with the Street Tree Key Plan in Macquarie Park Public Domain Technical Manual, and their health guaranteed for a minimum of 5 years. At grade parking is not permitted in the front setback</p> <p><u>Community Facilities.</u> Community facilities are to be provided in accordance with the relevant documentation prepared by Council, particularly the City of Ryde: Social and Cultural Infrastructure Framework. Based on population growth statistics (available 2011) within Macquarie Park Corridor the City of Ryde.</p> <p><u>Art in Publicly Accessible Place.</u> 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 \$1,500,000. Art must be located within the site so as to be publicly accessible i.e. viewed or experienced from publicly accessible places.</p>	<p>Not required to provide public open space</p> <p>To provide details of road/public domain</p> <p>No at grade parking is proposed within any of the setbacks.</p> <p>An Art Plan has been prepared as part of the DA with public art proposed within the new public plaza. Council's Senior Planner – Community Cultural Officer has advised that <i>the Art Plan outlines the thematic framework and a concept and location, in addition to the process to be undertaken to develop the public art. However further development of the art work concept will be required, and an additional approval will be necessary at the completion of the detail design stage. At a minimum the submitted detailed design will include scale of the proposed artwork, use of materials and details of fabricators.</i></p>	<p>To be conditioned – See <b>Condition 89.</b></p> <p>Yes</p> <p>N/a</p> <p>To be conditioned – See <b>Condition 62.</b></p>

Control	Comments	Comply
<b>6.0 Infrastructure, facilities &amp; public domain improvement</b>		
<p>Floor space ratios and height are to comply with Ryde LEP 2014. Where it is proposed to take advantage of Floor Space and/or Height Incentives, applicants are to present and discuss their scheme with Council prior to lodgement of a development application.</p> <p>Access Network and open space network being park are to be dedicated to Council, be design and constructed in accordance with the Macquarie Park Corridor Public Domain Technical Manual.</p>	<p>Concept – 65m height line shown to comply. FSR: 3:1 allowed Site area: 17150 x 3 = 51,450m<sup>2</sup> allowed. Proposed: 3.3:1 – 57,146.4m<sup>2</sup> The applicant has agreed to provide a new 14.5m wide access road and a letter of offer in respect to a Voluntary Planning Agreement has been agreed to by Council and the applicant for other benefits including affordable housing and a link to Macquarie Shopping Centre.</p> <p>The new road to be dedicated to Council.</p>	<p>No – Clause 4.6 variation submitted.</p> <p>Yes – <b>Condition 172.</b></p>
<b>7.0 Built Form</b>		
<p><u>Activity Centres</u> Macquarie Park Station Macquarie University Station North Ryde Station</p> <p><u>Active Frontage</u> Continuous ground level active uses must be provided where primary active frontages are shown in Figure 7.3.1. Setbacks and Build to Lines Setback to Waterloo Road – 10m. 5m to all new and existing streets. 2m setback to pedestrian pathways.</p> <p>Front door and street address is to be located on the primary frontage.</p> <p>Loading docks, vehicular access is not to be located where primary active frontages are shown in Figure 7.3.2 Active Frontage and Setback Control Drawing unless it can be demonstrated that there is no alternative.</p> <p>Active ground level uses are encouraged where secondary active frontages are shown in Figure 7.3.2 Active Frontage and Setback Control Drawing.</p> <p>Entries to active frontage</p>	<p>Not within any Activity Centre (outside of Macquarie University Station Activity Centre).</p> <p>Secondary active frontage along Waterloo Road. Required: 10 setback to Waterloo Road and 5m to new road. Proposed: 10m from Waterloo Road and 5m from new road. No encroachment into the front setback.</p> <p>Retail tenancies will be constructed along the entire ground floor of the site fronting Waterloo Road and the residential lobby to Tower D is located at the Waterloo Road street frontage. This will activate the streetscape.</p> <p>Vehicular access to on-site loading facilities and car parking is provided off the new 14.5m wide road.</p> <p>Waterloo Road is a secondary active frontage and as discussed above, retail tenancies will be provided along the ground floor level fronting Waterloo Road. This together with a large public plaza/domain area will help activate the street front.</p> <p>Entry to the plaza area and to the retail shops is at the same level as the footpath.</p>	<p>N/A</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

Control	Comments	Comply
tenancies are to be accessible and at the same level as the adjacent footpath.		
Active uses must occupy the street frontage for a depth of at least 10m. Refer Figure 7.3.1 Active Frontages Plan Diagram and Active Frontages Elevation Diagram.	Minimum depth of 10m.	Yes
Where active frontage is required a minimum of 90% of the building frontage is to be transparent i.e. windows and glazed doors (A maximum 10% active frontage may be fire stairs, plant, masonry walls and other non-active uses). Clear glazing is to be provided to windows and doors. The sill height for windows must be maximum 1200mm above the footpath, including for sloping sites.	The majority of the ground floor building frontage is transparent with glazing to create an active streetscape.	Yes
<u>Setbacks and build to lines</u> Minimum setbacks and build-to lines must be provided as shown Figure 7.3.2 Active Frontage and Setback Control Drawing – summarised as follows: <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> </ul>	10m from Waterloo Road and 5m from new road.	Yes
Council encourages development that complies with Figure 7.3.2 Active Frontage and Setback Control Drawing and meets the requirements of the ECRL Second Reserve Support Zone. The following are permitted in the Second Reserve support zone: <ul style="list-style-type: none"> <li>i. Excavations 3m or more in depth are required to be assessed for their impact on the underground infrastructure, including impacts during construction.</li> </ul>	As the subject site is adjacent to a rail corridor and it is proposed to excavate, the proposal was referred to RailCorp. The property functions of RailCorp have been transferred to Sydney Trains and the concurrence function under the Infrastructure SEPP has been delegated to Sydney Trains. Sydney Trains via letter dated 14 July 2017 has raised no objections, subject to deferred commence condition and operational conditions. See <b>Deferred Commencement Condition Part 1 – (A) 3 and General Conditions Part 2 – 25 to 28, 77 to 84 &amp; 164.</b>	Yes
<ul style="list-style-type: none"> <li>ii. Shallow footings with relatively light loadings (allowable bearing pressure of less than 150kPa on small pad or strip</li> </ul>	A Geotechnical Report was submitted with the application and Council's Consultant Geotechnical Engineer has reviewed the	


Control	Comments	Comply
<p>footings) are not required to be assessed. Other shallow footings and deep foundations are required to be assessed.</p> <p>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. Refer to Figure 7.4.1.</p>	<p>proposal and has raised no objections to the proposal. <b>Condition 73</b> requiring compliance with the Geotechnical reports.</p>	Yes
<p>Carparking is not located within the setback zone with landscaping within the front and side setbacks.</p>	<p>The street setback contains tree cover, shrubs, grasses and paving. Deep soil landscaping is proposed along the northern (side) and rear setbacks to provide screening against adjacent development.</p>	Yes
<p>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.</p> <p><u>Awning and Canopies.</u> Awnings must be provided where Primary Active Frontages are shown in Figure 7.2.1 Activity Centres Structure Plan and Active Frontage Control Drawing. Entry canopies and discontinuous awnings and entry canopies are encouraged elsewhere in the Corridor.</p>	<p>Awning provided around ground floor shops and along 1<sup>st</sup> half of the new road.</p>	Yes
<p><u>Rear and Side Setbacks</u> 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. Buildings are not to be constructed on the locations for proposed new roads. An allowance for a 5m setback from a proposed road should also be made. 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. Above ground portions of basement car-parking structures</p>	<p>10m rear setback &amp; 6m north west side setback and 5m setback from the proposed new road.</p> <p>Car parking and basement structures do not encroach into rear or side setbacks to enable deep soil planting to screen adjacent development.</p> <p>The proposal provides for above ground parking structures facing the adjoining</p>	Yes

Control	Comments	Comply
<p>are discouraged and deep soil planting is promoted. 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.</p> <p><u>Building Separation</u> Provide building separation as recommended by the NSW Residential Flat Design Code "Rule of Thumb" requirements.</p> <p><u>Building Bulk &amp; Design</u> The floor-plate of buildings above 8 storeys is not to exceed 2000 m<sup>2</sup>, unless it can be demonstrated that slender building forms are achieved through courtyards, atria, articulation or architectural devices.</p> <p>Buildings are to address the street, and are to have a street address. Facade design is to:</p> <ul style="list-style-type: none"> <li>– Reflect and respond to the orientation of the site using elements such as sun shading and other passive environmental controls where appropriate.</li> <li>– Provide building articulation such as well design roof forms, expressed vertical circulation etc.</li> <li>– 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).</li> </ul>	<p>shopping centre car park. The UDRP has raised no objections to the proposed car parking area and silver aluminium louvers have been provided along this elevation to screen the car parking.</p> <p>See discussion in ADG table.</p> <p>All towers have a floor plate smaller than 2,000m<sup>2</sup>.</p> <p>The building façade has been discussed in detail earlier in the report.</p>	<p>No – variation acceptable.</p> <p>Yes</p> <p>Yes – See UDRP discussion.</p>
<p><u>Site Planning &amp; Staging</u> Site coverage, DS areas &amp; POS 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 20 m x 10 m may be included. A minimum 20% of the site area is to be provided as Landscaped Area.</p> <p>Solar access to communal open</p>	<p>The proposal has 2,543m<sup>2</sup> deep soil, representing 15% of the site area. Whilst the proposal does not provide a minimum 20% deep soil across the site, the proposal exceeds the minimum deep soil provision of the ADG. Further, the proposal provides over 20% of total site area as communal open space. Furthermore, the proposal has 7,606m<sup>2</sup> of landscaped area, representing 44.32% of the site area. This is well in excess of the DCP requirement.</p>	<p>No – variation acceptable.</p>



Control	Comments	Comply
<p>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. Appropriate shading is to be provided so that communal spaces are useable during summer.</p> <p>Communal open spaces are to incorporate the primary deep soil area where possible.</p> <p><u>Planting on Structures</u> Provide optimum conditions for plant growth by providing appropriate irrigation and drainage methods. Design planters to provide the largest possible volume of soil, in accordance with the recommended standards (contained in the DCP).</p> <p><u>Topography and Building Interface</u> Level changes across sites are to be resolved within the building footprint. Where buildings are set back from the street boundary, entries are to be provided at street level wherever possible. An accessible path of travel is to be provided from the street through the main entry door of all buildings. Where necessary, stairs and ramps are to be integrated with the landscape design of front setbacks. Natural ground level is to be retained for a zone of 4 m from the side and rear property boundaries. Retaining walls, cut and fill are not permitted within this zone.</p> <p><u>Site Facilities</u> Commercial: Vehicular access to loading facilities is to be provided from secondary and tertiary streets where possible. Rubbish and recycling areas</p>	<p>645m<sup>2</sup> of the Level 1 communal open space will achieve the 2 hours solar access in mid winter. In addition over 150m<sup>2</sup> of the communal rooftop terraces will achieve over 2 hours solar access. The northern end of the podium landscape contains the most activity zones and more than 50% of this area will receive more than 2 hours of direct sunlight. See <b>Figures 31 to 34</b> below on pages 63 &amp; 64 illustrating solar access to the podium area.</p> <p>The level 1 communal terrace provides a variety of soil depths to facilitate small, medium and large-scale trees.</p> <p>The site falls steeply towards Waterloo Road. In response, the proposal provides direct access to the site by incorporating entry steps and gradual slopes from the street to the public plaza. An accessible path of travel is provided at the front of the site and from the new road.</p> <p>Vehicular access from new road.</p> <p>Waste Management Plan prepared by Elephants Foot Recycling Solutions has</p>	<p>Yes</p> <p>Yes – condition to comply. See <b>Condition 108.</b></p> <p>Yes</p> <p>Yes</p>

Control	Comments	Comply
<p>must be provided in accordance with Section 6.3 Waste Management. These areas must be integrated with the development; minimise the visibility of these facilities from the street; and be located away from openable windows to habitable rooms. Barrier free access is to be provided to all shared facilities.</p> <p><u>Residential</u> 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 permitted on balconies that are permanently screened from view from the public domain.</p> <p>Provide storage to dwellings as required by the NSW Apartment Design Guide.</p> <p>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.</p> <p><u>Vehicular Access</u> Vehicular access is not permitted along streets identified as 'Active Frontages' Where practicable, vehicle access is to be from secondary streets. Potential pedestrian/vehicle conflict is to be minimised by: limiting the width and number of vehicle access points ensuring clear site lines at pedestrian and vehicle crossings utilising traffic calming devices separating and clearly distinguishing between pedestrian and vehicular access-ways.</p> <p><u>On site Parking</u> Safe and secure 24 hour access to car parking areas is to be provided for building users.</p>	<p>been submitted. The plan outlines proposed rubbish and recycling areas to be provided. Waste collection is from inside the property and Council's Senior Coordinator – Waste has raised no objections to the proposed development, subject to conditions. See <b>Condition 112</b></p> <p>Each apartment includes individual laundry facilities. <b>Condition 13</b> has been imposed to prohibit clothes drying on the balconies and this requirement to be included in any strata plan management.</p> <p>All apartments are provided with appropriate internal storage facilities in accordance with the ADG recommendations. Apartments are also provided with dedicated basement storage units. See <b>Condition 87</b>.</p> <p>The applicant has advised that lockable mailboxes are located within dedicated mailrooms adjacent to each residential tower lobby. <b>Condition 208</b> has been imposed requiring this.</p> <p>Vehicular access is provided off the new 14.5m wide street proposed along the site. This vehicular access point is located away from the public plaza. Council's Senior Coordinator – Development Engineering and Traffic Engineer have no objections to the location of the vehicular driveway.</p> <p>A roller door is proposed and will provide 24-hour access to the basement loading dock and car park for users of the buildings only.</p>	<p></p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

Control	Comments	Comply
<p><b><u>Basement parking</u></b>  Basement parking areas should be located directly under building footprints to maximize opportunities for deep soil areas unless the structure can be designed to support mature plants and deep root plants. Basement parking areas must not extend forward of the building line along a street.  Basement parking should be contained wholly beneath ground level along public streets.  Ventilation grills or screening devices of car park openings are to be integrated into the overall façade and landscape design of the development.</p> <p><b><u>Fencing</u></b>  Fencing is not permitted on the perimeter boundary of sites. Security should be provided within buildings.</p>	<p>The majority of proposed on-site parking is located below ground with the exception of some parking located within the ground and mezzanine floors of the building. The proposed above-ground car parking:</p> <ul style="list-style-type: none"> <li>– Is setback behind proposed retail tenancies</li> <li>– Cannot be seen from Waterloo Road; Responds to the existing car park on the adjacent AMP Macquarie Shopping Centre site; and</li> <li>– Has been designed to achieve a minimum floor to ceiling height of 2.7m so that in the event that these car parks are made redundant, these levels may be converted to other uses.</li> </ul> <p>No fencing is proposed along the Waterloo Road frontage however along the new road, 3 apartments are located on the ground floor with their private open space facing the new road. In order to provide privacy to these apartments, fencing, screened by landscaping is provided, as illustrated below:</p>  <p>PRIVACY SCREEN TO GROUND FLOOR TERRACES</p> <p><b>Figure 30: Details in front of the courtyard units.</b></p> <p>The proposed fencing is considered acceptable as it provides privacy with surveillance of the public space.</p>	<p>No – variation acceptable.</p> <p>Yes</p>



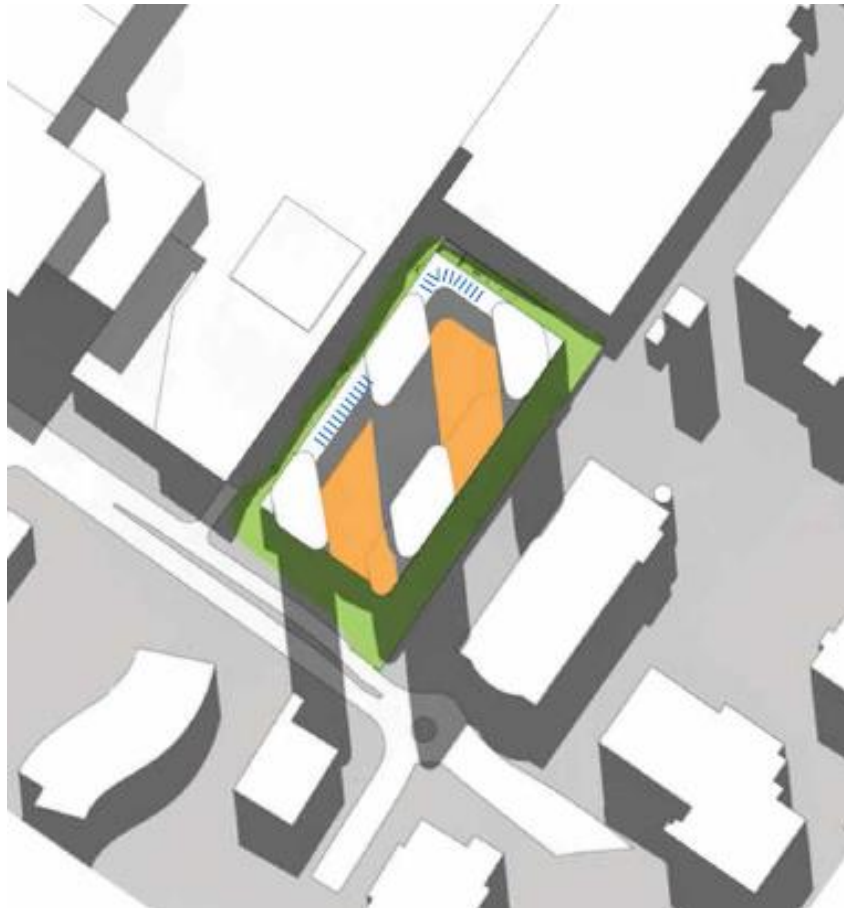
<p><u>Noise &amp; Vibration</u> An Acoustic Impact Assessment report prepared by a suitably qualified acoustic consultant is required to be submitted with all development applications for commercial, industrial, retail and community buildings, with the exception of applications minor building alterations. Development is to comply with all relevant statutory regulations. Loading and unloading facilities must not be located immediately adjacent to residential development.</p> <p>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.</p> <p><u>Soil Management</u> Development is to comply with the City of Ryde DCP 2014 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.</p>	<p><u>Level 1:</u></p> <ul style="list-style-type: none"> <li>- The inclusion of a 3m high impermeable screen within the open-viewing deck.</li> <li>- The inclusion of densely foliating evergreen trees within and around the proposed landscaping beds of the various communal terraces.</li> </ul> <p>The report concludes that: <i>With the inclusion of these recommended treatments to the final design, it is expected that wind conditions for all outdoor trafficable areas within and around the subject development to be suitable for their intended uses.</i></p> <p><i>Note the densely foliating vegetation should be of an evergreen species to ensure their effectiveness in wind mitigation throughout the year. The inclusion of additional densely foliating vegetation within and around the outdoor trafficable areas of the subject development is expected to further enhance the localised wind conditions.</i></p> <p><b>Condition 76</b> has been imposed requiring compliance with the recommendations contained in the report.</p> <p>An Acoustic Assessment has been prepared by EMM. The report states that the glazing, façade and roof materials proposed will mitigate external noise in accordance with the relevant criteria.</p> <p><b>Condition 214</b> has been imposed stating that, within the communal open space area, the playing of amplified music or messages, any spruiking and the likes are not to disturb the amenity of other public and private places.</p>	<p>Yes –</p>
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<p>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</p> <p>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.</p> <p>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.</p> <p>The ESCP is to be prepared in conjunction with the Site Stormwater Management Plan and as a minimum contain the following information:</p>	<p>Appropriate conditions of consent will be imposed to require the submission of an Erosion and Sediment Control Plan that meets Council's requirements See <b>Conditions 45 &amp; 105.</b></p>	<p><b>Condition 45 &amp; 105.</b></p> <p>Yes</p>
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Figure 31 – Solar access to the communal open space on the podium level at 9.00am



**Figure 32 – solar diagram to the podium level at 12 noon.**



**Figure 33 – solar diagram to the podium level at 3pm.**

## Part 7.2 Waste Minimisation and Management

The application includes a Waste Management Plan prepared by Elephants Foot Recycling solutions which has been reviewed by Council's Senior Co-ordinator Waste. A separate retail and residential waste room, along with a bulky good room are provided in the ground floor car parking area, with collection vehicles entering the site via the new road. The collection vehicles will park in the delegated vehicle loading bay. **Conditions 112** have been recommended with regard to the waste room.

## Part 9.2 Access for People with Disabilities

The application includes an Access Compliance Report prepared by BCA Logic which states that the development complies or can achieve compliance with the access provisions of the BCA, the Access to Premises Standards, and the requirements of AS4299 – Adaptable Housing. 68 adaptable units are proposed to be provided, which is in accordance with Council's requirements. **Conditions 72 & 86** have been recommended requiring compliance with the recommendations of the Access Compliance Report and for the required adaptable units, each with an allocated disabled parking space to be provided.

## Part 9.3 Parking

Whilst Clause 4.5B Macquarie Park Corridor of RLEP 2014 dealt with the maximum number of car parking for the commercial component, Part 9.3 of DCP stipulates the residential parking rates as follows:

*Residential Development - Macquarie Park Corridor (as shown on RLEP 2014 Centres Map)*

*Maximum 0.6 space / one bedroom dwelling*

*Maximum 0.9 spaces / two bedroom dwelling*

*Maximum 1.4 spaces / three bedroom dwelling*

*Maximum 1 visitor space / 10 dwellings*

*1 car share space per 50 proposed parking spaces*

The proposed residential apartment mix is 177 x 1 bedroom, 447 x 2 bedroom, 49 x 3 bedroom and 7 x 4 bedroom apartments, accordingly the proposal requires:

$$177 \times 0.6 = 106.2$$

$$447 \times 0.9 = 402.3$$

$$56 \times 1.4 = \underline{78.4}$$

$$\text{Residents } \underline{586.9} \text{ (587)}$$

$$680/10 = \underline{68 \text{ visitors}}$$

$$\text{Car share} - 587 \text{ residents spaces}/50 = 11.7 \text{ (} \underline{12} \text{) car share.}$$

It is proposed to provide 1674.8m<sup>2</sup> of retail/commercial floor space around the perimeter of the plaza area. Based on the rate of 1/80m<sup>2</sup>, 20.9 (21) commercial parking spaces are required to be provided. 21 commercial parking spaces are provided on the ground floor parking area. A total of 688 car spaces are required.

The proposal provides 689 car spaces which is one over the maximum. **Condition 209** has been imposed requiring the number of car spaces to be 587 residents, 68 visitors, 21

commercial and 12 car spare = 688 spaces. This condition will limit the maximum parking to 688 vehicles rather than 689.

68 of the units are to be adaptable in accordance with the minimum 10% requirement. Council requires that a disabled parking space be allocated to each of these units. 20 disabled parking spaces have been provided however the plans do not indicate specific unit allocations.

**Condition 86** has been imposed requiring the residential disabled car spaces to be allocated to the adaptable units.

The DCP states that: *in every new building, where the floor space exceeds 600m<sup>2</sup> GFA (except for dwelling houses and multi-unit housing) provide bicycle parking equivalent to 10% of the required car spaces or part thereof.*

Based on the above, 68 bicycle spaces are required to be provided. 60 bicycle spaces and 94 motorcycle spaces have been provided. The proposal is short of the required bicycle space by 8 spaces however there are sufficient motorcycle spaces to convert some to bicycle spaces. Note: The DCP does not stipulate a numerical requirement for motorcycle parking however the development is proposing to provide 108 motorcycle spaces which is more than sufficient to cater for the proposed development. Accordingly **Condition 1(a)** has been imposed requiring a minimum of 68 bicycle spaces. **Condition 209** has also been imposed requiring a maximum of 68 motorcycle spaces to be provided.

#### **Section 94 Development Contributions Plan 2007**

As part of the offer to enter into a VPA, Section 94 is excluded.

### **9. LIKELY IMPACTS OF THE DEVELOPMENT**

Most of the impacts associated with the proposed development have already been addressed in the report. The additional impacts associated with the development or those requiring further consideration are discussed below.

#### **Access and Traffic**

The application was accompanied by a Traffic and Parking Report prepared by Traffix. Council's Traffic and Development Engineer has raised no objections with regard to traffic. See full discussion under "Comments from Council Departments", Section 10 of the report.

Accordingly, from a traffic perspective the development will not result in any unacceptable traffic implications to the road network.

#### **Overshadowing and Solar Access**

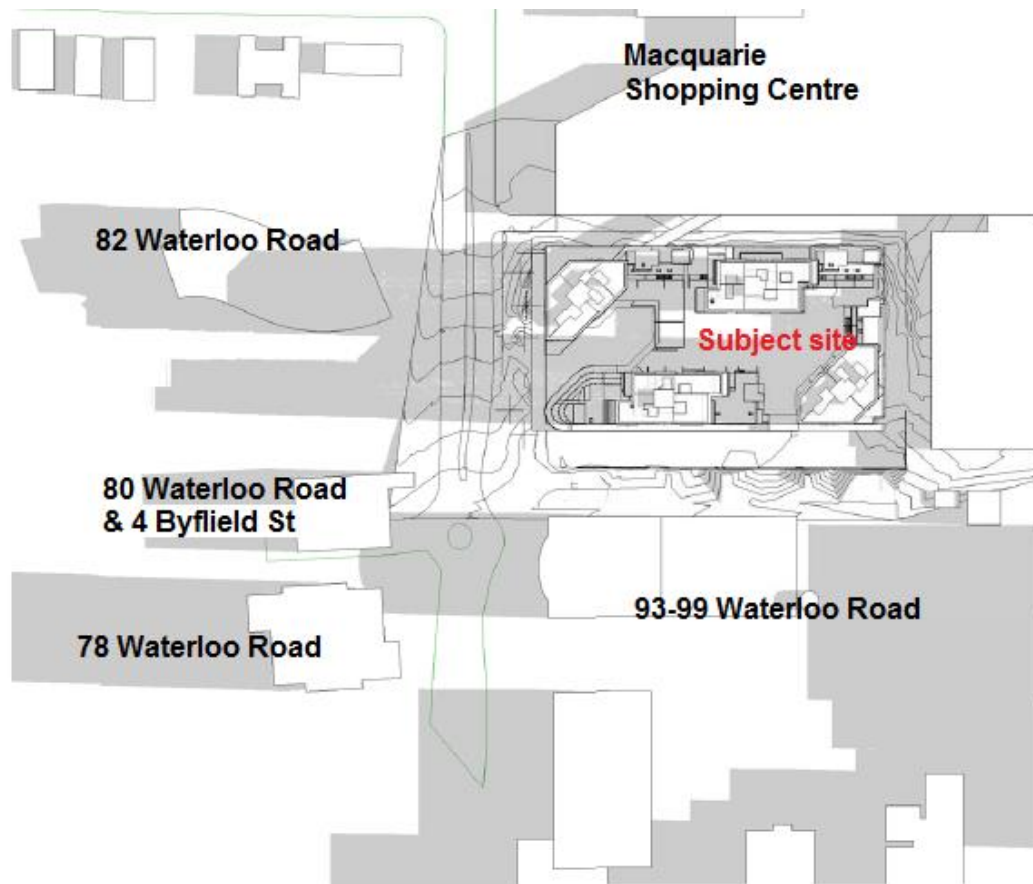
The extent of overshadowing is an important consideration in terms of amenity to the proposed development as well as adjoining developments.

The overall development complies with 70% of apartments receiving the required solar access as required by SEPP 65. The development will comply with the requirements of Council's codes and the SEPP 65 requirements in terms of providing acceptable amenity within the development.

The development is unlikely to result in any significant increase in overshadowing onto the surrounding residential buildings or open spaces. The subject site has a north south orientation with overshadowing occurring on the adjoining commercial property at 93-99 Waterloo Road which contains a 5 storey commercial building. Due to the orientation of the

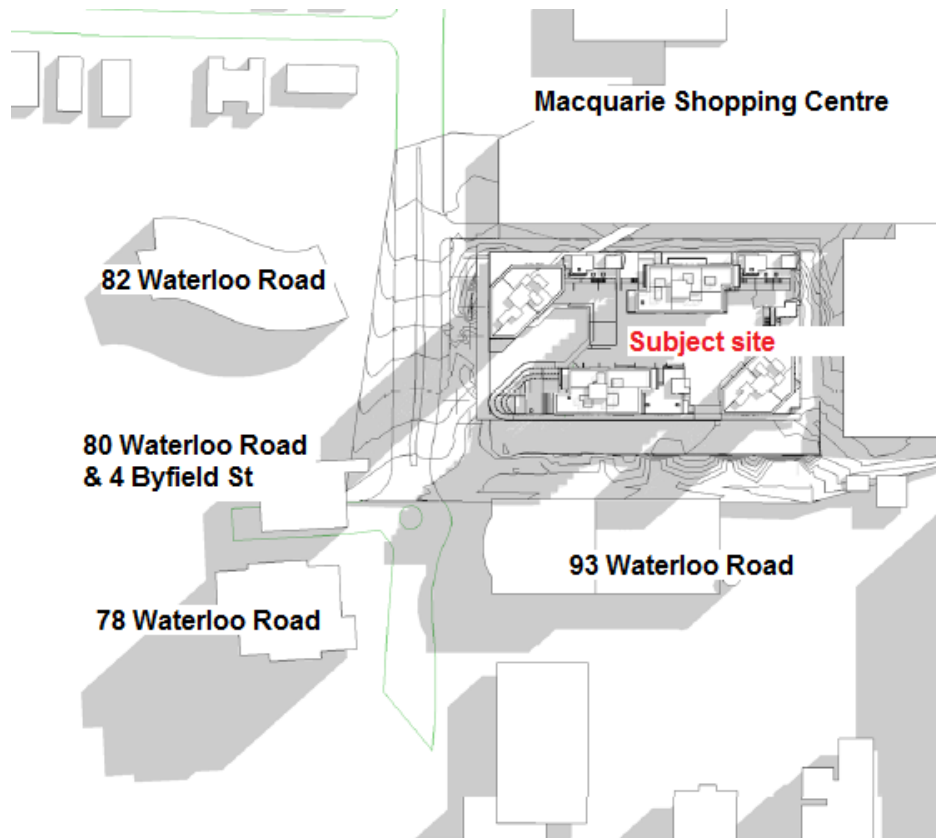
land, the adjoining building will receive the required solar access in the morning from 9am to 12 noon, thereby receiving 3 hours of solar access, see **Figure 34** below.

The properties opposite at 82 Waterloo Road and 80 Waterloo Road and 4 Byfield Street currently have applications in with Council for 20 storey residential flat buildings. These properties will be partially overshadowed in the morning from 9am to 12 noon. From 12 noon onwards, the proposal will have minimal overshadowing impact to these properties. See **Figures 34 to 36**.



21 June 900 am

**Figure 34: Shadow diagrams and impact to adjoining properties at 9am.**



21 June 12 noon

Figure 33: Shadow impact at 12 noon.



21 June 3pm

Figure 34: Shadow impact at 3pm.



### Construction Impacts

Construction impacts are controlled by Part 8.1 of the Ryde DCP 2014. Council's standard conditions of consent have been imposed to control the impact of the construction activities. Similar to any major redevelopment work, some level of inconvenience/impact may result once the construction commences. However, to address the issue and to minimise traffic impact, a Construction Traffic Management Plan (CTMP) will be required to be submitted and approved by Council's Traffic and Development Engineer. See **Condition 99**.

### Public Domain

Council has a Public Domain Technical Manual that applies to Macquarie Park Corridor. This document specifies the landscaping, paving and street furniture required to be provided as part of an upgrade of the existing public domain. **Conditions 89 & 90** have been imposed to ensure that the public domain is upgraded as part of this development consent.

### Acoustic Impacts

The proposed application is a mixed use development comprising commercial use and residential apartments adjacent to a major shopping centre. Any future residential use must be provided with reasonable levels of acoustic amenity and the operation of the existing Macquarie Shopping Centre should be considered.

The application was submitted with Acoustic Reports prepared by EMM. These reports outlined the internal and external noise criteria that should be adopted. Macquarie Shopping Centre engaged their own acoustic consultant – Acoustic Logic who raised concerns about EMM's reports and stated their own recommendation for internal and external noise criteria. Consequently, Council engaged an independent Acoustic Consultant – GHD to review each of the consultant acoustic reports as well as Council's Environmental Health assessment and to provide recommendations for appropriate noise levels criteria. The findings of GHD are included as **ATTACHMENT 3**.

		EMM Consultants (applicant)	Acoustic Logic (Macquarie Shopping Centre)	City of Ryde Environmental Health
Proposed internal noise criteria	7 am to 10 pm	40 dBA Leq for sleeping and living areas	40 dBA Leq(15 min) for sleeping and living areas	acceptable levels in AS 2107
	10 pm to 7 am	35 dBA Leq for sleeping and living areas	35 dBA Leq(15 min) and 50 dBA L1 (1 min) for sleeping and living areas	acceptable levels in AS 2107
Proposed external noise criteria	7 am to 6 pm	62 dBA Leq (7 am to 6 pm)	60 dBA Leq (7 am to 6 pm)	65 dBA Leq(7am to 6 pm)
	6 pm to 10 pm	57 dBA Leq (6 pm to 10 pm)	55 dBA Leq (6 pm to 10 pm)	55 dBA Leq(7am to 6 pm)

**Figure 35: Proposed internal and external noise criteria as recommended by each stakeholder and Council.**

Figure 35 illustrates the noise criteria recommended by the applicant, Macquarie Shopping Centre and City of Ryde Environmental Health Officer.

A summary of GHD findings is as follow:

*“Guidance provided by the Industrial Noise Policy (INP) is considered appropriate for consideration in land use planning for new residential developments near existing industrial noise sources (in this case, commercial premises). Council’s Environmental Health Officer letter (14 June 2017) recommends that the application of the ‘Urban/Industrial Interface’ INP receiver category for external areas (Acceptable 65 dBA LAeq(day) and 55 dBA Leq(evening)). The INP Application notes provide commentary on when to apply the urban/industrial interface criteria and states that it should only be used for existing receivers, which the proposed residential development is not:*

*With this in mind, the ‘urban’ receiver category is considered a more appropriate criteria for residential apartments in a business/mixed use zone. The ‘urban’ category has an acceptable amenity criteria of 60 dBA LAeq(day) and 50 dBA Leq(evening). The recommended maximum amenity criteria for this category is 65 dBA Leq(day) and 55 dBA Leq evening). Section 2.2 of the INP states:*

*‘Meeting the acceptable noise levels in Table 2.1 will protect against noise impacts such as speech interference, community annoyance and, to some extent, sleep disturbance. These levels represent current best practice for assessing industrial noise sources, based on research and a review of assessment practices used overseas and within Australia.’*

*and;*

*‘recommended maximum values provide guidance on an upper limit to the level of noise from industry. In all cases it is expected that all feasible and reasonable mitigation measures would be applied before the recommended maximum noise levels are referenced’.*

*Based on these two statements in the INP the acceptable amenity criteria should be considered in the first instance, and the recommended maximum amenity criteria should only be considered after all feasible and reasonable mitigation measures have been applied. Based on the information supplied by the proponent there is no evidence to confirm all feasible and reasonable mitigation measures have been considered. It is GHD’s opinion that the acceptable amenity criteria are appropriate unless it can be demonstrated to the satisfaction of Council that all feasible and reasonable mitigation measures have been investigated.*

*The amenity criteria is 10 dBA lower during the evening period than the day period. This is because, ‘The community generally expects greater control of noise during the more sensitive evening and night-time periods than the less sensitive daytime period.’ (INP Application notes (version 12 June 2013)). The INP provides external criteria at residential receivers to preserve amenity at residential premises and does not specifically refer to either indoor or outdoor areas. However, it is GHD’s opinion that the intention of setting the evening criteria 10 dBA below the daytime criteria is not to protect amenity in outdoor areas, but rather amenity in indoor living areas, more commonly used during the evening period. There is no reason why the occupants of an external area (such as a balcony or courtyard) would be more sensitive to noise during the evening period than the daytime period, and one could argue that use of the outdoor area could be higher during the day-time period. As such it is recommended that the daytime amenity criteria are adopted for the external areas during the evening period. Keeping in mind the amenity of the internal areas (living rooms and bedrooms) would be maintained through applying the internal noise limits, and the implemented noise mitigation, agreed by both parties.*

*It is worth noting that other NSW noise guidelines (including the Road Noise Policy (DECCW, 2011), Rail Infrastructure Noise Guideline (EPA, 2013) and Development Near Rail Corridors and Busy Roads (DoP 2008)) do not differentiate between the day-time and evening period and consider the day-time period as 7 am to 10 pm.*

*The INP amenity criteria assessment period is the average Leq noise level over the day-time and evening periods. As such it is recommended that these time periods are maintained for averaging. This is to prevent the potential for higher noise levels in the day above 60 dBA being offset by lower noise levels in the evening period. Therefore, the consent conditions for external areas (such as balconies or courtyards) are recommended to be set so that the noise level from Macquarie Shopping Centre does not exceed the following:*

- 60 dBA Leq (7am to 6pm)
- 60 dBA Leq (6pm to 10pm).

*The INP also provides the intrusive criteria which is background plus 5 dBA. The background noise environment is likely to change with the new residential development. GHD consider the amenity as more appropriate for establishing external noise criteria for new residential developments along with internal noise criteria to prevent intrusive noise impacts.*

The internal noise criteria are not disputed between the two parties. The proposed external noise criteria as recommended by GHD is discussed above and Council's Environmental Health Officer has advised that the *"approach taken by GHD is considered a compromise between all parties and the various noise guidelines. It does give amenity levels that are still similar to the consultants and Council and a clearer indication for the design of acoustic control measures in the development to achieve the target noise goals. As such the recommendation has been incorporated into the conditions"*.

Accordingly, recommended noise conditions have been imposed, see **Conditions 66 to 70, 167 & 214.**

## **10. COMMENTS FROM COUNCIL DEPARTMENTS**

### Internal Referrals:

**Senior Coordinator - Development Engineering Services: 26 June 2017:** Council's Senior Coordinator Development Engineering Services has made the following comments:

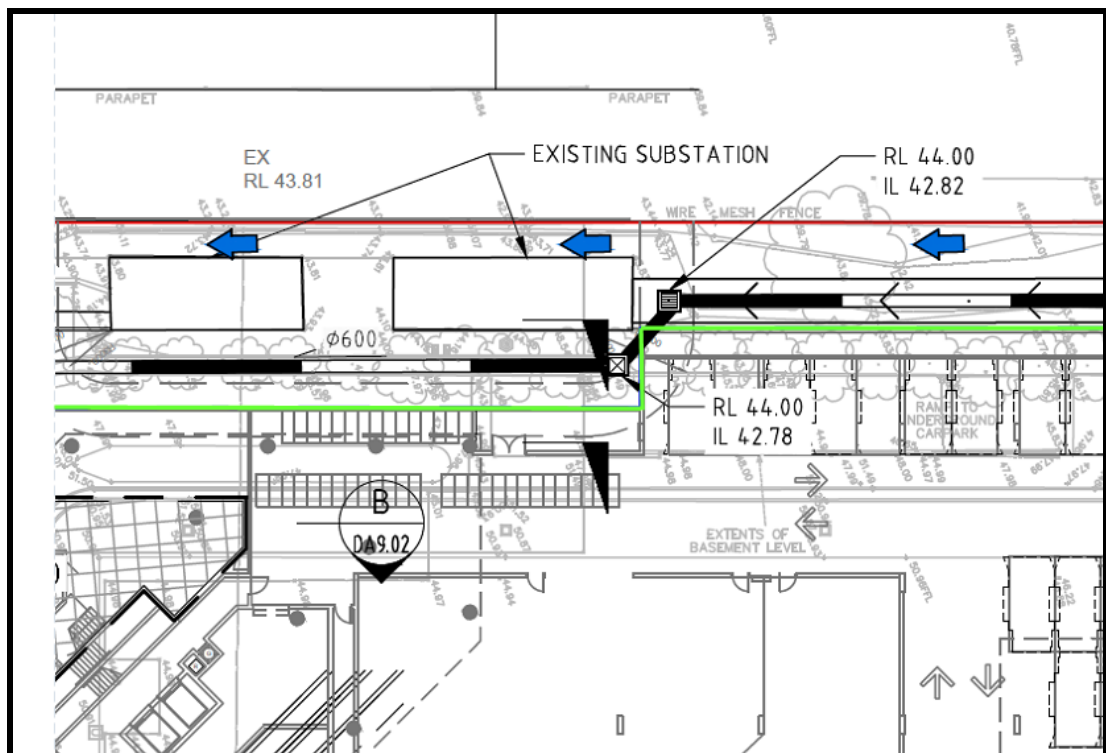
*The applicant's civil consultant, Northrop Consulting Engineers has provided correspondence dated 6th April 2017 in response to Council's concerns. The consultant has referred to the comments from the previous Development Engineering Assessment report which recommended that Council's City Works and Infrastructure – Stormwater section be consulted in relation to the proposed point of discharge (currently Waterloo Road). The consultant has misinterpreted this to imply that Council's preferred drainage system is to discharge stormwater runoff back to Waterloo Road. This is not the case and confusingly, neither the report or the comments quoted by the consultant specify this.*

*As per the objectives of the DCP Part 8.2 (Stormwater and Floodplain Management), the development warrants that stormwater runoff be directed with the fall of the land. This would warrant drainage through the Macquarie Centre site (AMP) to discharge to engineered drainage channel aligned with the former path of Shrimpton Creek, running through the basement parking level of the Centre.*

Whilst AMP do not wish the applicant to drain through their site, the lot already accommodates public drainage infrastructure and an easement which extend from the trunk drainage line (previously Shrimptons Creek) to some 5m from the subject development site. The easement is noted to commence from the base of a public ROC which appears to have been dedicated to Council as a result of future development of the AMP lot. A new drainage easement would need to be established from the subject development site to legally discharge to the existing easement.

Council is aware that the public drainage infrastructure in the AMP site has a finite capacity to accommodate stormwater runoff, the easement is not suited to accommodate a defined overland flow path and there is limited ability to expand the capacity of this drainage infrastructure. Accordingly the level of runoff to be directed to this point of discharge should be mindful of this.

With regards to the proposed system and revised plans, the expansion of the basement footprint has exacerbated the issues associated with the proposed drainage line alignment around the substation, with the plans now depicting the drainage line to divert around the substation. The alignment now extends through the ventilation plenum of the parking area and appears to adjoin the footing of the substation (refer to figure below).



**Figure 35: Existing substation and proposed drainage line.**

The proposed arrangement is not supported as;

- The drainage line is sandwiched between the building footprint and the substation and therefore will be very difficult should any further maintenance of the drainage line be required.
- The proposed installation of the line or future maintenance will unlikely be supported by AusGrid as it will impose on the integrity of their infrastructure. The applicant has advised that AusGrid will not support the easement in the vicinity of their infrastructure.
- Whilst Council would be prepared to give concession to a reduced easement width, the width is grossly insufficient and would be ineffective for the purpose of ensuring adequate access to the drainage line could be provided.

- The revised architectural plans have provided extensive structures (suspended deck and pedestrian path to the Macquarie Centre) over the region of the easement in the vicinity of the substation. Council's DCP does not permit such extensive development over an easement.

It is advised that;

- Stormwater runoff from the future road dedication be directed to the easement in the AMP site. This will require the extension of the existing easement to the development site. The establishment of the easement over the AMP lot will warrant a condition of deferred commencement for the applicant to acquire this.
- The proposed extension of a trunk drainage line (and subsequent easement) along the western boundary is to be deleted.
- Mindful that the infrastructure through the AMP site is of finite capacity and is to accommodate stormwater runoff from future development and related road network in the upstream catchment, the proposed discharge of the developments private drainage system to Waterloo Road is accepted.

### Vehicle Access and Parking

The revised development has not reconfigured the residential component and so the parking demand of this aspect is summarised as follows;

<b>Unit Type</b>	<b>Quantity</b>	<b>Maximum Resident.</b>	<b>Visitor</b>	<b>Bicycle</b>
1 Bedroom	177	106.2		
2 Bedroom	447	402.3		
3 Bedroom	56	78.4		
<b>TOTALS</b>	<b>680</b>	<b>586.9</b>	<b>68</b>	<b>58.69</b>
		(587)	(68)	(59)

The revised plans have provided 587 resident parking spaces (including 68 adaptable), 68 visitor spaces (including 1 disabled) and 60 bicycle spaces thereby complying with the DCP.

In regards to the commercial component, the applicants Planning Consultant has advised the commercial component has now been reduced to 1674m<sup>2</sup>. The original assessment is noted to have utilised the rates deduced from the LEP maps which specified a maximum parking rate of 1 parking space per 80m<sup>2</sup>.

The original assessment made the following notes in regards to the design of the parking area and these are reviewed in light of the revised plans;

- The proposed adaptable spaces have been based on AS 4299 (Adaptable Housing) which warrant a 3.8 metre space be provided. This is in contrast to AS 2890.6 (Disabled Parking) which warrants a space width of 2.4 m plus an adjoining shared space of 2.4 m. Given that AS 2890.6 represents a more recent standard, it is desirable these standards be implemented. The proposed basement layout provides ample opportunities where shared spaces could be located (most of the disabled parking spaces are noted to adjoining clear areas). Accordingly would be appropriate to apply a condition of consent warranting that at least 85% of the adaptable spaces be compliant with AS 2890.6.

*The applicant has provided 39 of the 68 adaptable parking spaces to be compliant with AS 2890.6. Whilst this is not as high as the proportion suggested, it is accepted on the basis the majority of spaces are compliant with the conservative Standard and there is no real guidance or requirements from Australian Standard governing the contradiction.*

- The southern end of Basement 1 parking area is located under the Plaza. The plans note this section is to have limited headroom. A review of the proposed levels notes that the floor of the basement to the finished surface level of the Plaza is nominated to be a 3 meter difference. As such it is doubtful whether the circulation aisles in this region can attain a 2.2 m height clearance as required by AS 2890.1. Whilst the applicant's traffic report has specified that all parking areas are to have a minimum clear height of 2.2 m high, clarification is warranted regarding the low headroom marking on the architectural plan.*

*The applicant has simply noted on the plans the requirement for 2.2m clearance. This is a very poor outcome for design however is still compliant with the Australian Standard.*

*A condition requiring this to be confirmed on the CC plans, as well as height warning bars installed on access aisles approaching this area, is to be applied.*

- The lower basement levels have a series of one-way aisles on the northern side of the basement parking area. One of these one-way aisles leads to the westernmost aisle which creates a dead end for northbound traffic in the westernmost aisle. Considering the one-way aisle is of sufficient width for two-way traffic this should be readily altered for two-way flow and can be addressed by condition of consent.*

*This has been addressed.*

- It is noted the ground floor parking area provides a mixture of retail and visitor parking. The arrangement is such that either parking areas may be utilised by the alternate drivers (i.e. retail parkers may elect to use visitor spaces and vice versa). It is therefore warranted that the visitor spaces be segregated from the retail parking. This could be achieved by locating the visitor parking area in the westernmost section of the basement garage, potentially having a one-way loop from the entry point, turning left and proceeding in a clockwise manner through the parking area. Due to the extent of the reconfiguration of parking, revised plans will be warranted before prior to consent.*

*The applicants Traffic Consultant has simply responded that the parking spaces will be labelled accordingly and will prevent the misuse of the visitor spaces.*

*In review of the original Traffic report, the consultant has specified a boom gate with license recognition will control entry to the basement. A condition requiring the system to be configured to restrict public vehicles unless authorised by telecom is therefore recommended and would address this.*

### *Recommendation*

*There are no objections to the proposed development with respect to the engineering components, subject to deferred commencement and conditions being applied to any development consent being issued for the proposed development. **See Conditions 99, 100, 101 to 106.***



## City Works and Infrastructure – Public Works: 30 June 2017

**Traffic Engineer:** Council's Traffic Engineer has reviewed the proposal and has made the following comments: *The site proposed to install a new access through the Macquarie Shopping Centre access Road off Talavera Road. This will provide a new vital link from Waterloo Road to Talavera Road hence completing a section of Council's Fine Grain Road Network in accordance with the DCP.*

*The Development intends to introduce 688 parking spaces within the basement levels. This is based on the maximum allowed in accordance with the DCP and is deemed compliant.*

*Not considering any discounts applicable under the 'Macquarie Park Traffic Impact Assessment' guidelines, the site is anticipating to produce a net increase to the local network of 30 vehicles in the PM peak hour. A reduction of 10 vehicles in the AM peak hour is expected compared to the existing use. This is deemed satisfactory and traffic impact on the existing road network would be minor. With the additional access being provided to Talavera Road, the traffic distribution will be divided more effectively across the network.*

*Contact with RMS has revealed that the access to the site from Waterloo Road will be permitted as left in/left out in the interim, until such time as the link through to Talavera Road is complete. At that time the access from Waterloo Road will be restricted to Left in only.*

No objections subject to **Conditions 54, 90, 95 & 99.**

**Waste:** Council's Waste Officer has reviewed the proposal and has advised: *The waste truck will enter via the new road and will need to liaise with the Loading Dock Manager (LDM) for access. Waste and recycle trucks will need to enter the building on 4 of the 5 days.*

*A bulky waste storage area has been provided and the Building Manager will be responsible for booking the cleanup when required.*

*A swept path has been provided for a 10.5 metre truck, however the waste trucks are actually 10.6m. This will need to be re-evaluated. Please see Traffic conditions regarding 11m swept path diagrams to be submitted prior to Construction Certificate. **Condition 95** has been imposed requiring swept path for a 11m truck to be provided and general waste **Condition 112.***

**Public Domain:** From a Public Domain perspective there are no objections to approval of this application subject to conditions. See **Conditions 89 & 90.**

**Drainage Engineer:** The stormwater plans are to be revised and submitted for Council's approval. This has been imposed as a Deferred Commencement condition. See **Condition (A) 2.**

**Environmental Health Officer: 3 July 2017:** Council's Environmental Health Officer has reviewed the proposal and has made the following comments:

*The application was accompanied by a preliminary site investigation report, STS GeoEnvironmental Pty Ltd, Preliminary Site Investigation, 101 Waterloo Road, Macquarie Park, Report number 15/2575, Project No. 20546/5985C, September 2015 (D16/158699). Sampling conducted for this study showed no issues of concern. Additionally, no concerns were found with an existing underground petroleum storage tank although it was*

*recommended that this tank be removed during the development. The investigation concluded that the site was suitable for the proposed development.*

*Noise emissions from the site once operational will most likely come from plant and equipment, waste servicing and possibly activities associated with the retail tenancies. Plant and equipment if properly selected, installed and managed should not cause any issues. The Holiday Inn and future closer residential developments are more likely to be impacted by noise from the operation of the shopping centre than this development. Noise transmission through the building from the loading dock waste collection should be considered particularly as it may occur during normal sleeping hours.*

*Noise impact on the site from the adjacent shopping centre has been considered by consultants for both the developer and the shopping centre. See separate Environmental Health report which summarises that process (D17/80592). The main point of contention is the noise impact on the external areas of the development such as balconies as there is no definitive guidance for the noise amenity in these areas. As a result, Council commissioned a separate independent review by consultants GHD. See report, GHD, DA2016/567 – 101-107 Waterloo Rd Macquarie Park – Peer review and advice, 26 June 2017, (D17/85832), which considered all the consultant reports as well as Council's Environmental Health assessment.*

*The recommendation of this review, which included suggested conditions of consent, was that for the internal areas the design noise levels should be 35 dB(A) Leq(15 min) in sleeping areas between 10pm and 7am, 40 dB(A) in other habitable rooms at any time and a sleep disturbance of 50 dB(A) L1(1 min) in sleeping areas between 7am and 10pm. This is essentially the same as Council's requirement to use the internal levels in AS2107. Additionally, these levels had been agreed between the consultants for the proponent and the shopping centre.*

*The external amenity levels were recommended to be 60 dB(A) Leq (15hr) between 7am and 6pm and 60 dB(A) Leq (4hr) between 6pm and 10pm. This level is based on the "urban" amenity criteria in the NSW EPA Industrial Noise Policy (INP). Here GHD has taken a different point of view to the other consultants and Council by recommending the same level through both a day and evening period (differing from the amenity levels in the INP). They argue that that the balconies could well be used more during the day and that various planning guidelines for road traffic treat the time from 7am to 10pm as a single daytime period. However, they have stipulated that the measurement periods are maintained as day and evening periods as used in the INP to ensure that any noise reduction that might occur in an evening period doesn't offset a higher noise environment during the day.*

*This approach could be considered a compromise between all the parties and also the various noise planning guidelines. It does give amenity levels that are still similar to the consultants and Council and a clearer indication for the design of acoustic control measures in the development to achieve the target noise goals. As such the recommendation has been incorporated into the conditions.*

*A submission from the Holiday Inn in Byfield Street, regarding the noise from both the development and operational stage of the development, highlighted their concern about disturbance to their guests. They wish to see a construction noise management plan (including vibration) be developed and implemented. Also, they are concerned that the location where the noise measurements were taken for the applicant's report may not be representative of the noise environment adjacent to the Holiday Inn's boundary, which they consider to be quieter and that any noise management plan developed from the higher measured noise levels will not provide adequate protection for the Holiday Inn.*

*Additionally, they request that the construction is restricted to the standard work hours in the EPA's Interim Construction Noise Guidelines which are:*

*Between 7.00am – 6.00pm Monday to Friday; Between 8.00am – 1.00pm Saturdays; and no work Sunday or Public Holidays.*

*These are different to Council's standard work times which allow slightly longer hours. It may be difficult to restrict this site specifically more than Council's standard hours as many similar sites in the area would be working to these hours. Though it would be prudent to prohibit work outside of Council's work times without providing justification and seeking approval.*

*GHD in their independent review considered that Holiday Inn would be considered a commercial site for the purposes of standard daytime work hours and be set a limit of 70 dB(A). But should be considered as a residential site should any work happen outside those times, particularly at night when most guests will have returned to the hotel and be trying to sleep.*

*For consistency for all the new sites in this area and those around the Holiday Inn it is recommended that the standard conditions for noise, dust and sediment, as reviewed below, be included. The only additional inclusion is a general condition for the Holiday Inn to be considered as a residential premise for any construction work outside of standard hours.*

**Conditions 44 to 46, 66 to 70 & 74** have been imposed with regard to noise, dust, sediment control and remediation of the site.

**Community Planner: 9 December 2016:** Council's Senior Community Planner has reviewed the submitted Public Art Plan and has advised that The Art Plan (Revision 1) requires further design details to be submitted prior to the issue of the Construction Certificate. **Condition 62** has been imposed requiring this.

**Sustainability: May 2017:** Council's Senior Sustainability Co-ordinator has reviewed the submitted Framework Travel Plan and has advised that further information is required to the FTP and this has been conditioned accordingly. **See Condition 169.**

#### External Referrals:

**Consultant Landscape Architect: 4 April 2017:** Council's Consultant Landscape Architect has reviewed the proposed landscaping for the site and has advised: "Tree removal / retention has been supported given the land-use zoning of the site, existing trees being planted specimens of generally low-moderate retention value and the new landscape scheme proposed providing canopy trees across the site where possible as compensation for those to be removed. I note a suite of detailed protection conditions have been recommended to be imposed as part of any consent granted to ensure retained trees are appropriately protected from any construction related impacts.

*In terms of the treatment of levels to the Waterloo Road frontage, the visual impact is considered acceptable providing a more connected and useable space that is far less visually obtrusive when compared to the current arrangements on site. With regards to the western boundary, some form of retaining must be provided along this edge and a condition be imposed that provides retaining wall systems be included on the plans for Construction Certificate.*

*With regard to the proposed landscaping, the scheme is considered to be of a high quality providing well-considered and useable public spaces, communal open spaces and private open spaces. As such, no issues have been raised in relation to the proposed landscape scheme. Conditions have been recommended in relation to provision of lighting and irrigation."*

*Based on the plans submitted, the primary design changes related to the landscape and open space arrangements occur to the public domain Waterloo Road frontage whereby efforts have been made to reduce the extent of stairs and grade changes leading to the central retail plaza so as to improve sightlines and promote ease of access along key desire lines. As such, the stairs of the three (3) key pedestrian entries from Waterloo Road have been reduced, removed or reconfigured resulting in improved access which is more inviting and likely to draw pedestrians from Waterloo Road towards the retail precinct. Accordingly, the amendments to the entries and stair and gradient configurations are supported.*

*In addition to the modification of the entries, the layout and orientation of the lawn terraces have been modified to provide more useable open space areas which are more functional and aligned so as to activate the spaces. The terraces have now been aligned to enable both an inward and outward outlook with reduced heights so as to promote use as seating. In addition the alignments provide more simplified spaces with better wayfinding which directs pedestrians into the site. As such, these amendments are considered to satisfactorily address JRPP concerns relating to poor geometry of terraces and seating to this area.*

*Within the central communal open space for residents of the development, changes proposed are limited to the undercroft area associated with Tower A. Concerns were raised by JRPP in relation to the large expanse of dead space and lack of functionality for residents. Based on the revised plans submitted, the design now includes a number of amusement/activity tables including table tennis and foosball. Additionally, the minor changes to the building layout has result in amended paved areas and raised landscape planters. This is considered acceptable and satisfactorily activates the existing space.*

**See Conditions 40, 51, 52, 108 to 110 & 140 to 151**

**Roads & Maritime Services: 27 March 2016:** In accordance with Schedule 3 of the State Environmental Planning Policy (Infrastructure) 2007 the proposal was referred to RMS.

RMS requested a strip of land in Waterloo Road fronting the subject site as RMS intend to upgrade traffic signals at the intersection of Byfield Street and Waterloo Road. The applicant has agreed to the future road widening and this has been indicated on the plans (proposed land acquisition area to RMS)<sup>1</sup>. RMS also advised that due to the close proximity the access will have to the proposed traffic signals at the intersection of Waterloo Rd & Byfield Street they would not support the left turn out access onto Waterloo Road. RMS suggested that all vehicular exit be from Talavera Road via the new road at the other end of the road that intersects with Talavera Road (Macquarie Shopping Centre site).

However RMS was advised that this road is currently in private ownership and would need to be dedicated to Council before the two roads can be connected. There is a Deed of Agreement between Council and AMP in respect of this road. Dedication is only to occur once the adjoining development at Talavera Road (known as 10-14 Khartoum Road) is redeveloped. The time frame for this occurring is uncertain and it may be some time before this occurs. The only exit for 101-107 Waterloo Road is via Waterloo Road, as per the current arrangement. Therefore RMS's requirement that no left hand access onto Waterloo Road effectively mean that the subject site will have no vehicular exit. This has been

discussed with RMS and RMS have agreed to allow temporary left-in & left out access off Waterloo Road until the access road is connected to Talavera Road. RMS **Conditions 7, 8, 9 & 173** have been imposed.

Note: \*1 RMS has advised that it is not necessary to dedicate the strip of land in front of Waterloo Road. RMS will acquire the land when future road works are proposed.

**NSW Police: 21 June 2017:** NSW Police have raised no objections to the development however they have provided comments and recommendations with regard to:

- Surveillance
- Landscaping
- Lighting
- Territorial Re-enforcement
- Environmental Maintenance
- Landscaping
- Access Control
- Other matters

Generally, the proposed development is capable of addressing each of the above criteria in an acceptable manner and conditions have been imposed as recommended. See **Conditions 64 & 185 to 192.**

**Sydney Trains:** In accordance with Clause 86(1) of the SEPP (Infrastructure) 2007, the proposal was referred to Sydney Trains. Sydney Trains has reviewed the proposal and has *grant its concurrence to the development proposed in Development Application LDA2016/0567 subject to Council imposing the deferred commencement condition provided and operational conditions that will need to be complied with upon satisfaction of the deferred commencement condition.*

*Should Council choose not to impose the deferred commencement condition in Attachment A and the operational conditions provided in Attachment B (as written), then concurrence from Sydney Trains has not been granted to the proposed development. See **Conditions (A) 3, 25 to 28, 77 to 84 & 164.***

**Ausgrid: 31 March 2017:** In accordance with Clause 45(2) of the SEPP (Infrastructure) 2007, the proposal was referred to Ausgrid as two electrical substations are located adjacent to the boundary's northern boundary. Ausgrid has advised *"Ausgrid requires that due consideration be given to the compatibility of proposed development with existing Ausgrid infrastructure, particularly in relation to risks of electrocution, fire risks, Electric & Magnetic Fields (EMFs), noise, visual amenity and other matters that may impact on Ausgrid or the development. With regard to: Demolition of existing structures and construction of four mixed use, multi storey towers at 101-107 Waterloo Rd, Macquarie Park, Ausgrid consents to the above mentioned development subject to conditions"* **Conditions 21 to 24** have been imposed as required.

**Council's Consultant Geotechnical Engineer: 26 May 2017:** The subject site is within a slope instability area and a geotechnical report was submitted with the application. The proposal was referred to Council's Consultant- Structural Engineer – Cardno P/L who advised: *Amended drawings S01.01C, S01.02C, S01.03B and S01.04B were recently received from ABC consultants and Cardno confirms that these drawings are assessed as complying with the recommendations of Douglas Partners Geotechnical Engineers.*

*Should Council's officers decide to approve this application, then Cardno recommend that such approval be conditional requiring that all design and construction works be carried out*

*in strict compliance with all of the recommendations in the various Douglas Partners reports prepared for this project. See **Condition 73**.*

## **11. PUBLIC NOTIFICATION & SUBMISSION**

In accordance with DCP 2014 Part 2.1 Notice of Development Applications, the proposal was advertised in the Northern District Times on 25 January 2017 and owners of surrounding properties were given until 15 February 2017 to make a submission. In response, two submissions were received. The two submissions were from the adjoining northern property – Macquarie Shopping Centre (AMP) and from Landerer & Company on behalf of Pro-Invest Australian Hospitality (Holiday Inn Express at 10 Byfield Street).

The submissions raised the following issues:

### AMP:

*The key matters we wish to bring to Council's attention with this development application are:*

- Acoustic Privacy - The impact of the noise emissions generated by Macquarie Centre will have on the future occupants of the proposed residential buildings. AMP want to ensure that future residents can achieve acoustic privacy and an acceptable level of amenity for all parts of the building including balconies:*
- Ensuring that the proposed development has considered the approved Stage 1 DA building envelope for Macquarie Centre and the potential implications on solar access and visual amenity.*

### Planner's Comment

AMP engaged an acoustic consultant - Acoustic Logic to undertake a detailed peer review of the acoustic assessment by EMM which was submitted with the application. A Peer review of the two acoustic reports was undertaken by an independent assessor – GHD P/L who has provided conditions with regard to noise criteria. See **Conditions 66 to 70**. The acoustic impact of the development is discussed above under Section 9 of the report.

With regard to the approved Stage 1 DA for Macquarie Shopping Centre and the impact of the approved development on the subject site, the applicant has advised solar diagrams submitted 2 June 2017 were modelled including the AMP Stage 1 podium height which will result in 70.3% compliance. However when considering the AMP Stage 1 podium and the Stage 1 Towers massing, the proposal will result in 67.5% (459 out of 680) apartments achieving the required solar requirement. Given that the AMP development is concept only and the massing of the towers may be altered and even if they were not altered, the proposed variation being 2.5% is relatively minor.

### Landerer & Company (Holiday Inn Express)

- Noise, vibration and dust impact to the hotel during construction.*
- Cumulative impact on the hotel from multiple concurrent DAs occurring near the site. Request a Draft Construction Traffic Management Plan with consultation with hotel to ensure noise and safety issues are properly managed.*
- Parking, site access and traffic impacts*
- Management of noise during construction and operation. – without proper management of demolition and construction impacts the hotel may suffer. Recommend preparation of a construction noise and vibration plan prior to any approval The plan should mandate standard EPA hours to protect amenity of hotel occupants.*



- *Request that the construction hours be restricted to the EPA's Interim Construction Noise Guidelines – 7.00am to 6.00pm Monday to Friday, 8.00am – 1.00pm Saturdays and no works Sunday and public holidays.*

#### Planner's Comment

Holiday Inn Express engaged Wilkinson Murray (Acoustic and Air Consultants) to provide comments with regards to noise, vibration and dust impact to their property from the proposed development.

The following issues are raised in the report by Wilkinson Murray:

- *Background noise levels for the assessment of construction and operational noise emission are based on monitoring conducted at the proposal site. Wilkinson Murray has conducted noise monitoring which suggests that background noise levels at the HIEX site are lower than those measured at site of the proposed*
- *Construction noise management levels and project specific operational noise criteria should be based on these measured background noise levels*
- *The HIEX should be considered a residential premises for the purposes of the construction and operational noise assessment*
- *Appropriate mitigation should be incorporated to achieve the relevant acoustic criteria*

Council's Independent Acoustic Consultant – GHD reviewed the comments by Wilkinson Murray and has advised:

*The Interim Construction Noise Guideline (DECC, 2009) provides guidance on the assessment of noise emission from proposed construction activities. This guideline does not provide guidance on the classification of hotels or motels such as the Holiday Inn Express. As such it is recommended that the construction noise management level for commercial receivers of Leq(15min) 70 dBA be applied for construction noise during recommended standard construction hours.*

*However, GHD agrees that given the nature of the HIEX, it is considered appropriate to classify the hotel as a residential receiver for construction activities undertaken outside of recommended standard construction hours. It is recommended that for out of hours construction activities the background noise monitoring undertaken by Wilkinson Murray be applied as the measured location was on the HIEX site and considered more representative.*

#### Operational noise

*There is no guidance within the current Industrial Noise Policy relating to operational noise criteria from proposed development on hotels. However, the Draft Industrial Noise Guideline does provide the following guidance on suitable criteria for the assessment of noise on hotels.*

*Recommended amenity noise level - 5 dB(A) above the recommended amenity noise level for a residence for the relevant noise amenity area and time of day. For an urban area, the project amenity noise criteria at HIEX would be as follows:*

Receiver	Noise amenity area	Time of day	L <sub>Aeq</sub> , dB(A) Project <sup>1</sup> amenity noise level
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks	Urban	Day	60
		Evening	50
		Night	45

*GHD recommends that the above recommended amenity noise levels for the hotel would be suitable for the assessment of noise emission from the proposed development and could be included in the Conditions of Consent, if Council deems appropriate*

Noise protection conditions have been imposed **Condition 66 to 70 and Condition 214**.

**Condition 14** sets out the hours of operation. These hours are slightly longer than what is recommended by Holiday Inn, being 7.00pm rather than 6.00pm Mondays to Fridays and 4.00pm rather than 1.00pm Saturdays. It is difficult to restrict different hours of each individual site, especially given that other developments are working to Council's standard hours. The proposed hours set by Council provide for construction works to be completed sooner and are not outside normal business working hours.

In addition, construction impacts are controlled by Part 8.1 of the Ryde DCP 2014. Council's standard conditions of consent have been imposed to control the impact of the construction activities.

A Construction Management Plan has been submitted with the application however the plan is very preliminary and Council has imposed **Condition 99** requiring a Construction Traffic Management Plan (CTMP) to be submitted and approved by Council's Traffic and Development Engineer prior to the Construction Certificate. The CTM must specify construction truck routes and truck rates with truck routes to be distributed over the surrounding road network where possible. Construction trucks will not be permitted to utilise Byfield Street.

The requested Construction Noise and Vibration Management Plan is a standard requirement to be prepared as part of the detailed design prior to a Construction Certificate. **Condition 44** has been imposed requiring this. In addition **Condition 14** has been imposed regarding the construction hours – *Building activities (including demolition) may only be carried out between 7.00am and 7.00pm Monday to Friday (other than public holidays) and between 8.00am and 4.00pm on Saturday. No building activities are to be carried out at any time on a Sunday or a public holiday.*

## 12 **CONCLUSION**

After consideration of the development against section 79C of the Environmental Planning and Assessment Act 1979 and the relevant statutory and policy provisions, the proposal is considered suitable for the site and is in the public interest. The proposal provides an opportunity to redevelop the site with a mixed use building that is considered responsive to the strategic intentions of the Macquarie University Station Priority Precinct and Council's RLEP2014 and associated planning controls that have been adopted for the locality. The proposed development was amended as per the recommendations of the UDRP and with the impositions of the attached conditions the development will provide a high degree of

amenity for future occupants in terms of access to public transport, commercial uses and the shopping centre.

The application generally complies with the planning provisions. The issues raised in the submissions have been considered and have been adequately addressed throughout the assessment process. Refusal of the application is not warranted based on the reasons contained in the submissions.

In light of the above, it is recommended that the application be approved subject to conditions.

### **RECOMMENDATION:**

Pursuant to Section 80 of the Environmental Planning and Assessment Act, 1979 the following is recommended:

- a) That the Sydney North Planning Panel grant consent to development application LDA2016/567 at 101 – 107 Waterloo Road, Macquarie Park subject to the conditions of consent in **Attachment 1** of this report for Demolition of all buildings and structures on the site and construction of a mixed use development comprising:
  - Four towers with a total rise of 23 storeys including a shared two storey podium;
  - 1674.8m<sup>2</sup> of retail space;
  - 680 residential apartments including 177 x 1 bedroom, 447 x 2 bedroom, 49 x 3 bedroom and 7 x 4 bedroom apartments;
  - Two basement levels & two above ground levels of car parking for a total of 688 car parking spaces;
  - A new public road off Waterloo Road and site landscaping
- b) That the persons who made submissions be advised of this decision.
- c) That a copy of the development consent be forwarded to Sydney Trains, RMS and Ausgrid.

### **Report prepared by:**

Sandra McCarry  
Senior Town Planner

### **Report approved by:**

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Senior Co-ordinator  
Major Development

Vince Galletto  
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Liz Coad  
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