# Appendix B – Assessment of the Apartment Design Guide (ADG)

C – Is the development consistent with the Design Criteria? Y – Yes
G – Is the development consistent with the Design Guideline? N – No
O – Is the development consistent with the Objective? N/A or - – Not applicable

| ADG Reference | Clause | Design Criteria | C | G | O |
|---|---|---|---|---|---|
| **Part 3 Siting the Development** | | | | | |
| 3A Site Analysis | 3A-1 | A site analysis is prepared; refer to Sheet A02, prepared by Archidrome Architects | - | Y | Y |
| 3B Orientation | 3B-1 | The location of the RFBs are situated so as to maximise solar access to surrounding sites and public areas. | - | Y | Y |
| | 3B-2 | The location of the RFBs will not excessively overshadow allotments within the proposed subdivision and allotments within the adjoining site (i.e. formerly 41 Warriewood Road). | - | Y | Y |
| 3C Public domain interface | 3C-1 | Terrace apartments would provide direct ground-level access to the central communal areas. Balconies and internal living areas will overlook central areas. | - | Y | Y |
| | 3C-2 | The RFBs will not directly adjoin either road frontage, through their appearance would be softened from surrounding areas by strategic planting and landscaping around the site. | - | Y | Y |
| 3D Communal and public open space | 3D-1 | **Required communal open space:** Minimum 25% of the site area (1,762m$^2$, based on the super lot area of 7,048m$^2$)<br>**Proposed communal open space:** 1,359m$^2$, or 19.3% (inclusive of minimum dimensions)<br><br>Whilst the proposed does not provide a minimum 25% of communal open space, the space would consist of well designed, easily identifiable and predominately landscaped areas. The communal space is to be entirely located at ground level, will contain large deep soil areas and a range of amenities (including expansive landscaped areas, a swimming pool, outdoor seating and BBQ areas).<br><br>Further, the majority (i.e. 20 of the 34 units) would contain landscaped private open space areas that are well in excess of minimum requirements (refer to the individual assessments below). The site layout therefore enhances residential amenity and provides ample opportunities for residential recreation opportunities within well-designed landscaped areas. As such, the proposal would satisfy the objectives and relevant design guidance requirements, therefore the variation would be supportable.<br><br>Council is also reminded that with regard to Planning Circular PS 17-001, where the objectives and design guidance requirements of the ADG are met, the design criteria is not to be treated as a strict set of development standards. | N | Y | Y |

<table>
<tr><td></td><td></td><td>Required: Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June<br><br>Proposed: More than 50% of the communal open space receives direct solar access until after 12:00pm on June 21 (refer to submitted shadow plans).</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td></td><td>3D-2</td><td>A range of facilities (including open spaces, outdoor seating, BBQ facilities and a swimming pool) will be provided to enable a wide range of activities.</td><td>-</td><td>Y</td><td>Y</td></tr>
<tr><td></td><td>3D-3</td><td>Communal open space areas will be centrally located and will be capable of being observed from the living areas of most apartments.</td><td>-</td><td>Y</td><td>Y</td></tr>
<tr><td></td><td>3D-4</td><td></td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>3E Deep soil zones</td><td>3E-1</td><td>Required: Deep soil zones are to be at least 7% of the site area, with minimum dimensions of 6m (i.e. 490.28m$^2$, based on a site area of 7,004m$^2$)<br><br>Proposed: 1,358.59m$^2$ (i.e. 19.4%), inclusive of minimum dimensions.</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td>3F Visual privacy</td><td>3F-1</td><td>Required: Minimum required separation distances from buildings to side and rear boundaries are as follows:<br><br>
<table>
<tr><th>Building Height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr>
<tr><td>Up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr>
<tr><td>Up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr>
<tr><td>Over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr>
</table>
Note: While the height of the buildings technically exceed 12 metres under the PLEP 2014, they would be less than 12 metres if measured from the modified ground levels; the 12m height has therefore been adopted.<br><br>Proposed:<br>• Southeast boundary: 11 metres<br>• Northwest boundary: 9.1 metres<br>• Northeast boundary: Minimum 4 metres<br>• Southwest boundary: Minimum 8 metres<br>• Internal separation: 24.4 metres<br><br>As indicated above, most areas will significantly exceed minimum requirements. The only points of noncompliance occur on the northeast boundary and would affect Unit D10, the southeast section of Unit C10, part of the Unit C17 balcony and the balconies of Units D16 and D17. The minimum separation distance to the boundaries from Blocks C and D will be 4 and 4.1 metres respectively.<br><br>Despite the reduced distances, new Torrens-Title allotments (Torrens lots) to adjoin the northeast boundary of the super lot will not be overshadowed by the RFBs. With regard to visual privacy, the RFBs will maintain the amenity and privacy of the Torrens lost to the north with regard to the following:<br>• The living areas of Units C10 and D10 are to be oriented towards the southeast and northwest; the only windows from these units looking towards the northeast would be bedroom and bathroom windows.<br>• The northern boundaries of the balconies for Units C17, D16 and D17 will contain planters with 800mm wide landscaped areas.</td><td>N</td><td>Y</td><td>Y</td></tr>
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| | | Planting within these will prevent views towards the northeast. The planters will also screen any views of living areas towards the northeast and the Torrens lots.<br>• The Torrens lots to the northeast will be of a substantial size, and will enable flexibility with regard to the placement of future building footprints (and noting that the DCP requires that future dwellings be set back at least 6 metres from the boundary), substantial separation distances will therefore be provided between the RFBs and any future dwellings to the north.<br>• Due to the slope of the site, future dwellings on the Torrens lots are to be located at a higher ground level (i.e. the RFBs would not look down onto future dwellings).<br>• The rear setbacks of the Torrens lots will be required to contain large/mature trees and vegetation (and noting that northern parts of the super lot are also landscaped).<br>As such, the privacy and amenity of the allotments to the northeast will be maintained, and the objectives and design guidance requirements will be satisfied, and the variation is therefore supportable. | | | |
| | 3F-2 | Apartments and private open space will would be separated from communal areas utilising landscaping and internal fences. | - | Y | Y |
| 3G Pedestrian access and entries | 3G-1 | The super lot does not directly address public areas, however building entrances will be both clearly identifiable and directly face onto communal areas within the centre of the site. | - | Y | Y |
| | 3G-2 | Lobby entrances form clearly identified features within the building facades. | - | Y | Y |
| | 3G-3 | A direct pedestrian link is to be provided between Warriewood Road and Lorikeet Grove for residents of the site. Clear sightlines will be provided, and will traverse the communal area within the centre of the site and will be located in active areas overlooked by habitable areas. | - | Y | Y |
| 3H Vehicle access | 3H-1 | The carpark entry would be both located at the lowest part of the RFB development and will be screened from the public domain by the Torrens allotments that will front Lorikeet Grove. The garbage collection point will also be screened by internal fencing.<br><br>Pedestrian and vehicular access would be clearly identifiable, and will contain sufficient sight lines. | - | Y | Y |
| 3J Bicycle and car parking | 3J-1 | **Required:** For development:<br>• On sites within 80m of a railway station or light rail stop in the Sydney Metropolitan Area, or<br>• Sites within 400m of B3 or B4 zoned land or equivalent in a nominated regional centre,<br>The minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by Council, whichever is less. The car parking must be provided off-street.<br><br>**Proposed parking:**<br>• 68 residential spaces<br>• 13 visitor spaces<br><br>Refer to the assessment of the DCP for further information. | - | Y | Y |
| | 3J-2 | Bicycle parking is proposed (noting that additional spaces are to be located within the garages for terrace apartments for such parking). Parking would be secured via security door at the carpark entrance, in addition to garage doors for individual basement garages. | - | Y | Y |
| | 3J-3 | | - | Y | Y |

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| | 3J-4 | The basement carpark is to be integrated into the purposed groundworks (i.e. excavation would be minimised due to the raising of ground levels) on/around the development. The carpark till threfore not protrude more than one metre above finished ground levels. | - | Y | Y |
| | 3J-5 | | - | - | - |
| | 3J-6 | | - | - | - |
| **Part 4 Designing the Building** | | | | | |
| 4A Solar and daylight access | 4A-1 | **Required:**<br>• Living room and Private Open Space areas within at least 70% of all apartments must receive at least 2 hours of direct sunlight between 9am and 3pm in mid-winter.<br>**Proposed:**<br>• The internal solar access plans indicate that 28 of the 34 (i.e. 82.4% of proposed apartments) will receive at least 2 hours of direct solar access on June 21. | Y | Y | Y |
| | | **Required:**<br>• A maximum of 15% of apartments receive no direct sunlight between 9am and 3pm in mid-winter.<br>**Proposed:**<br>• All (i.e. 100%) of apartments will receive direct solar access on June 21, noting that skylights would provide secondary solar access to living and/or private open space areas of apartments oriented towards the southeast (i.e. Units C11, C12, C14, D11, D12 and D14. | Y | Y | Y |
| | 4A-2 | Opportunities for solar access are maximised where possible. | - | Y | Y |
| | 4A-3 | | - | Y | Y |
| 4B Natural ventilation | 4B-1 | | - | Y | Y |
| | 4B-2 | | - | Y | Y |
| | 4B-3 | **Required:** At least 60% of all apartments are naturally cross ventilated.<br>**Proposed:** All (i.e. 100%) of the proposed apartments are be capable of cross-ventilation. | Y | Y | Y |
| | | **Required:** Cross-over/through not to exceed 18m<br>**Proposed:** Maximum 17.3m for cross-through apartments. | Y | Y | Y |
| 4C Ceiling heights | 4C-1 | **Required:**<br>• Minimum ceiling height for a habitable room is 2.7m<br>• Minimum ceiling height for a non-habitable room is 2.4m<br>**Proposed:**<br>• Habitable rooms: Minimum 2.7m ceiling heights proposed<br>• Non-habitable rooms: Minimum 2.4m ceiling heights proposed | Y | Y | Y |
| | 4C-2 | | - | Y | Y |
| | 4C-3 | | - | Y | Y |

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|---|---|---|---|---|---|
| 4D Apartment size and layout | 4D-1 | Apartments are required to have the following minimum internal areas:<br>**Apartment Type** / **Minimum Internal Area**<br>Studio – 35m²<br>1 Bedroom – 50m²<br>2 Bedroom – 70m²<br>3 Bedroom – 90m²<br>Additional requirements:<br>• These calculations only provide for 1 bathroom, and 5m² is to be added for each additional bathroom.<br>• A fourth bedroom and further additional bedrooms are to increase the internal floor area by 12m²<br><br>**Proposed development:**<br>**U** – Unit No. **R** – Required floor area (m²)<br>**B** – No. of bedrooms **P** – Proposed floor area (m²)<br>**+** - Additional bathroom<br>**U** / **B** / **R** / **P** / **U** / **B** / **R** / **P**<br>C1 / 4+ / 112 / 206.25 / D1 / 4+ / 112 / 206.25<br>C2 / 4+ / 112 / 206.25 / D2 / 4+ / 112 / 206.25<br>C3 / 4+ / 112 / 206.25 / D3 / 4+ / 112 / 206.25<br>C4 / 4+ / 112 / 206.25 / D4 / 4+ / 112 / 206.25<br>C5 / 4+ / 112 / 206.25 / D5 / 4+ / 112 / 206.25<br>C6 / 4+ / 112 / 206.25 / D6 / 4+ / 112 / 206.25<br>C7 / 4+ / 112 / 206.25 / D7 / 4+ / 112 / 206.25<br>C8 / 4+ / 112 / 206.25 / D8 / 4+ / 112 / 206.25<br>C9 / 4+ / 112 / 206.25 / D9 / 4+ / 112 / 206.25<br>C10 / 4+ / 112 / 167.5 / D10 / 4+ / 112 / 197.54<br>C11 / 3+ / 95 / 129.8 / D11 / 3+ / 95 / 120<br>C12 / 3+ / 95 / 129 / D12 / 3+ / 95 / 121<br>C13 / 3+ / 95 / 125.3 / D13 / 3+ / 95 / 125<br>C14 / 3+ / 95 / 121.9 / D14 / 3+ / 95 / 122<br>C15 / 3+ / 95 / 123.1 / D15 / 3+ / 95 / 123.6<br>C16 / 3+ / 95 / 122 / D16 / 3+ / 95 / 129.8<br>C17 / 3+ / 95 / 123 / D17 / 3+ / 95 / 129.8<br><br>As indicated above, all units would comply with minimum size requirements. | Y | Y | Y |
| | | **Required:**<br>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. | Y | Y | Y |
| | 4D-2 | **Required:**<br>Habitable room depths are limited to a maximum of 2.5 x ceiling height. | Y | Y | Y |
| | | **Required:**<br>In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.<br><br>The depths of living areas within some ground floor units (i.e. C2-9 and D2-9) are 8.3m from a window. Whilst the numerical requirement is not reached for some apartments, areas beyond 8m would include the rear of the kitchen and dining rooms, therefore the overall impact on these living spaces would be negligible. Further, all living areas will have minimum 2.7m celling heights and would address an external window/elevation, thereby satisfying applicable design objectives and guidance. As such, these small variations are be supportable. | N | Y | Y |

<table>
<tr><td></td><td></td><td>Required:<br>Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobes).</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td></td><td></td><td>Required:<br>Bedrooms have a minimum dimension of 3m (excluding wardrobes).</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td></td><td>4D-3</td><td>Required:<br>Living rooms or combined living/dining rooms have a minimum width of:<br>• 1-bedroom apartments: Minimum 3.6m<br>• 2-bedroom apartments: Minimum 4m</td><td>Y</td><td>Y</td><td>Y</td></tr>
<tr><td></td><td></td><td>Required:<br>Widths of cross-over/through apartments are to be at least 4m.</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>4E Private open space and balconies</td><td>4E-1</td><td>1 bedroom apartments are to have primary balconies with a minimum area of 8m² and a minimum depth of 2m.<br>2 bedroom apartments are to have primary balconies with a minimum area of 10m² and a minimum depth of 2m.<br>3 bedroom apartments are to have primary balconies with a minimum area of 12m² and a minimum depth of 2.4m.<br><br>Proposed development:<br>U – Unit No. R – Required POS area (m²)<br>B – No. of bedrooms P – Proposed POS area (m²)<br><br>
<table>
<tr><th>U</th><th>B</th><th>R</th><th>P</th><th>U</th><th>B</th><th>R</th><th>P</th></tr>
<tr><td>C11</td><td>3</td><td>12</td><td>22</td><td>D11</td><td>3</td><td>12</td><td>17</td></tr>
<tr><td>C12</td><td>3</td><td>12</td><td>22</td><td>D12</td><td>3</td><td>12</td><td>20</td></tr>
<tr><td>C13</td><td>3</td><td>12</td><td>15</td><td>D13</td><td>3</td><td>12</td><td>14</td></tr>
<tr><td>C14</td><td>3</td><td>12</td><td>16</td><td>D14</td><td>3</td><td>12</td><td>14</td></tr>
<tr><td>C15</td><td>3</td><td>12</td><td>20</td><td>D15</td><td>3</td><td>12</td><td>17</td></tr>
<tr><td>C16</td><td>3</td><td>12</td><td>21</td><td>D16</td><td>3</td><td>12</td><td>22</td></tr>
<tr><td>C17</td><td>3</td><td>12</td><td>34</td><td>D17</td><td>3</td><td>12</td><td>22</td></tr>
</table>
It is acknowledged that minimum depth requirements will not be satisfied for some apartments. This has been countered by ensuring that the balconies form a direct extension of living room areas. Further, the areas of all balconies notably exceed minimum size requirements, and the design of the buildings would ensure that all private open space balconies would obtain solar access (either through direct solar access or secondary access provided by roof openings). Design guidance and objectives would therefore be satisfied, and the variation is subsequently capable of support.</td><td>N</td><td>Y</td><td>Y</td></tr>
<tr><td></td><td></td><td>Required: For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.<br><br>Proposed:<br>
<table>
<tr><th>Unit</th><th>Proposed POS area</th><th>Unit</th><th>Proposed POS area</th></tr>
<tr><td>C1</td><td>200m²</td><td>D1</td><td>93m²</td></tr>
<tr><td>C2</td><td>67m²</td><td>D2</td><td>80m²</td></tr>
<tr><td>C3</td><td>105m²</td><td>D3</td><td>100m²</td></tr>
<tr><td>C4</td><td>70m²</td><td>D4</td><td>100m²</td></tr>
<tr><td>C5</td><td>69m²</td><td>D5</td><td>80m²</td></tr>
<tr><td>C6</td><td>69m²</td><td>D6</td><td>80m²</td></tr>
<tr><td>C7</td><td>70m²</td><td>D7</td><td>100m²</td></tr>
<tr><td>C8</td><td>105m²</td><td>D8</td><td>100m²</td></tr>
<tr><td>C9</td><td>70m²</td><td>D9</td><td>80m²</td></tr>
<tr><td>C10</td><td>203m²</td><td>D10</td><td>170m²</td></tr>
</table></td><td>-</td><td>-</td><td>-</td></tr>
</table>

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| | | **Note:** Areas above are inclusive of 'front' courtyard areas and individual POS areas. | | | |
| | 4E-2 | | - | Y | Y |
| | 4E-3 | New balconies would be integrated into the facades of the buildings. | - | Y | Y |
| | 4E-4 | The design prevents stepped changes in ground levels within POS areas. | - | Y | Y |
| 4F Common circulation and spaces | 4F-1 | **Maximum number of dwellings off circulation core:** 4 | Y | Y | Y |
| | 4F-2 | | - | Y | Y |
| 4G Storage | 4G-1 | **Required:**<br>• Studio apartments: 4m$^3$<br>• 1 bedroom apartments: 6m$^3$<br>• 2 bedroom apartments: 8m$^3$<br>• 3+ bedroom apartments: 10m$^3$<br><br>Sufficient storage is provided in accordance with ADG requirements, noting that each apartment includes storage areas, rooms and cupboards, in addition to substantial walk-in-robes. It should also be noted that individual garages would also include large areas for storage. | Y | Y | Y |
| | 4G-2 | Storage is to be provided within dwellings and individual garages. | - | Y | Y |
| 4H Acoustic privacy | 4H-1 | | - | Y | Y |
| | 4H-2 | | - | Y | Y |
| 4J Noise and pollution | 4J-1 | Not applicable. | - | - | - |
| | 4J-2 | Not applicable. | - | - | - |
| 4K Apartment Mix | 4K-1 | The proposed development includes the following mix:<br>• Three bedrooms: 14<br>• Four bedrooms: 20<br>The apartments are also split between 'terrace style' apartments and more traditional layouts. The proposed mix anticipates demand for such housing by families seeking a larger number of bedrooms with larger private open space areas like those being proposed within this development. The size of the dwellings (in terms of number of bedrooms, floor space and POS area) is reflective of similar such development residential development within the surrounding area. | - | Y | Y |
| | 4K-2 | The larger terrace style apartments are appropriately situated at lower levels to take advantage of larger at-grade POS areas, while small apartments are located at higher elevations. | - | Y | Y |
| 4L Ground floor apartments | 4L-1 | Direct access to communal areas is proposed for the terrace apartments at ground level. Activity is achieved through terraces, gardens and the façade of each dwelling, which enable overlooking of communal areas. | - | - | - |
| | 4L-2 | Privacy would be afforded to the terrace apartments through the situation of the majority of POS areas to the rear of the dwelling (i.e. within the side setback areas) and sufficient spatial separation between the two RFBs. | - | - | - |
| 4M Facades | 4M-1 | The buildings will be highly articulated and provide areas of visual interest when viewed between surrounding residential development. | - | Y | Y |
| | 4M-2 | Building entries are clearly define; corners and ends of the building are clearly defined through changes in articulation, materials and colours. | - | - | - |
| 4N Roof design | 4N-1 | Roof design is integrated into the building design. | - | Y | Y |
| | 4N-2 | Not applicable. | - | - | - |
| | 4N-3 | Sustainability measures will include skylights. | - | Y | Y |
| 4O Landscape design | 4O-1 | The landscape design will enhance the local microclimate through the implementation of appropriately scaled and locally endemic trees. | - | Y | Y |
| | 4O-2 | Tree plantings will progressively be visible from, and positively contribute towards, the streetscape. | - | Y | Y |

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| 4P Planting on structures | 4P-1 | Planting on the buildings would be limited to planters on balconies. Appropriate structural reinforcement will be undertaken for basement areas beneath landscaped and deep soil areas. | - | Y | Y |
| | 4P-2 | Suitable plantings have been selected; refer to the landscaping information prepared by CPS. | - | Y | Y |
| | 4P-3 | | - | - | - |
| 4Q Universal design | 4Q-1 | Section C1.9 of P21 DCP requires that 20% of the apartments be adaptable. Four apartments (i.e. 11.7% of the total number) are adaptable apartments. The proposal however satisfies the 20% requirement for the Liveable Housing Guideline's silver level universal design features in accordance with the design guideline. | - | Y | Y |
| | 4Q-2 | Four three-bedroom apartments are proposed to be adaptable, which are contained within a variety of layouts. | - | Y | Y |
| | 4Q-3 | The proposed layouts are flexible and would be capable of accommodating a range of domestic uses and needs. | - | Y | Y |
| 4R Adaptive reuse | 4R-1 | Not applicable. | - | - | - |
| | 4R-2 | Not applicable. | - | - | - |
| 4S Mixed Use | 4S-1 | Not applicable. | - | - | - |
| | 4S-2 | Not applicable. | - | - | - |
| 4T Awnings and signage | 4T-1 | Not applicable. | - | - | - |
| | 4T-2 | Not applicable. | - | - | - |
| **Performance** | | | | | |
| 4U Energy efficiency | 4U-1 | The proposal maximises the number of units that will obtain adequate solar access; refer to the assessment above. | - | Y | Y |
| | 4U-2 | | - | Y | Y |
| | 4U-3 | The proposal maximises the number of units that will obtain adequate natural ventilation; refer to the assessment above. | - | Y | Y |
| 4V Water management and conservation | 4V-1 | Appropriate and drought-tolerant landscaping is proposed. | - | - | - |
| | 4V-2 | Urban stormwater would be treated; refer to submitted engineering information. | - | - | - |
| | 4V-3 | Appropriate stormwater management systems are proposed; refer to submitted engineering information. | - | - | - |
| 4W Waste management | 4W-1 | Adequate waste storage areas are be provided within the basement and out of sight of public areas; there would be sufficient space for bulk waste storage. Refer to the submitted waste management plan for further information. | - | Y | Y |
| | 4W-2 | Designated waste and recycling bins would be separated. Refer to the submitted waste management plan for further information. | - | - | - |
| 4X Building maintenance | 4X-1 | Measures to prevent weathering of the building as recommended by the ADG are to be adopted. | - | - | - |
| | 4X-2 | The design and layout would permit ease of maintenance where required. | - | - | - |
| | 4X-3 | Sturdy and natural materials are proposed to reduce ongoing maintenance requirements. | - | - | - |