11-13 albert road + 2-6 pilgrim avenue
strathfield
apartment design guide compliance table

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kennedy associates architects

	Part 3 – Siting the Development		
Ref			**Compliance**
3A	**Site Analysis**		
3A-1	**Objective**		
	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context		✓
	Design Guidance		
	Each element in the Site Analysis Checklist should be addressed	Refer Site Analysis Drawings DA 004 – 006	YES
3B	**Orientation**		
3B-1	**Objective**		
	Building types and layouts respond to the streetscape and site while optimising solar access within the development		✓
	Design Guidance		
	Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)	The proposed development faces both Pilgrim Avenue and Albert Road. The building is oriented to both street frontages. Direct pedestrian access, to ground floor units and communal entries, is available from Pilgrim Avenue. Direct pedestrian access to the commercial space is available via Albert Road	YES
	Where the street frontage is to the east or west, rear buildings should be orientated to the north	The street frontages are to the South (Albert Road) and West (Pilgrim Road) The proposed development is in a single form, there are no 'rear' buildings.	YES
	Where the street frontage is to the north or south overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)	The south street frontage is narrow. The building form has been lowered in this location to minimise overshadowing.	N/A
3B-2	**Objective**		
	Overshadowing of neighbouring properties is minimised during mid winter		✓
	Design Guidance		
	Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access	Due to the location of the site and the height of the proposed development, some overshadowing to surrounding properties occurs. However, due to the 'tower' form of the proposed development, the shadows 'move quickly' and do not impact individual properties or buildings for the whole day. As such, surrounding developments should be capable of achieving the requirements of this part. The proposed development complies fully with the LEP height and density controls for the subject site. As such, the shadow impacts are as anticipated and accepted for a development of this typology in this location. Refer Shadow Analysis Plans DA 50	YES
	Solar access to living rooms, balconies and private open spaces of neighbours should be considered	As above	YES
	Where and adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%	-	N/A
	If the proposal will significantly reduce the solar access of neighbours building separation should be increased beyond the minimums contained in section 3F Visual privacy	-	N/A
	Overshadowing should be minimised to the south or down hill by increased upper level setbacks	As above	YES
	It is optimal to orientate buildings 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where buildings are higher than the adjoining development	The proposed development is consistent with the massing principles recommended by the Design Review Panel (DRP).	YES
	A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings	No solar collectors apparent on neighbouring properties.	N/A
3C	**Public Domain Interfaces**		
3C-1	**Objective**		
	Transition between private and public domain is achieved without compromising safety and security		✓
	Design Guidance		
	Terraces, balconies and courtyard apartments should have direct entry, where appropriate	Ground floor dwellings have direct pedestrian entry from Pilgrim Avenue.	YES
	Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)	Ground floor dwelling private terraces are set above the street level, with stair access, to provide privacy and surveillance.	YES
	Upper level balconies and windows should overlook the public domain	Balconies and windows of upper level units overlook the public domain, on both street frontages, and communal areas within the development.	YES
	Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m	The proposed development is in a mixed-use zone with a 0m street front setback. No front fences are proposed.	YES
	Length of solid walls should be limited along street frontages	As Above	YES
	Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets	Casual interaction between residents and the public domain is facilitated by ground floor terraces along Pilgrim Avenue as well as the commercial tenancies and associated colonnade along the Albert Road frontage / corner.	YES
	In developments with multiple buildings and/ or entries, pedestrian entries and spaces associated with individual buildings/ entries should be differentiated to improve legibility for residents, using a number of the following design solutions: • architectural detailing • changes in materials • plant species • colours	The proposed development incorporates separate entry to each of the proposed tower building (A + P). Both entries are visually differentiated through building massing – in particular, large, vertically proportioned recesses – and architectural detailing	YES
	Opportunities for people to be concealed should be minimised	Opportunity for concealment along the street frontages is minimised by maintaining clear sightlines to building entries and enabling surveillance of the public domain as detailed above.	YES
3C-2	**Objective**		
	Amenity of the public domain is retained and enhanced		✓
	Design Guidance		
	Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking	Planters are located in discrete areas along both street frontages, softening the appearance of the raised edges.	N/A
	Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual entries are provided	Mailboxes are located perpendicular to the street alignment, at each building entrance.	YES
	The visual prominence of underground car park vents should be minimised and located at a low level where possible	No car park vents will be visible from the public domain.	YES
	Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view	All service requirements (except for those which require street access) are located on the ground floor, behind the ground floor units and commercial spaces and will not be visible from the public domain.	YES
	Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels	Due to flood constraints the ground floor level is raised above street level. Stair lifts are incorporated to provide accessible entry to the buildings without excessive ramping.	YES
	Durable, graffiti resistant and easily cleanable materials should be used	The proposed materials have been selected for their long term durability and are easily cleanable	YES
	Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions • street access, pedestrian paths and building entries which are clearly defined • paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space	-	N/A

	• minimal use of blank walls, fences and ground level parking		
	On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking	The car park does not protrude above ground level.	YES
3D	**Communal and Public Open Spaces**		
3D-1	**Objective**		
	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping		✓
	Design Criteria		
	1. Communal Open Space has a minimum area equal to 25% of the site	826m^2 or 29% of the site area is provided as communal open space. Refer Summary of Area Counts DA 42	YES
	2. Developments achieve a minimum of 50% direct sunlight to the principal useable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	The principal useable communal open space (rooftop area) receives 6 hours solar access to over 50% of its area between 9am and 3pm on the winter solstice. Refer ADG Solar Access COS DA 48	YES
	Design Guidance		
	Communal open space should be consolidated into a well designed, easily identified and usable area	The communal open space is located in three consolidated, useable areas – a central podium top courtyard on level 01, a lower roof terrace on level 05 and an upper roof terrace on level 11.	YES
	Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions	The majority of the proposed communal open space achieves a minimum dimension equal to or greater than 3m. Refer Summary of Area Counts DA 42	YES
	Communal open space should be co-located with deep soil areas	The subject site is located in a mixed use area which requires a 'built to boundary' commercial podium. As such, no deep soil area is required or achievable.	N/A
	Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies	Lift access and / or accessible pathways are provided to all communal open space areas. Refer Proposed Level 01 Plan DA 17, Proposed Level 05 Plan DA 21 and Proposed Level 11 Plan DA 27	YES
	Where communal open space cannot be provided at ground level, it should be provided on a podium or roof	Due to the required commercial podium, communal open space cannot be provided at the ground floor. Communal open space is located at both the podium level on roof tops.	YES
	Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense suburban area, they should: • provide communal spaces elsewhere such as a landscaped roof top terrace or a common room • provide larger balconies or increased private open space for apartments • demonstrate good proximity to public open space and facilities and/or provide contributions to public open space	N/A Design Criteria Achieved	N/A
3D-2	**Objective**		
	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting		✓
	Design Guidance		
	Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements: • seating for individuals or groups • barbeque areas • play equipment or play areas • swimming pools, gyms, tennis courts or common rooms	A range of communal open spaces, of different sizes and types, are provided within the development including: • soft and hard surface areas • small areas and large areas • areas for seating and areas for activities • covered and open areas	YES
	The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts	The communal open spaces contain areas that are • naturally sunny • naturally shaded • covered Barbeque facilities and a childrens play area are located within the roof top communal open space on Level 11 Refer Proposed Level 01 Plan DA 17, Proposed Level 05 Plan DA 21 and Proposed Level 11 Plan DA 27and Landscape Package prepared by Taylor Brammer Landscape Architects	YES
	Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks	Visible services are not proposed within or adjacent to communal open spaces	YES
3D-3	**Objective**		
	Communal open space is designed to maximise safety		✓
	Design Guidance		
	Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include: • bay windows • corner windows • balconies	Due to the mixed-use zoning of the subject site, the communal open space areas are located on the podium and roof tops and are not visible from the public domain. Habitable room windows overlook all communal open spaces for surveillance both at the same level and on upper levels. Planters provide privacy to units on the same level as communal open spaces.	YES
	Communal open space would be well lit	Communal open spaces will be well lit	YES
	Where communal open space/facilities are provided for children and young people they are safe and contained	Communal open space for children and young people is not specifically incorporated, however, both the central courtyard and roof top spaces provide safe and contained areas able to be utilised by people of all ages. Refer Proposed Level 01 Plan DA 17, Proposed Level 05 Plan DA 21 and Proposed Level 11 Plan DA 27and Landscape Package prepared by Taylor Brammer Landscape Architects	YES
3D-4	**Objective**		
	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood		N/A
	Design Guidance		
	The public open space should be well connected with public street along at least one edge	-	N/A
	The public open space should be connected with nearby parks and other landscape elements	-	N/A
	Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid	-	N/A
	Solar access should be provided year round along with protection from strong winds	-	N/A
	Opportunities for a range of recreational activities should be provided for all ages	-	N/A
	A positive address and active street frontages should be provided adjacent to public open space	-	N/A
	Boundaries should be clearly defined between public open space and private areas	-	N/A

3E	**Deep Soil Zones**		
3E-1	**Objective**		
	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		✓
	Design Criteria		
	1. Deep soil zones are to meet the following minimum requirements: Site Area / Minimum Dimension / Deep Soil Zone (% of site area) less than 650m² – / - 650m² – 1500m² / 3m > 1500m² / 6m > 1500m² with significant existing tree cover / 6m / 7%	The subject site is located within a mixed-use area which requires a 'built to boundary' commercial podium. As such, no deep soil area is required or achievable. Substantial planting on structures is incorporated, to provide amenity and recreational opportunities to residents.	N/A
	Design Guidance		
	On some sites it may be possible to provide larger deep soil zones, depending on the site area and context: • 10% of the site as deep soil on sites with an area of 650m² – 1500m² • 15% of the site as deep soil on sites greater than 1500m2	-	N/A
	Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include: • basement and sub basement car park design that is consolidated beneath building foot prints • use of increased front and side setbacks • adequate clearance around trees to ensure long term health • co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil	-	N/A
	Achieving the design criteria may not be possible on some sites including where: • the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas or in centres) • there is 100% site coverage or non residential uses at ground floor level Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure	As above.	YES
3F	**Visual Privacy**		
3F-1	**Objective**		
	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy		✓
	Design Criteria		
	1. Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: Building Height / Habitable Rooms and Balconies / Non Habitable Rooms up to 12m (4 storeys) / 6m / 3m up to 25m (5-8 storeys) / 9m / 4.5m over 25m (9+ storeys) / 12m / 6m Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2) Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties	The proposed development incorporates variations to this requirement for: a. the glazed corridor 'end' at the eastern edge of Building P, on levels 01 - 03 b. the secondary living room windows and balcony openings at the eastern edge of Building P, on levels 08 – 14 c. the secondary balcony and secondary opening to the primary balcony at the eastern edge of Building A, on levels 01 – 10 d. openings onto the 'indent' on the eastern facade of Building P, on levels 01 - 03 e. openings onto the 'indent' on the eastern facade of Building P, on levels 05 – 14 The proposed development has been designed to achieve a 'reasonable level of external and internal visual privacy' in these instances, equivalent to that which would be achieved by building separations compliant with this part. Additional discussion regarding the proposed variations and their acceptability is included in the accompanying SEPP 65 Design Principle Statement.	ACCEPTABLE
	Design Guidance		
	Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance	One step in the street fronting built form is proposed at Level 05 of the proposed development in line with the requirements of the site specific DCP and recommendations of the Design Review Panel (DRP).	YES
	For residential buildings next to commercial buildings, separation distances should be measured as follow: • for retail office spaces and commercial balconies use the habitable room distances • for service and plant areas use the non habitable room distances	N/A	N/A
	New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include: • site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) • on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4)	The proposed development is located and oriented in line with the massing principles recommended by Design Review Panel (DRP) and endorsed by Council and the Sydney Eastern Planning Panel (the Panel) The proposed development incorporates two 'towers' (A + P), above Level 05, which are provided with building separation compliant with the design criteria of this part. The proposed development has benefit of two street frontages, as well as a third frontage to the railway line. As such, there are limited privacy concerns to neighbouring buildings. The proposed development has been designed to achieve appropriate privacy to the neighbouring site both in its existing configuration and into the future. Additional discussion regarding the visual privacy achieved by the proposed development is included in the accompanying SEPP 65 Design Principle Statement.	YES
	Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping. (see figure 3F.5)	N/A. The subject site and neighbouring site have the same zoning.	N/A
	Direct lines of sights should be avoided for windows and balconies across corners	Windows and balconies have been located, sized and detailed to minimise direct lines of site across corners.	N/A
	No separation is required between blank walls	As above.	YES

3F-2	**Objective**		
	Site and building design elements increase privacy without compromising access to light and air balance outlook and views from habitable rooms and private open space		✓
	Design Guidance		
	Communal Open Space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include: • setbacks • solid or partially solid balustrades to balconies at lower levels • fencing and/or trees and vegetation to separate spaces • screening devices • bay windows or pop out windows to provide privacy in one direction and outlook in another • raising apartments/ private open space above the public domain or communal open space • planter boxes incorporated into walls and balustrades to increase visual separation • pergolas or shading devices to limit overlooking of lower apartments or private open space • on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvers or screen panels to windows and/ or balconies	Communal open spaces, common areas and circulation paths are separated from the private open space and windows to apartments through: • solid balustrades / low height walls, to units on the same level • planting, including raised planter beds at the edges of courtyards	YES
	Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartments service areas	Habitable rooms of units are located away from circulation spaces.	YES
	Balconies and private terraces should be located in front of living rooms to increase internal privacy	All balconies and private terraces are located in front of and/or adjacent to living rooms.	YES
	Windows should be offset from the windows of adjacent buildings	Windows have been offset from windows on adjacent building facades	YES
	Recessed balconies and/or vertical fins should be used between adjacent balconies	Where balconies are located adjacent to one another, or in close proximity, they are separated by solid walls.	YES
3G	**Pedestrian Access and Entries**		
3G-1	**Objective**		
	Building entries and pedestrian access connects to and addresses the public domain		✓
	Design Guidance		
	Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge	The proposed development incorporates two separate communal building entries, one to each of the residential 'tower' lobbies. Individual private entries are incorporated for the ground floor units on Pilgrim Avenue. Additionally, the proposed development also includes two commercial tenancies (with direct entries and substantial glazing) and a 'colonnade', further activating the street frontage.	YES
	Entry locations relate to the street and subdivision pattern and the existing pedestrian network	The proposed entries are consistent with the site specific DCP.	YES
	Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries	The building entries are clearly demarcated through deep, vertically proportioned recesses in the building articulation and architectural detailing, including raking soffits, materiality and wide stairways.	YES
	Where street frontage is limited and multiple buildings are located on the site, a primary street address should be provided with clear sight lines and pathways to secondary building entries	-	N/A
3G-2	**Objective**		
	Access, entries and pathways are accessible and easy to identify		✓
	Design Guidance		
	Building access including lift lobbies, stairwells and hallways should be clearly visible from the public domain and communal spaces	Building entries are provided with a direct line of site to and from the street frontages.	YES
	The design of ground floor and underground car parks minimise level changes along pathways and entries	The design of the car park does not result in any level changes	YES
	Steps and ramps should be integrated into the overall building and landscape design	Stairs and walkways are integrated into the building and landscape design.	YES
	For large developments 'way finding' maps should be provided to assist visitors and residents to the development (see figure 4T-1)	A wayfinding map will be provided	YES
	For large developments electronic access and audio/video intercom should be provided to manage access	Electronic access and audio / visual intercoms will be provided.	YES
3G-3	**Objective**		
	Large sites provide pedestrian links for access to streets and connection to destinations		N/A
	Design Guidance		
	Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport	-	N/A
	Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate	-	N/A
3H	**Vehicle Access**		
3H-1	**Objective**		
	Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes		✓
	Design Guidance		
	Car park access should be integrated with the building's overall facade. Design solutions may include: • the materials and colour palette to minimise visibility from the street • security doors or gates at entries to minimise voids in the facade • where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed	The car park entry is located at the end of Pilgrim Avenue, which is a cul de sac. As such, it is not highly visible from the public domain and will not have an unacceptable appearance. The design of the car park access is integrated with, and reflective of, the building's overall facade design.	YES
	Car park entries should be located behind the building line	The car park entry is located behind the main building line.	YES
	Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout	The vehicle entry is located in line with the requirements of the site specific DCP.	YES
	Car park entry and access should be located on secondary streets or lanes where available	The vehicle entry is located in line with the requirements of the site specific DCP. The location of the car park entry is at the end of Pilgrim Avenue, a cul de sac.	YES
	Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided	-	N/A
	Access point locations should avoid headlight glare to habitable rooms	The vehicle entry is not located in close proximity to any habitable rooms.	YES
	Adequate separation distances should be provided between vehicle entries and street intersections	The vehicle entry is located in line with the requirements of the site specific DCP. The location of the car park entry is at the end of Pilgrim Avenue, a dead end cul de sac.	YES
	The width and number of vehicle access points should be limited to the minimum	One vehicular entry point with a width of approximately 6m is provided.	YES
	Visual impact of long driveways should be minimised through changing alignments and screen planting	The proposed driveway length is minimised and will have minimal visual impact.	YES
	The need for large vehicles to enter or turn around within the site should be avoided	As per Council's waste collection requirements, adequate space is provided on the ground floor for a waste collection vehicle to enter and turn around. This area is concealed behind the ground floor units and will not be visible from the public domain.	YES
	Garbage collection, loading and servicing areas are screened	As above.	N/A
	Clear sight lines should be provided at pedestrian and vehicle crossings	Clear sightlines are available along both street frontages	YES
	Traffic calming devices such as changes in paving material or textures should be used where appropriate	-	N/A

	Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include: • changes in surface materials • level changes • the use of landscaping for separation	The vehicular and pedestrian entries are separate. The entry to tower 'P' is located closest to the vehicular entry and is separated from the pedestrian entry by approximately 8m. The vehicular entry is located at the end of a cul de sac. As such there will be minimal (to no) pedestrian traffic across the car park entry. The entries are visually distinct and utilise different building massing and articulation to distinguish their use	YES
3J	**Bicycle and Car Parking**		
3J-1	**Objective**		
	Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas		✓
	Design Criteria		
	For development in the following locations: • on sites that are within 800 meters of a railway station or light rail stop in the Sydney Metropolitan Area • on land zoned, and sites within 400 meters of land zoned B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre The minimum car parking requirements for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed be the relevant council, whichever is less. The car parking need for a development must be provided off street.	Car parking is provided in accordance with the Guide to Traffic Generating Development's as follows: • 175 spaces for residents (including 26 adaptable spaces, 34 visitor spaces and 1 car wash bay) • 13 spaces for the commercial tenancies • 30 'commuter' spaces, as required by the site specific DCP • 5 carshare spaces All car parking is located off the street, in the basement.	YES
	Design Guidance		
	Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site	5 car share spaces are provided	YES
	Where less car parking is provided in a development, council should not provide on street resident parking permits	-	N/A
3J-2	**Objective**		
	Parking and facilities are provided for other modes of transport		✓
	Design Guidance		
	Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters	3 motorcycle spaces are provided within the basement	YES
	Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas	66 bicycle spaces are provided on the ground floor. These spaces are easily accessible from both street frontages, via the residential lobbies.	YES
	Conveniently located charging stations are provided for electric vehicles where desirable	-	N/A
3J-3	**Objective**		
	Car park design and access is safe and secure		✓
	Design Guidance		
	Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces	All support areas are located on the ground floor. No car parking spaces are located on this floor Refer Proposed Level 00 Plan DA 16	YES
	Direct, clearly visible and well lit access should be provided into common circulation areas	Clear access is provided throughout the car park	YES
	A clearly defined and visible lobby or waiting area should be provided to lifts and stairs	All lifts are provided with clearly defined and adequate waiting areas on the basement levels.	YES
	For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/ or bollards	-	N/A
3J-4	**Objective**		
	Visual and environmental impacts of underground car parking are minimised		✓
	Design Guidance		
	Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites	No car park protrusion proposed	N/A
	Natural ventilation should be provided to basement and sub basement car parking areas	The basement carpark is wholly underground. Mechanical ventilation will be provided in accordance with Australian Standards	N/A
	Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design	Ventilation to the carpark will be fully integrated within the building design	YES
3J-5	**Objective**		
	Visual and environmental impacts of on-grade car parking are minimised		N/A
	Design Guidance		
	On-grade car parking should be avoided	No on grade car parking proposed	N/A
	Where on-grade car parking is unavoidable, the following design solutions are used: • Parking is located on the side or rear of the lot away from the primary street frontage • Cars are screened from view of streets, buildings, communal and private open space areas • Safe and direct access to building entry points is provided • Parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space • Stormwater run off is managed appropriately from car parking surfaces • Bio-swales, rain gardens or on site detention tanks are provided, where appropriate • Light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving	-	N/A
3J-6	**Objective**		
	Visual and environmental impacts of above ground enclosed car parking are minimised		N/A
	Exposed parking should not be located along primary street frontages	No above ground enclosed car parking is proposed	N/A
	Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include: • Car parking that is concealed behind the facade design (approach should be limited to developments a where larger floor plate podium is suitable at lower levels • car parking that is wrapped with other uses, such as retail, commercial or two storey small office/home office (SOHO) units along the street frontage (see figure 3J.9)	-	N/A
	Positive street address and active frontages should be provided at ground level	-	N/A

	Part 4 – Designing the Building		
Ref	**Item Description**	**Notes**	**Compliance**
4A	**Solar and Daylight Access**		
4A-1	**Objective**		
	To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space		✓
	Design Criteria		
	1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	125 units, or 74.4% of the development, receive at least 2 hours solar access, to living rooms and private open spaces, between 9am and 3pm at mid-winter. Refer Summary of ADG Solar Access DA 46 -47 and Views From Sun DA 49	N/A
	2. In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter		N/A
	3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter	24 units, or 14.3% of the development, do not receive any direct sunlight between 9am and 3pm at mid-winter. Refer Summary of ADG Solar Access DA 46 -47 and Views From Sun DA 49	YES
	Design Guidance		
	The design maximises north aspect and the number of single aspect south facing apartments is minimised	Due to the orientation of the site, only a limited portion of the proposed development faces directly north. The design of the proposed development maximises this frontage as far as possible, and also orients units to the east and west. Two single aspect south facing units are included in the first 4 storeys of the building, with only one included on levels 5 – 10 and none thereafter.	YES
	Single aspect, single storey apartments should have a northerly or easterly aspect	As above.	YES
	Living areas are best located to the north and service areas to the south and west of apartments	Where possible, living areas have been oriented to the north, east or west.	YES
	To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used: • dual aspect apartments • shallow apartment layouts • two storey and mezzanine level apartments • bay windows	Most apartments in the development are dual aspect. Single aspect apartments have been appropriately designed to optimise direct sunlight	YES
	To maximise the benefit to residents of direct sunlight within living rooms and private open spaces a minimum of 1m^2 of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes	The proposed development complies with the design criteria for the objective. Adequate, enjoyable direct sunlight is provided for the benefit of residents. Refer Summary of ADG Solar Access DA 46 -47 and Views From Sun DA 49	YES
	Achieving the design criteria may not be possible on some sites. This includes: • where greater residential amenity can be achieved along a busy road or rail line by orienting the living rooms away from the noise source • on south facing sloping sites • where significant views are oriented away from the desired aspect for direct sunlight Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective	-	N/A

4A-2	**Objective**		
	Daylight access is maximised where sunlight is limited		✓
	Design Guidance		
	Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as secondary light sources in habitable rooms	No courtyards are proposed.	YES
	Where courtyards are used: • use is restricted to kitchens, bathrooms and service areas • building services are concealed with appropriate detailing and materials to visible walls • courtyards are fully open to the sky • access is provided to the light well from a communal area for cleaning and maintenance • acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved	As Above.	N/A
	Opportunities for reflected light into apartments are optimised through: • reflective exterior surfaces on buildings opposite south facing windows • positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light • integrating light shelves into the design • light coloured internal finishes	Windows to units which do not receive direct sunlight between 9am and 3pm at mid-winter have been positioned to maximise daylight.	YES
4A-3	**Objective**		
	Design incorporates shading and glare control, particularly for warmer months		✓
	Design Guidance		
	A number of the following design features are used: • balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas • shading devices such as eaves, awnings, balconies, pergolas, external louvers and planting • horizontal shading to north facing windows • vertical shading to east and particularly west facing windows • operable shading to allow adjustment and choice • high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)	The following design features are used to incorporate shading and glare control: • balconies extend across the face of the living areas providing solar protection to those units, during summer • balconies are appropriately sized to allow for sun penetration to living rooms, during winter • operable screens are provided where appropriate to allow residents to control solar access and glare	

4B	**Natural Ventilation**		
4B-1	**Objective**		
	All habitable rooms are naturally ventilated		✓
	Design Guidance		
	The buildings' orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms.	The development is primarily oriented east / west enabling capture of prevailing breezes.	YES
	Depths of habitable rooms support natural ventilation	Depths of habitable rooms do not exceed 2 x ceiling height. Natural ventilation is supported.	YES
	The area or unobstructed window openings should be equal to at least 5% or the floor area served	All habitable rooms will be provided with adequate natural ventilation in accordance with the NCC.	YES
	Light wells are not the primary air source for habitable rooms	No light wells proposed	YES
	Doors and openable windows maximise natural ventilation opportunities by using the following design solutions: • adjustable windows with large effective openable areas • a variety of window types that provide safety and flexibility such as awnings and louvers • windows which occupants can reconfigure to funnel breezes into the apartment such as vertical louvers, casement windows and externally opening doors	A variety of opening types are proposed, including sliding doors to balconies and sliding / awning windows which provide for flexibility of opening sizes.	YES

4B-2	**Objective**		
	The layout and design of single aspect apartments maximises natural ventilation		✓
	Design Guidance		
	Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)	Single aspect apartment depths are appropriate to achieve cross ventilation and airflow.	YES
	Natural ventilation to single aspect apartments is achieved with the following design solutions: • Primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation) • Stack effect ventilation/ solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries • Courtyards or building indentation have a width to depth ration or 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells	All single aspect apartments are naturally ventilated.	YES
4B-3	**Objective**		
	The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents		✓
	Design Criteria		
	1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of a building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed.	72 units or 60%, of the units in the first 9 storeys of the development are naturally cross ventilated. Refer Summary of ADG cross ventilation DA 45	YES
	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.	The depth of cross through apartments does not exceed 18m, measured glass line to glass line	YES
	Design Guidance		
	The building should include dual aspect apartments cross through apartments and corner apartments and limit apartment depths	The majority of units are cross through or dual aspect. Apartment depths are appropriate to achieve cross ventilation and airflow	YES
	In cross-through apartments external window and door openings sizes/ areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/ areas on the other side of the apartment (outlet side) (see figure 4B.4)	A variety of opening types are proposed, including sliding doors to balconies and sliding / awning windows which provide for flexibility of opening sizes to create airflow.	YES
	Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow	Apartment designs are capable of facilitating adequate airflow.	YES
	Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow	Apartment depths and ceiling heights are in accordance with the relevant provisions of this guide	YES
4C	**Ceiling Heights**		
4C-1	**Objective**		
	Ceiling height achieves sufficient natural ventilation and daylight access		✓
	Design Criteria		
	Measured from finished floor level to finished ceiling level, minimum ceiling heights are; Minimum ceiling height for apartment and mixed use buildings Habitable rooms: 2.7m Non-habitable rooms: 2.4m For 2 storey apartments: 2.7m for main living area floor, 2.4m for second floor, where its area does not exceed 50% of the apartment area Attic spaces: 1.8m at edge of room with a 30 degree minimum ceiling slope If located in mixed use areas: 3.3m for ground and first floor to promote future flexibility of use These minimums do not preclude higher ceilings if desired	The following floor to floor heights have been provided: • Level 00: 5.5m (commercial) • Levels 01 – 14: min 3.1m (residential) A floor to floor height of 3.1m has been provided. This is considered capable of providing ceiling heights in accordance with this criteria. Refer Elevations and Sections DA 30 – 40	YES
	Design Guidance		
	Ceiling height can accommodate use of ceiling fans for cooling and distribution	A minimum floor to floor height of 3.1m has been provided for residential levels. This is considered capable of providing compliant ceiling heights in accordance with this guideline Refer Elevations and Sections DA 30 – 40	YES
4C-2	**Objective**		
	Ceiling height increases the sense of space in apartments and provides for well proportioned rooms		✓
	Design Guidance		
	A number of the following design solutions can be used: • the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces • well proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings • ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist.	A minimum floor to floor height of 3.1m has been provided for residential levels. This is considered capable of providing compliant ceiling heights in accordance with this guideline Refer Elevations and Sections DA 30 – 40	YES
4C-3	**Objective**		
	Ceiling heights contribute to the flexibility of building use over the life of the building		✓
	Design Guidance		
	Ceiling heights of lower levels apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)	The floor to floor height of 5.4m has been provided for the ground floor. This is considered capable of providing compliant ceiling heights in accordance with this guideline Refer Elevations and Sections DA 30 – 40	N/A
4D	**Apartment Size and Layout**		
4D-1	**Objective**		
	The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity		✓
	Design Criteria		
	1.Apartments are required to have the following minimum internal areas: Apartment Type — Minimum Internal Area Studio — 35m² 1 bedroom — 50m² 2 bedroom — 70m² 3 bedroom — 90m² The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each. A fourth bedroom and further, additional bedrooms increase the minimum internal area by 12m² each	All apartments exceed the minimum internal areas required by this criteria. Refer Introduction DA 01	YES
	2.Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms.	Adequate glass area will be provided for habitable rooms in accordance with the requirements of the NCC	YES
	Design Guidance		
	Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway space or entry space)	Kitchens are not located as part of the main circulation space in all apartments.	YES
	A window should be visible from any point in a habitable room	All habitable rooms include a window that is visible from any part of that room.	YES
	Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layout and circulation areas. These circumstances would be assessed on their merits	-	N/A

4D-2	**Objective**		
	Environmental performance of the apartment is maximised		✓
	Design Criteria		
	1.Habitable room depths are limited to a maximum of 2.5 x the ceiling height	All habitable rooms are less than 6.7m deep (2.5 x 2.7) except as allowable by criteria 2 below.	YES
	2.In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.	All open plan layouts have a maximum depth from a window of less than 8m. Refer Typical Unit Layouts DA 53-58	YES
	Design Guidance		
	Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths	-	N/A
	All living areas and bedrooms should be located on the external face of the building	All living areas and bedrooms are located on the external faces of the building.	YES
	Where possible: • bathrooms and laundries should have an external openable window • main living spaces should be oriented toward the primary outlook and aspect and away from noise sources	Due to site constraints, windows to laundries and bathrooms have generally not been incorporated. Main living areas are oriented for solar access and views.	YES
4D-3	**Objective**		
	Apartment layouts are designed to accommodate a variety of household activities and needs		✓
	Design Criteria		
	Master bedrooms have a minimum area of $10m^2$ and other bedrooms $9m^2$ (excluding wardrobe space)	All master bedrooms have areas greater than $10m^2$ All other bedroom have areas greater than $9m^2$ Refer Typical Unit Layouts DA 53-58	YES
	Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	All bedrooms have a minimum dimension greater than 3m excluding wardrobes. Refer Typical Unit Layouts DA 53-58	YES
	Living rooms or combined living/ dining rooms have a minimum width of • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments	All living rooms have a minimum width of 3.6m or 4m, as required. Refer Typical Unit Layouts DA 53-58	YES
	The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	The width of all cross through apartments is at least 4m Refer Typical Unit Layouts DA 53-58	YES
	Design Guidance		
	Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas	Bedrooms, bathrooms and laundries are accessed from corridors for the majority of apartments. Where rooms are accessed off living areas, this access is limited to bedrooms only and has been located to minimise disruption to living areas and maximise privacy and use ability of bedrooms. No service areas are directly accessible off living areas.	YES
	All bedrooms allow a minimum length of 1.5m for robes	All bedrooms contain wardrobes capable of complying with the minimum lengths.	YES
	The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high	All bedrooms contain wardrobes capable of complying with the minimum lengths.	YES
	Apartment layouts allow flexibility over time, design solutions may include: • dimensions that facilitate a variety of furniture arrangements and removal • spaces for a range of activities and privacy levels between different spaces within the apartment • dual master apartments • dual key apartments (note dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments) • room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1)) • efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of useable floor space in rooms	Apartments layouts will allow for flexibility over time. Rooms are generally rectangular in proportion to allow for ease and variety of furnishing. Where possible, 'nook' or 'L' shaped spaces have been provided to separate dining and living or provide for different uses.	YES

4E Private Open Space and Balconies

4E-1	**Objective**		
	Apartments provide appropriately sized private open space and balconies to enhance residential amenity		✓
	Design Criteria		
	1. All apartments are required to have primary balconies as follows: Dwelling Type / Minimum Area / Minimum Depth Studio / $4m^2$ / - 1 bedroom / $8m^2$ / 2m 2 bedroom / $10m^2$ / 2m 3 bedroom / $12m^2$ / 2.4m The minimum balcony depth to be counted as contributing to the balcony area is 1m	All units are provided with primary balconies that meet the requirements of this part. Refer Typical Unit Layouts DA 53-58	YES
	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 $15m^2$ and a minimum depth of 3m	All ground floor units are provided with private open spaces that meet the requirements of this part. Refer Typical Unit Layouts DA 53-58	YES
	Design Guidance		
	Increased communal open space should be provided where the number or size of balconies are reduced	Design criteria is achieved	N/A
	Storage areas on balconies is additional to the minimum balcony size	No storage is incorporated on balconies	N/A
	Balcony use may be limited in some proposals by: • consistently high wind speeds at 10 storeys and above • close proximity to road, rail or other noise sources • exposure to significant levels of aircraft noise • heritage and adaptive reuse of existing buildings • in these situations, Juliet balconies, operable walls, enclosed winter gardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated	-	N/A
4E-2	**Objective**		
	Primary private open space and balconies are appropriately located to enhance liveability for residents		✓
	Design Guidance		
	Primary open spaces and balconies should be located adjacent to living room, dining room or kitchen to extend the living space	All primary private open spaces and balconies are located adjacent to and directly accessible from living areas.	YES
	Private open spaces and balconies predominantly face north, east and west	The majority of private open spaces and balconies face north, east or west. Due to the site orientation, a few private open spaces face south, however, this is limited to a small number of apartments only.	YES

	Primary open space and balconies should be oriented with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms	All private open spaces and balconies are oriented with the long sides facing outwards.	YES
4E-3	**Objective**		
	Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building		✓
	Design Guidance		
	Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred	A combination of solid, glazed and open metal balustrades are utilised to respond to the unique conditions of each building facade.	YES
	Full width full height glass balustrades alone are generally not desirable	Some full height glass balustrades are incorporated to allow for visual permeability whilst dealing with the wind conditions of the subject site. The glazed balustrades are considered to be appropriate for the context of the proposed development.	YES
	Projecting balconies should be integrated into the building design and the design of soffits considered	No projected balconies are proposed.	YES
	Operable screens, shutters, hood and pergolas are used to control sunlight and wind	Screens are provided where appropriate.	YES
	Balustrades are set back from the building or balcony edge where overlooking or safety is an issue	-	N/A
	Downpipes and balcony drainage are integrated with the overall facade and building design	Downpipes and balcony drainage will be integrated within the overall facade and building design	YES
	Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design	Air-conditioning condenser units will be fully integrated into the building design, located in consolidated areas (not on individual balconies)	YES
	Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design	The design and size of balconies allows for clothes drying facilities to be integrated appropriately into the building design. Not storage or air conditioning units are proposed on the balconies.	YES
	Ceilings of apartments below terraces should be insulated to avoid heat loss	Ceilings will be insulated in accordance with the requirements of the NCC and accompanying BASIX certificate.	YES
	Water and gas outlets should be provided for primary balconies and private open spaces	Water and gas outlets will be provided for primary balconies and private open spaces	YES
4E-4	**Objective**		
	Private open space and balcony design maximises safety		✓
	Design Guidance		
	Changes in ground levels or landscaping are minimised	Ground floor units incorporate a level change within their private open spaces, due to flood constraints. No other level changes are proposed within private open spaces or balconies/	YES
	Design and detailing of balconies avoids opportunities for climbing and falls	The design of balconies and balustrades will be in accordance with the provisions of the NCC	YES
4F	**Common Circulation and Spaces**		
4F-1	**Objective**		
	Common circulation spaces achieve good amenity and properly service the number of apartments		✓
	Design Criteria		
	1. The maximum number of apartments off a circulation core on a single level is eight	The maximum number of apartments off a circulation core on a single level is 9. This occurs on Levels 01 – 04 of tower P only. The circulation core is serviced by 2 lifts and is separated into two distinct corridors, at right angles to one another, with glazed ends. As such, the arrangement is considered to achieve a good level of amenity and proper service in accordance with the objective of this part. Additional discussion regarding the proposed variations and their acceptability is included in the accompanying SEPP 65 Design Principle Statement.	ACCPETABLE
	2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40	Building P includes a total of 100 units and is serviced by two lifts. As such, the maximum number of units sharing a single lift is less than 50. Technical advice was sought in relation to the proposed variation. This advice is included in the accompanying SEPP 65 Design Principle Statement.	ACCPETABLE
	Design Guidance		
	Greater than minimum requirements for corridor widths and/ or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors	Circulation spaces have been designed to allow for comfortable access and movement. All circulation spaces have a minimum width of 1.5m. Greater than minimum widths are provided around lift lobbies, apartment entries and corridor ends	YES
	Daylight and natural ventilation should be provided to all common circulation spaces that are above ground	All common circulation areas are naturally lit and ventilated, via a window at one or both corridor ends.	YES
	Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors	As above.	YES
	Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include: • a series of foyer areas with windows and spaces for seating • wider areas at apartment entry doors and varied ceiling heights	Longer corridors incorporate direction changes, changes in width and 'open' ends, to provide appropriate amenity for residents.	YES
	Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments	2 lift cores are provided, maximising the number of dual aspect apartments incorporated into the proposed development.	YES
	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: • sunlight and natural cross ventilation in apartments • access to ample daylight and natural ventilation in common circulation areas • common areas for seating and gathering • generous corridors with greater than minimum ceiling heights • other innovative design solutions that provide high levels of amenity	The design criteria is exceeded (by 1 unit) on 4 levels only. All common circulation spaces are provided with a high level of amenity through: • glazed ends, providing ventilation and daylight • generous widths • limited lengths, in any one direction	YES
	Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level	As above. The design criteria for number of apartments off a circulation core is exceeded by 1 unit, on 4 levels only.	YES
	Primary living room or bedroom windows should not open directly onto common circulation spaces whether open or enclosed. Visual acoustic privacy from common circulation spaces to any other rooms should be carefully controlled	No bedroom or living room windows open on to common circulation space.	YES
4F-2	**Objective**		
	Common circulation spaces promote safety and provide social interaction between residents		✓
	Design Guidance		
	Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines	Corridors between vertical circulation points and apartment entries have been minimised in length and incorporate a single bend. Clear sight lines are available along the length of each corridor segment.	YES
	Tight corners and spaces are avoided	No tight corners or spaces are proposed.	YES
	Circulation spaces should be well lit at night	Circulation spaces will be well lit at night	YES
	Legible signage should be provided for apartment numbers, common areas and general way finding	Legible signage will be provided.	YES
	Incidental spaces, for example space for seating in a corridor, at a stair, or near a window are provided	The proposed development incorporates glazed corridor ends, capable of facilitating seat opportunities.	YES

	In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space	The communal open spaces are capable of supporting a range of activities including meetings. Refer Level 01 Plan DA 17, Level 05 Plan DA 21 and Level 11 Plan DA 27 and Landscape Package prepared by Taylor Brammer Landscape Architects	YES
	Where external galleries are provided, they are more open than closed above the balustrade along their length	No external galleries proposed.	N/A
4G	**Storage**		
4G-1	**Objective**		
	Adequate, well designed storage is provided in each apartment		✓
	Design Criteria		
	1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: Dwelling Type / Storage Size Volume Studio 4m³ 1 bedroom 6m³ 2 bedroom 8m³ 3 bedroom 10m³ At least 50% of the required storage is to be located within the apartment	All units are provided with storage in accordance with the requirements of this criteria. At least 50% of the required storage volume is located within the apartment. Storage cages for each unit are provided within the basement Refer Introduction DA 01, Typical Unit Layouts DA 53-58, Basement Plans DA 12 - 15	YES
	Design Guidance		
	Storage is accessible from either circulation or living areas	All internal storage areas are accessible from circulation or living areas. Refer Typical Unit Layouts DA 53 - 58	YES
	Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street	No storage on balconies proposed	N/A
	Left over space such as under stairs is used for storage		N/A
4G-2	**Objective**		
	Additional storage is conveniently located, accessible and nominated for individual apartments		✓
	Design Guidance		
	Storage not located in apartments is secure and clearly allocated to specific apartments	Storage cages for each unit are provided within the basement. The units will be allocated to specific apartments. Refer Proposed Basement Plans DA 12 - 15	YES
	Storage is provided for larger and less frequently accessed items	Basement storage cages will enable storage of larger items	YES
	Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible	Storage cages are provided separately to car spaces. Car spaces are not encroached upon by storage cages	YES
	If communal storage rooms are provided they should be accessible form common circulation areas of the building	-	N/A
	Storage not located in apartments is integrated into the overall building and is not visible from the public domain	Storage is provided in the basement	YES
4H	**Acoustic Privacy**		
4H-1	**Objective**		
	Noise transfer is minimised through the siting of buildings and building layout		✓
	Design Guidance		
	Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy)	Refer part 3F Visual Privacy	YES
	Window and door opening are generally oriented away from noise sources	The proposed development is located adjacent to the railway line. An acoustic report has been prepared by Dural Group and accompanies the development application.	N/A
	Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas	Where possible, noisy uses are located adjacent to each other. Service areas of apartments are stacked.	YES
	Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources	Non-habitable rooms and circulation areas of apartments are located adjacent to common circulation spaces to buffer noise to habitable rooms	YES
	The number of party walls (walls shared with other apartments) are limited and are appropriately insulated	Party walls are limited and will be insulated in accordance with the requirements of the NCC	YES
	Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms	Bedrooms are located away from noise sources	YES
4H-2	**Objective**		
	Noise impacts are mitigated within apartments through layout and acoustic treatments		✓
	Design Guidance		
	Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions: • rooms with similar noise requirements are grouped together • doors separate different use zones • wardrobes in bedroom are co-located to act as sound buffers	Like uses are grouped within apartments. Where possible kitchens bathrooms and laundries are co-located and separated from sensitive uses such as bedrooms. Doors and corridors are utilised to separate uses of different noise levels.	YES
	Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions: • double or acoustic glazing • acoustic seals • use of materials with low noise penetration properties • continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements		N/A
4J	**Noise and Pollution**		
4J-1	**Objective**		
	In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings		✓
	Design Guidance		
	To minimise impacts the following design solutions may be used: • physical separation between buildings and the noise or pollution source • residential uses are located perpendicular to the noise sources and where possible buffered by other uses • non-residential buildings are sites to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces • non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources • buildings should respond to both solar access and noise. Where solar access is away from the noise source, non-habitable rooms can provide a buffer • where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4)	The proposed development is located adjacent to the railway line. An acoustic report has been prepared by Dural Group and accompanies the development application. The recommendations of the acoustic report will be fully incorporated into the proposed development, in order to minimise the impacts of the external noise source and create an appropriate level of residential amenity.	YES
	Landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry	The proposed development incorporates substantial planting on structures which has the potential to reduce the perception of noise and act as a filter.	YES

	Achieving the design criteria in the Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas: • solar and daylight access • private open space and balconies • natural cross ventilation	-	N/A
4J-2	**Objective**		
	Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission		✓
	Design Guidance		
	Design solutions to mitigate noise include: • limiting the number and size of openings facing noise sources • providing seals to prevent noise transfer through gaps • using double or acoustic glazing, acoustic louvers or enclosed balconies (wintergardens) • using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits	As Above.	YES
4K	**Apartment Mix**		
4K-1	**Objective**		
	A range of apartment types and sizes is provided to cater for different household types and into the future		✓
	Design Guidance		
	A variety of apartments types is provided	A mix of apartment types is provided including: • 54 X 1 bedroom units (32%) • 110 X 2 bedroom units (65%) • 4 X 3 bedroom units (3%)	YES
	The apartment mix is appropriate, taking into consideration: • the distance to public transport, employment and education centres • the current market demands and projected future demographic trends • the demand for social and affordable housing different cultural and socioeconomic groups	The mix is considered appropriate for the location.	YES
	Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households	Apartment layouts are considered appropriate to provide flexibility of use. The provision of 2+ bedroom units caters for different life stages and living arrangements as the additional bedroom(s) can be used flexibly. Potential alternative uses include: a nursery, media room, study, home office or home gym. A number of 1 bedroom units are provided with studies. Additionally, the inclusion of 1, 2 and 3 bedroom units caters for different life stages, household and family configurations.	YES
4K-2	**Objective**		
	The apartment mix is distributed to suitable locations within the building		✓
	Design Guidance		
	Different apartment types are located to achieve successful facade composition and to optimise solar access (see figure 4K.3)	The location of apartment types achieves cohesive and attractive facade designs and provides adequate solar access. Refer also 4M Facade Design	YES
	Larger apartment types are located on the ground or roof level where there is potential from more open space and on corners where more building frontage is available	3 bedroom apartments are located on levels 04, 08,09 + 10. The articulation and massing of the building form on these levels facilitates more building frontage for these apartments.	YES

4L	**Ground Floor Apartments**		
4L-1	**Objective**		
	Street frontage is maximised where ground floor apartments are located		✓
	Design Guidance		
	Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include: • both street, foyer and other common internal circulation entrances to ground floor apartments • private open space is next to the street • doors and windows face the street	The proposed ground floor street facing units have been designed to activate the facade, design solutions include: • private open space overlooking the public domain • windows facing the street • individual building entries • raised terraces • planter beds adjacent to the street edge and bedrooms Additionally, common building entries are directly visible from the street. The street frontage is further activated through the commercial tenancies.	YES
	Retail or home office spaces should be located along the street frontages	Commercial tenancies are located on the primary (Albert Road) frontage, closest to the Strathfield Town Centre and around the corner of Pilgrim Avenue	YES
	Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion	As above.	YES
4L-2	**Objective**		
	Design of ground floor apartments delivers amenity and safety for residents		✓
	Design Guidance		
	Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include: • elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4) • landscaping and private courtyards • window sill heights that minimise sight lines into apartments • integrating balustrades, safety bars or screens with the exterior design	Ground floor apartments are provided with a high level of privacy whilst allowing for surveillance to and from the public domain and communal open space. The private open spaces (terraces) are raised above the street level. Part solid / part open fencing provides addition privacy which is augmented by screen planting.	YES
	Solar access should be maximised through: • high ceiling and tall windows • trees and shrubs that allow solar access in winter and shade in summer	Solar access to ground floor apartments is maximised through window type and positioning.	YES

4M	**Facades**		
4M-1	**Objective**		
	Building facades provide visual interest along the street while respecting the character of the local area		✓
	Design Guidance		
	Design solutions for front building facades may include: • a composition of varied building elements • a defined base, middle and top of buildings • revealing and concealing certain elements • changes in texture, material, detail and colour to modify the prominence of elements	All building facades, including the street frontages to Albert Road and Pilgrim Avenue are highly articulated, well-considered and visually appealing. The facade compositions utilise a range of design solutions including: • a cohesive and striking colour palette, incorporating different textures of white • a high level of articulation including deep vertical recesses, horizontal banding, building indentations and architectural roof elements • inclusion of visually 'light' elements (glazed balconies) and visually 'solid' elements (blade walls, expressed slab edged) • careful composition of elements and architectural detailing including treatment and patterning of windows, balconies, balustrades and screening • incorporation of planters, providing visually engaging 'greenery' to the facades • provision of operable folding screens, which create a sense of movement in the facade through resident use	YES
	Building services should be integrated within the overall facade	Building services are not visible from the street frontages	YES
	Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: • well composed horizontal and vertical elements • variation in floor heights to enhance the human scale • elements that are proportional and arranged in patterns • public artwork or treatments to exterior blank walls • grouping of floors or elements such as balconies and windows to taller buildings	All building facades, including internal facades, are well resolved with appropriate scale, proportions and detail. Design solutions include: • incorporation and emphasis of vertical elements including stacked balconies, building indentations and recesses • incorporation and emphasis of horizontal elements including exposed slab edges to balconies, fifth floor datum line and roof elements • composition of horizontal and vertical elements to break up the building massing and volume and create a 'human scale' • a high level of architectural detailing including balustrades, windows, vertical screening elements and horizontal shading elements • a variety of materials and textures of 'white' to create visual interest and differentiate between building elements • incorporation of planters, providing visually engaging 'greenery to the facades • provision of operable folding screens, which create a sense of movement in the facade through resident use	YES
	Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights	The facades of the proposed development have been conceived of as part of the wider 'streetscape' and relate to both existing and proposed development and anticipated future character of the area.	YES
	Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals.	Building articulation including indentations, projecting balconies, blade walls and horizontal shading elements will create shadow on the facades throughout the day.	YES
4M-2	**Objective**		
	Building functions are expressed by the facade		✓
	Design Guidance		
	Building entries should be clearly defined	The building entries are highly defined through deep recesses, architectural detailing and materiality.	YES
	Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height	The corner of Albert and Pilgrim road is given visual prominence through the use of a 'rounded' corner, at the lower levels and a contrasting 'sharp' corner at the upper levels. A deep vertical recess in the first third of the Albert facade further defines and emphasise the corner element.	YES
	The apartment layout should be expressed externally through facade features such as party walls and floor slabs	Apartment layouts are expressed on the facades through exposed slab edges to balconies, window size and location and recesses between units.	YES
4N	**Roof Design**		
4N-1	**Objective**		
	Roof treatments are integrated into the building design and positively respond to the street		✓
	Design Guidance		
	Roof design relates to the street. Design solutions may include: • special roof features and strong corners • use of skillion or very low pitch hipped roofs • breaking down the massing of the roof by using smaller elements to avoid bulk • using materials or a pitched form complementary to adjacent buildings	The design of the roof relates to both street frontages. Design solutions include: • continuation of vertical articulation throughout the roof elements • continuation of the materials palette into the roof design • strong horizontal elements at the roof line • separation into smaller elements, to reduce bulk, particularly along the 'long' frontage of Pilgrim Road	YES
	Roof treatments should be integrated with the building design. Design solutions may include: • roof design proportionate to the overall building size, scale and form • roof materials compliment the building • service elements are integrated	As Above. Service elements will be integrated into the roof design.	YES
4N-2	**Objective**		
	Opportunities to use roof space for residential accommodation and open space are maximised		✓
	Design Guidance		
	Habitable roof space should be provided with good levels of amenity. Design solutions may include: • penthouse apartments • dormer or clerestory windows • openable skylights	-	N/A
	Open space is provided on roof tops subject to acceptable visual and acoustic privacy, comfort levels, safety and security considerations	The roof top communal open spaces are appropriately detailed for the location of the subject site and will provide an enjoyable and high amenity space for residents. Refer Level 11 Plan DA 17 and Landscape Package prepared by Taylor Brammer Landscape Architects	YES
4N-3	**Objective**		
	Roof design incorporates sustainability features		✓
	Design Guidance		
	Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include: • the roof lifts to the north • eaves and overhangs shade walls and windows from the summer sun	The roof design provides cover to top floor apartments to provide shading whilst also allowing for adequate winter solar access. The roof top communal open spaces on Level 11 includes a covered area for all weather use	YES
	Skylights and ventilation systems should be integrated into the roof design	No skylights or ventilation systems are included on the roof top.	YES

4O	**Landscape Design**		
4O-1	**Objective**		
	Landscape design is viable and sustainable		✓
	Design Guidance		
	Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating: • diverse and appropriate planting • bio-filtration gardens • appropriately planted shading trees • areas for residents to plant vegetables and herbs • composting • green roofs and walls	The landscape design includes variety of planting spaces, in different locations and of different sizes. The landscape design is capable of supporting diverse planting types, including large shade trees, and incorporating a variety of environmental sustainability initiatives. Refer Landscape Package prepared by Taylor Brammer Landscape Architects.	YES
	Ongoing maintenance plans should be prepared	The proposed development will be appropriately managed.	YES
	Microclimate is enhanced by: • appropriately scaled trees near the eastern and western elevations for shade • a balance of evergreen and deciduous trees to provide shading in summer and sunlight access in winter • shade structures such as pergolas for balconies and courtyards	The landscape design includes appropriately sized trees and a balance of deciduous and evergreen trees. Refer Landscape Package prepared by Taylor Brammer Landscape Architects	YES
	Tree and shrub selection considers size at maturity and the potential for roots to compete (see table 4)	Plant selection considers size at maturity and root competition. Refer Landscape Package prepared by Taylor Brammer Landscape Architects	YES
4O-2	**Objective**		
	Landscape design contributes to the streetscape and amenity		
	Design Guidance		
	Landscape design responds to the existing site conditions including: • changes of levels • views significant landscape features including trees and rock outcrops	The subject site is located in a high-density mixed-use area. There are no significant landscape features. The landscape treatment has been designed to complement the proposed development and provide a high amenity, visually attractive place to live Refer Landscape Package prepared by Taylor Brammer Landscape Architects	YES
	Significant landscape features should be protected by: • tree protection zones (see figure 4O.5) • appropriate signage and fencing during construction	Tree protection zones will be employed as per the accompanying arborist report	YES
	Plants selected should be endemic to the region and reflect the local ecology	Plant selection includes native and endemic species that reflect the ecology of the local area. Refer Landscape Package prepared by Taylor Brammer Landscape Architects	YES
4P	**Planting on Structures**		
4P-1	**Objective**		
	Appropriate soil profiles are provided		✓
	Structures are reinforced for additional saturated soil weight	Structures will be reinforced to allow for sufficient planting	YES
	Soil volume is appropriate for plant growth, considerations include: • modifying depths and widths according to the planting mix and irrigation frequency • free draining and long soil life span • tree anchorage	All planter beds and planting on structures will include soil volumes capable of supporting a variety of plant types and sizes.	YES
	Minimum soil standards for plant sizes should be provided in accordance with Table 5	See above	YES
4P-2	**Objective**		
	Plant growth is optimised with appropriate selection and maintenance		
	Design Guidance		
	Plants are suited to site conditions, consideration include: • drought and wind tolerance • seasonal changes in solar access • modified substrate depths for a diverse range of plants • plant longevity	Plant selection includes species suited to site conditions, including planting on structures. Refer Landscape Package prepared by Taylor Brammer Landscape Architects	YES
	A landscape maintenance plan is prepared	A landscape maintenance plan will form part of the plan of management.	YES
	Irrigation and drainage systems respond to: • changing site conditions • soil profile and the planting regime • whether rainwater, stormwater or recycled grey water is used	The detailed design of the development will be ensure appropriate irrigation systems are installed.	YES
4P-2	**Objective**		
	Planting on structures contributes to the quality and amenity of communal and public open spaces		✓
	Design Guidance		
	Building design incorporates opportunities for planting on structures. Design solutions may include: • green walls with specialised lighting for indoor green walls • wall design that incorporates planting • green roof, particularly where roofs are visible from the public domain • planter boxes Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time.	Substantial and appropriate planting is incorporated within both the podium top and roof top communal open spaces. Refer Landscape Package prepared by Taylor Brammer Landscape Architects	YES
4Q	**Universal Design**		
4Q-1	**Objective**		
	Universal design features are included in apartment design to promote flexible housing for all community members		✓
	Design Guidance		
	Developments achieve a benchmark of 20% of the total apartments incorporating the Liveable Housing Guidelines' silver level universal design features	The proposed development incorporates 27 (16%) adaptable apartments, in line with the requirements of the site specific DCP. These apartments incorporate LHA silver level universal design features in their 'pre adapted' configuration. Additionally, a further 9 units incorporate LHA Silver Level features, providing a total of 36 (20%) units with Universal Design Features Refer Adaptable Unit Layouts DA 51-52 and Unit Layout Type Sheets DA 53 – 58.	YES
4Q-2	**Objective**		
	A variety or apartments with adaptable designs are provided		✓
	Design Guidance		
	Adaptable housing should be provided in accordance with the relevant council policy	As above. 27 Unit (16%) are adaptable in line with the requirements of the site specific DCP.	YES
	Design solutions for adaptable apartments include: • convenient access to communal and public areas • high level of solar access • minimal structural change and residential amenity loss when adapted • larger car parking spaces for accessibility • parking titled separately from apartments or shared car parking arrangements	Accessible parking spaces are provided for the adaptable units. Adapting the units requires minimal structural change and will not result in loss of residential amenity. Refer Adaptable Unit Layouts DA 51-52	YES

4Q-3	**Objective**		
	Apartment layouts are flexible and accommodate a range of lifestyle needs		✓
	Design Guidance		
	Apartment design incorporates flexible design solutions which may include: • rooms with multiple functions • dual master bedroom apartments with separate bathrooms • larger apartments with various living space options • open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom	Apartment layouts have the ability to be flexible for future residents, for example the 2+ bedroom units could allow for a separate TV room, study or home office. Units incorporate living areas capable of containing multiple activities.	YES
4R	**Adaptable Reuse**		
4R-1	**Objective**		
	New additions to existing buildings are contemporary and complementary and enhance and area's identity and sense of place		N/A
	Design Guidance		
	Design solutions may include: • new elements to align with the existing building • additions that complement the existing character, siting, scale, proportion, pattern, form and detailing • use of contemporary and complementary materials, finishes, textures and colours		N/A
	Additions to heritage items should be clearly identifiable from the original building		N/A
	New additions allow for the interpretation and future evolution of the building		N/A
4R-2	**Objective**		
	Adapted buildings provide residential amenity while not precluding future adaptive reuse		N/A
	Design Guidance		
	Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include: • generously sized voids in deeper buildings • alternative apartment types when orientation is poor • using additions to expand the existing building envelope		N/A
	Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas: • where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) • alternatives to providing deep soil zones where less that the minimum requirement is currently available on the site • building and visual separation – subject to demonstrating alternative design approaches to achieving privacy • common circulation • car parking • alternative approaches to private open space and balconies		N/A
4S	**Mixed Use**		
4S-1	**Objective**		
	Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement		✓
	Design Guidance		
	Mixed use development should be concentrated around public transport and centres	The proposed development is located within a mixed-use zone and is approximately 200m for Strathfield Train Station. The location is considered appropriate for – and requires – a mixed use development.	YES
	Mixed use developments positively contribute to the public domain. Design solutions may include: • development addresses the street • active frontages are provided • diverse activities and uses • avoiding blank walls at the ground level • live/work apartments on the ground level, rather than commercial	The proposed development is a mixed use development. It contributes positively to the public domain through: • an 'active' frontage – with glazed commercial premises – to Albert Road, and the corner of Pilgrim Avenue • individual apartment entries to ground floor apartments • no blank walls at the ground level • a highly articulated, high quality contemporary design with an attractive and visually engaging streetscape appearance	N/A
4S-2	**Objective**		
	Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents		✓
	Design Guidance		
	Residential circulation areas should be clearly defined. Design solutions may include: • residential entries are separated from commercial entries and directly accessible form the street • commercial service areas are separates from residential components • residential car parking and communal facilities are separated or secured • security at entries and safe pedestrian routes are provided • concealment opportunities are avoided	The residential lobbies are cleared defined by deep vertical recesses in the buildings facade. Commercial service and parking areas are separate from residential facilities. The residential lobbies will require electric access and be provided with audio / visual intercoms, for security.	YES
	Landscaped communal open space should be provided at podium or roof levels	Landscaped open space is provided on Levels 01, 05 and 11	YES
4T	**Awnings and Signage**		
4T-1	**Objective**		
	Awning are well located and complement and integrate with the building design		✓
	Design Guidance		
	Awnings should be located along streets with high pedestrian activity and active frontage	A colonnade is incorporated along the active frontage, to provide shelter in an integrated manner.	YES
	A number of the following design solutions are used: • continuous awnings are maintained and provided in areas with an existing pattern • height, depth, material and form complements the existing street character • protection from the sun and rain is provided • awning are wrapped around the secondary frontages of corner sites • awnings are retractable in areas without an established pattern	As above.	YES
	Awnings should be located over building entries for building address and public domain amenity	As above. The residential entries to the proposed development are distinguished by deep recesses, which also provide shelter.	YES
	Awnings relate to residential windows, balconies, street tree planting , power poles and street infrastructure	As above.	YES
	Gutters and down pipes should be integrated and concealed	Gutters and downpipes will be integrated and concealed	YES
	Lighting under awnings should be provided for pedestrian safety	Lighting will be provided in the colonnade and building entry recesses to provide pedestrian safety.	YES

4T-2	**Objective**		
	Signage responds to the context and desired streetscape character		✓
	Design Guidance		
	Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development	Signage will be integrated into the building design	YES
	Legible and discrete way finding should be provided for larger developments	Circulation throughout the development is continuous, legible, highly articulated and inviting.	YES
	Signage is limited to being on and below awnings and a single facade sign on the primary frontage	Signage will be limited to being below the level 01 slab and a single sign will be incorporated on the primary frontage.	YES
4U	**Energy Efficiency**		
4U-1	**Objective**		
	Development incorporates passive environmental design		✓
	Design Guidance		
	Adequate natural light is provided to habitable rooms (see 4A Solar and Daylight access)	Adequate natural light is provided to habitable rooms in accordance with part 4A and the requirements of the NCC	YES
	Well located, screened outdoor areas should be provided for clothes drying	Areas for clothes drying will be incorporated within balconies and private open space, below balustrade height.	YES
4U-2	**Objective**		
	Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer		✓
	Design Guidance		
	A number of the following design solutions are used: • the use of smart glass or other technologies on north and west elevations • thermal mass in the floors and walls of north facing rooms is maximised • polished concrete floors, tiles or timber rather carpet • insulated roofs, walls and floors and seals on window and door openings • overhangs and shading devices such as awnings, blinds and screens	The proposed development is subject to the provisions of SEPP 2004 BASIX. Appropriate solar design and energy efficiency measures will be provided in accordance with the BASIX Certificate. Additionally, a 28kw solar array has been incorporated on the roof of Building P.	YES
	Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement)	Heating and cooling infrastructure will be provided in an appropriate location	YES
4U-3	**Objective**		
	Adequate natural ventilation minimises the need for mechanical ventilation		✓
	Design Guidance		
	A number of the following design solutions are used: • rooms with similar usage are grouped together • natural cross ventilation for apartments is optimised • natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and circulation spaces as possible	Adequate natural ventilation is provided to habitable rooms in accordance with part 4B and the requirements of the NCC	
4V	**Water Management and Conservation**		
4V-1	**Objective**		
	Potable water use is minimised		✓
	Design Guidance		
	Water efficient fittings, appliances and wastewater reuse should be incorporated	The proposed development is subject to the provisions of SEPP 2004 BASIX. Appropriate water efficiency measures will be provided in accordance with the accompanying BASIX Certificate.	YES
	Apartments should be individually metered	Apartments will be individually metered	YES
	Rainwater should be collected, stored and reused on site	A Rainwater Tank has been provided and will be designed by a qualified engineer.	YES
	Drought tolerant, low water use plants should be used within landscaped areas	Drought tolerant, low water use plants will be used within landscaped areas	YES
4V-2	**Objective**		
	Urban stormwater is treated on site before being discharged		✓
	Design Guidance		
	Water sensitive urban design systems are designed by a suitably qualified professional	An On-Site Detention Tank has been provided and will be designed by a qualified engineer	YES
	A number of the following design solutions are used: • runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation • porous and open paving materials is maximised • on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits	As Above	YES
4V-3	**Objective**		
	Flood management systems are integrated into site design		✓
	Design Guidance		
	Detention tanks should be located under paved areas, driveways or in basement car parks	An On-Site Detention Tank has been provided and will be designed by a qualified engineer	YES
	On large sites parks or open spaces are designed to provide temporary on site detention basins	-	N/A
4W	**Waste Management**		
4W-1	**Objective**		
	Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity or residents		✓
	Design Guidance		
	Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park	Adequate provision of rubbish bins and storage areas ae located on the ground floor in accordance with Council requirements.	YES
	Waste and recycling storage areas should be well ventilated	As above.	YES
	Circulation design allows bins to be easily manoeuvred between storage and collection points	The design of the ground enables bins to be moved between the storage rooms and collection points.	YES
	Temporary storage should be provided for large bulk items such as mattresses	A bulky waste room is located on the ground floor.	YES
	A waste management plan should be prepared	A waste management plan will be provided	YES
4W-2	**Objective**		
	Domestic waste is minimised by providing safe and convenient source separation and recycling		✓
	Design Guidance		
	All dwelling should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days worth of waste and recycling	Kitchen layouts are capable of providing sufficient temporary storage for rubbish and recycling. Waste chutes and temporary recycling storage bins are provided within the circulation spaces of both towers, on each level..	YES
	Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core	As above.	YES
	For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses	The residential and commercial waste and recycling storage areas are separate and will be secure.	YES
	Alternative waste disposal methods such as composting should be provided	The proposed development is capable of incorporating alternative waste disposal, such as compost bins.	YES
4X	**Building Maintenance**		
4X-1	**Objective**		
	Building design detail provides protection from weathering		✓
	Design Guidance		
	A number of the following design solutions are used: • roof overhangs to protect walls • hoods over windows and doors to protect openings • detailing horizontal edges with drip lines to avoid staining of surfaces • methods to eliminate or reduce planter box leaching • appropriate design and material selection for hostile locations	The proposed building material selection, building design, architectural detailing and roof design will provide appropriate protection from weathering.	

4X-2	**Objective**		
	Systems and access enable ease of maintenance		✓
	Design Guidance		
	Window design enables cleaning from the inside of the building	Windows and doors either open to a balcony or are sliding type, enabling cleaning from inside the building	YES
	Building maintenance systems should be incorporated and integrated into the design of the building form, roof and facade	The buildings have been designed to minimise the need for external maintenance of the facade	YES
	Design solutions do not require external scaffolding for maintenance access	The buildings have been designed to minimise the need for external scaffolding	YES
	Manually operated systems such as blinds, sunshade and curtains are used in preference to mechanical systems	The units will be designed to minimise the need for mechanical blinds and the like	YES
	Centralised maintenance services and storage should be provided for communal open space areas within the building	The development will be managed by the property owners through a detailed Plan of Management, which will include maintenance of all communal open space. Provision for the storage of materials etc .will be provided in the basement	YES
4X-3	**Objective**		
	Material selection reduces ongoing maintenance costs		✓
	Design Guidance		
	A number of the following design solutions are used: • sensors to control artificial lighting in common circulation and spaces • natural materials that weather well and improve with time such as face brickwork • easily cleaned surfaces that are graffiti resistant • robust and durable materials and finishes are used in location which receive heavy wear and tear, such as common circulation areas and lift interiors	The proposed material pallet includes materials that are durable and easy to maintain	YES