

STATE ENVIRONMENTAL PLANNING POLICY NO 65 – RESIDENTIAL FLAT DESIGN CODE

Issue	Required	Proposed	Complies (Y/N)
Part 1 – Local Context			
Local Context	Undertake a local context analysis.	Local context analysis forms part of Environmental Assessment lodged with the Concept Plan application.	Yes
Residential Flat Building Types	Block apartments are best used with large development sites.	Apartments have been designed to respond to site configuration and optimal amenity outcomes.	Yes
Building Envelopes	Establish allowable bulk, height and location of development on a site.	Bulk, height and siting of proposed buildings will complement existing and likely future residential flat development, including the balance of the renewal area (as proposed in the Concept Plan), the existing nine storey buildings to south and the likely future development to west. Existing and proposed green spaces will improve linkages and maintain landscape character of local area.	Yes
Building Height	Test height controls against FSR and proposed number of storeys and minimum ceiling heights.	Height of buildings is comparable to existing residential flat buildings to south.	Yes
Building Depth	Max internal depth should be 18m. Freestanding buildings may exceed 18m, subject to satisfactory daylight and natural ventilation.	Buildings are designed with a maximum width of 18.7m, which is justified on the basis of the generous corridor widths (1.8m) between the apartments. Apartments typically have a maximum depth of 8.2m allowing satisfactory daylight and natural ventilation to be achieved.	Yes
Building Separation	<p><u>Up to four storeys/12 metres:</u> 12m between habitable rooms/balconies. 9m between habitable rooms & non-habitable rooms. 6m between non-habitable rooms.</p> <p><u>Five to eight storeys/25 metres:</u> 18m between habitable rooms/balconies. 13m between habitable rooms/balconies and non-habitable rooms. 9m between non-habitable rooms</p>	<p>The minimum separation between Building A and Building B is 24.2m which exceed the minimum SEPP 65.</p> <p>The minimum separation between Building B and Building C is 28.2m which well exceeds the minimum SEPP65 standard.</p>	Yes
Street Setbacks	<p>Use range where desired character is variation with overall consistency (5-9m for suburban areas). Minimise overshadowing of street and buildings. Consider secondary upper level setbacks to reinforce desired scale. Underground parking structures, awnings and balconies may encroach on setback.</p>	<p>The principal building lines for Buildings A and B are generally setback between 1m and 8m, with a minimum of 0.8m measured from the northeast corner of Building B. Building C is generally setback between 12m and 28m from the existing road reserve.</p> <p>While the setbacks to Buildings A and B may be considered less than what would usually be anticipated for a suburban area, the proposed</p>	No – fully justified and considered acceptable

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		<p>setbacks are considered appropriate based on the following:</p> <ul style="list-style-type: none"> ▪ The proposal fully complies with State and subregional strategic planning policies which seek to increase dwelling densities on land in close proximity to public transport and services, including renewal of outdated social housing estates. ▪ The location, size, road layout, lot configuration and physical separation of the renewal area from other properties (under separate ownership) enables site-specific street setbacks to be set without compromising the existing streetscape or any established setbacks or impacting on the amenity of adjoining land. ▪ Holistic site planning provides a high level of amenity for future residents. The indicative layouts have been designed to enable future compliance with SEPP 65 requirements, including solar access, natural ventilation, etc. <p>The proposed setbacks enable a dwelling density to be achieved that will facilitate the delivery of housing at an affordable price point, enabling people to enter the market who may not otherwise be able to afford to purchase a home.</p>	
Side and Rear Setbacks	<p>Retain or create rhythm or pattern of development that positively defines streetscape so space is not just left over around building form. Consider building separation, open space and soil zones. Relate setbacks to existing streetscape pattern.</p>	<p>Buildings are sited and designed to achieve good solar access, natural ventilation, building separation (for privacy/landscaping/deep soil) and views.</p> <p>Proposed setbacks respond to green open spaces and retention of existing significant vegetation.</p>	Yes
Floor Space Ratio	<p>Height, setbacks and FSR to be consistent.</p>	<p>The proposed renewal area is generally consistent with the height of the buildings to the south. The setbacks and FSR vary from the existing built form, however, the proposed densification of the site is considered appropriate, taking into account the delivery of a more pedestrian friendly environment that benefits from access to public transport and services. It represents the first step in the renewal of the broader estate and will deliver a quality residential environment with a variety of dwellings at varying price points.</p>	Yes

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Part 2 Site Design			
<i>Site Configuration</i>			
Deep Soil Zones	<p>Optimise deep soil zones.</p> <p>Support rich variety of vegetation type and size.</p> <p>Increase permeability of paved areas.</p> <p>25% of open space to be deep soil.</p>	<p>The total open space of the sites of Buildings A, B, and C is 2,432m², of which 1,314m² is deep soil zones, exceeding the minimum of 25%.</p>	Yes
Fences and Walls	<p>Respond to character of street and area.</p> <p>Delineate private and public domain without compromising safety and security.</p> <p>Contribute to amenity, beauty and usability of private and communal open spaces.</p> <p>Retain and enhance amenity of public domain by avoiding continuous lengths of blank walls and using planting to soften edges and reduce scale.</p> <p>Select durable materials which are easily cleaned and graffiti resistant.</p>	<p>There will be clear delineation between public open spaces and private communal spaces for residents through the use of fences/walls, landscaping and level changes. Materials to be used in the fences/walls will complement the materials used in the proposed buildings.</p>	Yes
Landscape Design	<p>Improve amenity of open space with landscape design, including shade and screening.</p> <p>Contribute to streetscape and public domain.</p> <p>Improve energy efficiency and solar efficiency of dwellings and microclimate of private open spaces.</p> <p>Design landscape with regard to site characteristics.</p> <p>Contribute to water and stormwater efficiency.</p> <p>Provide sufficient depth of soil above pavers</p> <p>Minimise maintenance by robust landscape elements.</p>	<p>Landscape design has been integrated with architectural/building design to deliver a high quality residential amenity, taking advantage of existing public open spaces within and to the north of the site. Significant tree planting will supplement existing significant vegetation, with additional public and private domain planting to enhance the appearance and amenity of the site. Planting includes endemic and drought tolerant species to minimise water demand, as outlined in the detailed landscape drawings.</p>	Yes
Open Space	<p>Provide communal open space appropriate and relevant to context and building setting.</p> <p>Facilitate use of communal open space by solar access, site features and minimising overshadowing.</p> <p>Provide private open space for each apartment.</p> <p>Locate open space to increase residential amenity.</p> <p>Provide environmental benefits including habitat, microclimate, rainwater percolation, outdoor drying area.</p> <p>Communal open space should be 25-30% of site area.</p>	<p>Large areas of public open space and communal (resident) open space are provided across the site. Communal open spaces are sited to provide clear delineation between private and publicly accessible open space, as well as achieving good residential amenity, solar access and the like.</p> <p>The combined site area of Buildings A, B and C is 5,106m². The total area of communal open space is 1,385m², which equates to 27% of the site area, complying with the rule of thumb in SEPP65.</p> <p>Ground floor apartments typically provide approximately 25m² of</p>	Minor variations – fully justified and considered acceptable

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	Minimum private open space for each ground level apartment is 25m ² , with minimum dimension of 4m.	private open space with minimum dimensions of 3.9m, which is broadly consistent with the rule of thumb. The dual aspect apartments within Building A have smaller terraces of 18.5m ² , however, these have a secondary balcony of 6.5m ² accessed from the bedroom. One apartment in Building A has a minimum dimension of 3.2m, however, this is considered to be useable and appropriate for a one bedroom apartment. Overall, the proposed communal and private open space areas are considered acceptable. Variations to the rule of thumb are minor and acceptable, having regard to their individual amenity and the excellent access to public open space.	
Orientation	Orient buildings to maximise north facing walls and provide adequate building separation. Respond to streetscape and optimise solar access. Courtyards and setbacks to northern boundaries. Optimise solar access to living spaces and private open space by orienting them to north. Building elements to maximise sun in winter and shade in summer.	Buildings A, B, and C are generally orientated north-south which enables connections to Green Square and the existing local road network. The north-south orientation for apartments on the eastern side to receive morning sun to internal and external living areas, while the apartments on the western side receive afternoon sun.	Yes
Planting on Structures	Design for optimum plant growth by appropriate soil and drainage. Design planters to support soil depth and plant selection.	Not applicable	NA
Stormwater Management	Retain stormwater on site. Protect stormwater quality. Control erosion. Consider grey water for irrigation.	The Stormwater Management Plan documents the water quantity and quality management measures to be incorporated into the staged development of the site. Stormwater will be retained and re-used on site in WC flushing and irrigation.	Yes
<i>Site Amenity</i>			
Safety	Delineate private and public space. Optimise visibility, functionality and safety of building entrances. Improve opportunities for casual surveillance and minimise opportunities for concealment. Control access to the development.	There will be a clear delineation between public open space, common/communal space for residents and private open space for individual residents. Building entrances will be clearly identifiable and visible from the street with appropriate security to enhance safety of residents and visitors to the site.	Yes
Visual Privacy	Maximise visual privacy adjoining buildings by separation, setbacks and site layout.	Visual privacy is maximised through building separation, window placement and landscaping within	Yes

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	<p>Design layouts to minimise direct overlooking of rooms and private open spaces.</p> <p>Use site and building design elements to increase privacy without compromising light and air access.</p>	<p>communal open spaces.</p>	
<i>Site Access</i>			
Building Entry	<p>Improve presentation to street by entry treatment.</p> <p>Direct connection and clear transition between street and entry.</p> <p>Ensure equal access for all.</p> <p>Provide safe and secure access.</p> <p>Separate building entry from car parks.</p> <p>Design entries/circulation to allow furniture movement.</p> <p>Provide mailboxes to be convenient, but not clutter the appearance of the development from the street.</p>	<p>Buildings are oriented to existing street frontages and proposed accessways to improve legibility and safety.</p> <p>Car park entries are separated from pedestrian entries, with internal access available via passenger lifts designed to accommodate furniture movement.</p> <p>Mailboxes will be located adjacent to or near the building entries.</p>	Yes
Parking	<p>Determine car spaces by access to public transport, density and ability to accommodate on site.</p> <p>Limit visitor spaces, where impact on landscape and open space is significant.</p> <p>Give preference to underground parking.</p> <p>Provide bicycle parking which is easily accessible.</p>	<p>Car parking is provided at a reduced rate of 1 space per 10 apartments, taking into account low car ownership rates of future residents (the social housing component is designed for seniors) and proximity of the site to existing public transport and services.</p> <p>Parking is located partially underground and designed so as not to be visible from public view.</p> <p>Bicycle parking facilities are provided in the basement of Buildings A and B.</p>	Yes
Pedestrian Access	<p>Accessible routes to public and semi-public areas.</p> <p>Promote equity by entry location and ramps.</p> <p>Ground floor apartments to be accessible from street and associated open space.</p> <p>Maximise number of accessible, visitable and adaptable apartments.</p> <p>Barrier free access to min 20% of dwellings.</p>	<p>The proposed development maximises accessibility through appropriate building entry design, including ramps where required, and passenger lifts for vertical circulation.</p> <p>Ground floor apartments will be directly accessible from street or communal open space where appropriate and feasible.</p> <p>All buildings have barrier free access to the front door of each apartment.</p>	Yes
Vehicle Access	<p>Ensure adequate separation between vehicle entries and street intersections.</p> <p>Optimise opportunities for active street frontages and streetscape design.</p> <p>Improve appearance of car parking entries.</p>	<p>Car park entries are located away from street intersections.</p> <p>Car parks are located partially underground to enable activated streetscapes with adequate natural surveillance of the street and avoid potential detrimental visual impacts.</p> <p>Vehicle driveways will meet AS,</p>	Yes

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	<p>Limit width of driveways to 6m.</p> <p>Locate vehicle entries away from pedestrian entries and on secondary frontages.</p>	<p>while limiting potential hardstand area. Driveways are physically separated from pedestrian entry points.</p>	

Part 3 Building Design

Building Configuration

Apartment Layout	<p>Determine apartment sizes in relation to location, market, spatial configuration and affordability.</p> <p>Ensure apartment layouts are resilient over time.</p> <p>Design layouts to respond to natural and built environments and optimise site opportunities.</p> <p>Avoid locating kitchen in circulation space.</p> <p>Include adequate storage in the apartment.</p> <p>Ensure apartments facilitate furniture removal and placement.</p> <p>Single aspect apartments to have max depth of 8m from window.</p> <p>Kitchen to be max 8m from window.</p> <p>Crossover or crossthrough apartments >15m deep to have min width of 4m.</p>	<p>Apartment sizes will meet the anticipated social housing market demand, taking into account location and design quality. 1 and 2 bedroom apartments of varying sizes are provided to accommodate multiple occupant typologies. 1 bed apartments have a minimum area of 52.5m² and 2 bed apartments have a minimum area of 70m², complying with the Code.</p> <p>Living areas are located towards the window line to maximise solar access and natural ventilation while wet areas are located closer to the centre.</p> <p>The proposal meets the SEPP65 rules of thumb concerning arrangement, storage, depth and flexibility. The typical maximum depth of apartments is 7.97m, which complies with the recommendations for single aspect apartments. Rear walls of kitchens are within 8m from a window in all apartments.</p>	Yes
Apartment Mix	<p>Provide variety of apartments in larger buildings.</p> <p>Refine appropriate mix by population trends and proximity to transport, employment and services.</p> <p>Locate mix of 1 and 3 bed units on ground floor to enable access by disabled, elderly and families.</p> <p>Optimise accessible and adaptable apartments.</p>	<p>1 and 2 bedrooms apartments are provided to cater for the existing and likely future demand within the local area.</p> <p>The social housing dwellings are designed to meet the accessibility provisions of Housing NSW for seniors.</p>	Yes
Balconies	<p>Primary balcony (min 2m depth) to be adjacent to living area.</p> <p>Consider secondary balconies in larger apartments, adjacent to bedrooms and for clothes drying.</p> <p>Balconies to respond to local climate and context, solar access, wind and privacy.</p> <p>Design balustrades to allow views and casual surveillance, while providing safety and privacy.</p> <p>Coordinate and integrate building services with façade and balcony design.</p>	<p>All primary balconies have a minimum width of 2m and are designed and orientated to take into account orientation, views, surveillance, privacy and architectural façade design.</p>	Yes

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Ceiling Heights	Coordinate internal ceiling heights and slab levels with external height requirements. Min floor to ceiling height of 2.7m. Variations to demonstrate satisfactory daylight.	A 3m floor-to-floor height has been adopted for each building, allowing for 2.7m ceiling heights.	Yes
Flexibility	Provide robust building configurations which utilise multiple building entries and circulation cores. Promote accessibility and adaptability by accessible and visitable apartments and pedestrian access.	Building A includes multiple building entries and lift cores due to the length of this building. Dwellings are designed to satisfy guidelines of NSW Housing for senior occupants.	Yes
Ground Floor Apartments	Design gardens to contribute to street. Promote housing choice by providing private gardens and maximising accessible apartments on ground floor. Increase solar access on ground floor by higher ceilings and windows and tree selection.	Front gardens will contribute to street and integrated with entry to ground floor apartments, where level access can be provided. Adequate solar access will be achieved through appropriate orientation and use of cross-through apartments, where possible.	Yes
Internal Circulation	Increase amenity and safety by generous widths, lighting, minimising lengths, avoiding tight corners, legible signage and adequate ventilation. Support better apartment layouts by designing buildings with multiple cores. Articulate longer corridors by using series of foyer areas and windows along or at end of window. Minimise maintenance and maintain durability by using robust materials in common circulation areas.	Generous corridor widths of 1.8m are provided to enable clear access for future residents who may have mobility issues. Corridors are generally straight and will be naturally ventilated. Building A has a maximum of 6 apartments serviced from a double loaded corridor, Building B has a maximum of 8 apartments serviced from a double loaded corridor and Building C has a maximum of 7 apartments serviced from a double loaded corridor. Windows will be provided at the end of corridors and on the upper level walkway in Building A, providing natural light. Robust materials will be used in common circulation areas to minimise maintenance costs and retain an appropriate appearance.	Yes
Storage	50% of storage to be within apartment and accessible from hall or living area, and dedicated storage rooms on each floor and car parks. Storage to be suitable for local area and able to accommodate larger items (eg bicycles). Storage is secure for individual use.	The majority of units (123 units) provide a minimum of 3m ³ of storage within the apartment and the balance within a dedicated storage area in the basement. The other 27 apartments provide the minimum amount of storage, however, less than 50% is provided within the apartment.	Minor variation – fully justified and considered acceptable

Building Amenity

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Acoustic Privacy	<p>Maximise acoustic privacy by adequate separation.</p> <p>Internal layout to separate noise from quiet areas by grouping bedrooms and service areas.</p> <p>Resolve conflicts between noise, outlook and views by design measures, such as double glazing.</p> <p>Reduce noise transmission from common corridors</p> <p>Provide seals to entry doors.</p>	<p>The development will incorporate recommendations of the acoustic consultant to achieve appropriate levels of internal acoustic amenity.</p>	Yes
Daylight Access	<p>Orient building to optimise northern aspect.</p> <p>Ensure daylight access to communal open space March-September and shade in summer.</p> <p>Optimise apartments receiving daylight access to habitable rooms and principal windows.</p> <p>Design for shading and glare control.</p> <p>Living rooms and POS of min 70% of apartments should receive 3 hours direct sunlight between 9am and 3pm in mid winter.</p> <p>Max 10% to be single aspect apartments with southerly aspect.</p>	<p>The proposed buildings have been orientated and articulated to allow for solar access, while maintaining desired urban design massing objectives.</p> <p>69.3% of living rooms will receive 2 hours of direct sunlight in mid-winter between 8am and 4pm. 82.7% of the outdoor private open spaces receive 2 hours of direct sunlight in mid-winter between 8am and 4pm.</p> <p>There are no apartments proposed with a single southerly aspect.</p>	Minor variation – fully justified and considered acceptable
Natural Ventilation	<p>Promote and guide natural breezes.</p> <p>Utilise building layout and section to increase natural ventilation.</p> <p>Internal layout to minimise disruptions and group rooms with similar usage together.</p> <p>Select doors and operable windows to utilise air pressure or windows to funnel breezes.</p> <p>Coordinate design with passive solar design.</p> <p>Explore innovative technologies to ventilate rooms.</p> <p>10-18m building depth for natural ventilation.</p> <p>60% of units to be naturally cross ventilated.</p> <p>25% of kitchens to have access to natural ventilation.</p>	<p>The proposed buildings have been designed to provide cross ventilation in excess of the rules of thumb by articulating the built form and supplementing with fire isolated plenum ventilation and roof openings.</p> <p>Large openings to the private open spaces will allow good ventilation to all apartments. Building widths have been kept to a maximum of 18m to allow for good natural ventilation.</p> <p>120 apartments have cross ventilation, which equates to 80% of the total number of apartments, exceeding the rule of thumb.</p>	Yes
<i>Building Form</i>			
Awnings and Signage	<p>Locate awnings over building entries.</p> <p>Enhance safety by providing lighting.</p>	<p>Building entries are recessed enabling covered areas to be provided at the front door. Lighting will be provided to enhance safety.</p>	Yes
Facades	<p>Consider relationship between building form and façade or building elements.</p> <p>Facades to have appropriate scale, rhythm and proportion responding</p>	<p>Building facades have been designed to achieve a high architectural design and finish. Refer to Turner & Associates Architectural report.</p>	Yes

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	<p>to use and desired character.</p> <p>Facades to reflect orientation of site using sunshade devices.</p> <p>Express important corners by giving visual prominence to parts of façade.</p> <p>Coordinate and integrate building services.</p> <p>Coordinate security grills, ventilation louvres and car park entry doors with overall façade design.</p>		
Roof Design	<p>Relate roof design to desired built form.</p> <p>Relate to size and scale of building, elevations, building form.</p> <p>Respond to orientation of site.</p> <p>Minimise visual intrusiveness of service elements.</p> <p>Facilitate use of roof for sustainable functions.</p>	Proposed flat roof forms are an appropriate element to complement the contemporary design approach.	Yes
<i>Building Performance</i>			
Energy Efficiency	<p>Incorporate passive solar design to optimise heat storage in winter and heat transfer in summer.</p> <p>Improve control of mechanical heating and cooling.</p> <p>Plan for photovoltaic panels</p> <p>Improve hot water system efficiency.</p> <p>Reduce reliance on artificial lighting.</p> <p>Maximise efficiency of household appliances.</p>	<p>The buildings have been sited and designed to enable solar access and natural ventilation to be readily achieved in the future detailed design phase.</p> <p>Various Ecological Sustainable Design principles have been incorporated into the proposed dwellings to achieve the required Basix certification.</p>	Yes
Maintenance	<p>Design windows to enable internal cleaning.</p> <p>Select manually operated systems, such as blinds.</p> <p>Incorporate and integrate building maintenance systems into design of building form, roof and façade.</p> <p>Select durable materials which are easily cleaned.</p> <p>Select appropriate landscape elements and vegetation and provide appropriate irrigation systems.</p> <p>Provide garden maintenance and storage area.</p>	The proposed buildings have been designed to meet Housing NSW guidelines for maintenance.	Yes
Waste Management	<p>Incorporate existing built elements where possible.</p> <p>Recycle and reuse demolished materials.</p> <p>Specify building materials that can be reused or recycled.</p> <p>Integrate waste management into all stages of project.</p>	A waste management plan was submitted with the Concept Plan application, detailing the approach to waste minimisation and management during the construction and operational phases of the development.	Yes

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	<p>Support waste management by specifying project needs and reducing waste by using standard product sizes.</p> <p>Prepare waste management plan.</p> <p>Locate storage areas for bins away from street frontage.</p> <p>Provide waste cupboards or temporary storage area.</p> <p>Incorporate on-site composting where possible.</p>		
Water Conservation	<p>Use AAA rated appliances.</p> <p>Encourage use of rainwater tanks.</p> <p>Collect, store and use rainwater on site.</p> <p>Incorporate local native vegetation in landscape.</p> <p>Consider grey water recycling.</p>	<p>Various Ecological Sustainable Design principles have been incorporated into the proposed dwellings to achieve the required Basix certification.</p>	Yes