APARTMENT DESIGN GUIDE CHECKLIST

PROJECT: LAH23047 | RESDIENTIAL FLAT BUILDING
ADDRESS: 46 Chester Avenue, MAROUBRA
CLIENT: Homes NSW
DATE: Issue A | 01 March 2024

Part 2 Developing Controls

ITEM	DESIGN CRITERIA	COMPLIANCE	DESIGN RESPONSE
2A Primary Controls			
Primary development controls include building height, floor space ratio, building depth, building separation and setbacks. See below responses to each control.			
2B Building Envelopes			
A building envelope is a three dimensional volume that defines the outermost part of a site that the building can occupy. Building envelopes set the appropriate scale of future development in terms of bulk and height relative to the streetscape, public and private open spaces, and block and lot sizes in a particular location.	*A building envelope should be 25-30% greater than the achievable floor area (see section 2D Floor space ratio) to allow for building components that do not count as floor space but contribute to building design and articulation such as balconies, lifts, stairs and open circulation space.*	**COMPLIES**	The proposed building is situated in a balanced combination of dwelling types from low residential to residential flat buildings. The scale of the proposed is appropriate to the future development of the area.
2C Building Height			
Height controls should be informed by decisions about daylight and solar access, roof design and use, wind protection, residential amenity and in response to landform and heritage.	*The allowable gross floor area should only 'fill' approximately 70% of the building envelope (see section 2B Building envelopes).*	**COMPLIES**	
2D Floor Space Ratio			
Floor space ratio (FSR) is the relationship of the total gross floor area (GFA) of a building relative to the total site area it is built on. It indicates the intended density. FSR is a widely used method for estimating the development potential of a site.	*The allowable gross floor area should only 'fill' approximately 70% of the building envelope (see section 2B Building envelopes*	**COMPLIES**	Housing SEPP (S.42(1)(c)) FSR not exceeding the greater of 0.65:1 or the maximum FSR permitted under the LEP Randwick DCP 2013 maximum FSR of **0.75:1** Proposed FSR is **0.75:1**

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		2E Building Depth	
Building depth is an important tool for determining the development capacity of a site. It is the overall cross section dimension of a building envelope. Building depth dimensions typically include articulation such as projecting balconies, gallery access, eaves, overhangs, sun hoods,	*Use a range of appropriate maximum apartment depths of 12-18m from glass line to glass line when precinct planning and testing development controls. This will ensure that apartments receive adequate daylight and natural ventilation and optimise natural cross ventilation*	**COMPLIES**	All units achieve cross ventilation with 7 of the 7 units (100%) achieve cross ventilation. 5 of the 7 (71%) units achieve solar access. See SEPP 65 Table on drawing P5-0004.
		2F Building Separation	
Street setbacks establish the alignment of buildings along the street frontage, spatially defining the width of the street. Combined with building height and road reservation, street setbacks define the proportion and scale of the street and contribute to the character of the public domain.	Minimum separation distances for buildings are: *Up to four storeys (approximately 12m):* • 12m between habitable rooms/balconies • 9m between habitable and nonhabitable rooms • 6m between non-habitable rooms *Five to eight storeys (approximately 25m):* • 18m between habitable rooms/balconies • 12m between habitable and nonhabitable rooms • 9m between non-habitable rooms	**NON-COMPLIANCE**	Proposed development only achieves 6966mm building separation to approved Section 4.55 at 48 Chester Avenue (DA/859/2016/B)
		2G Street Setbacks	
Street setbacks establish the alignment of buildings along the street frontage, spatially defining the width of the street. Combined with building height and road reservation, street setbacks define the proportion and scale of the street and contribute to the character of the public domain	Align street setbacks with building use. For example in mixed use buildings a zero street setback is appropriate	**COMPLIES**	Prevailing setback (5m) but no less than 3m. Building achieves **5.5m** setback
		2H Side and Rear Setbacks	

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Side and rear setbacks govern the distance of a building from the side and rear site boundaries and are related to the height of the building. They are important tools for achieving amenity for new development and buildings on adjacent sites.	*Test side and rear setbacks with height controls for overshadowing of the site, adjoining properties and open spaces* *Test side and rear setbacks with the requirements for:* *• building separation and visual privacy* *• communal and private open space* *• deep soil zone requirements*	**NON-COMPLIANCE**	ADG side setback 6m (habitable), 3m (non-habitable). Proposed side setbacks are 3.0m with habitable spaces from ground to level 2. Randwick DCP 2013 Rear setback requires 15% of Lot depth (6.2m). Proposed development has 4m rear setback and 3m side setbacks. Proposed rear and side setbacks take precedent from neighbouring sites.

Part 3 Siting the Development

ITEM	DESIGN CRITERIA	COMPLIANCE	DESIGN RESPONSE
	3A Site Analysis		
Objective 3A-1 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*	**COMPLIES**	The proposed design responds to site location, context and physical elements.
	3B Orientation		
Objective 3B-1 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)* *Where the street frontage is to the east or west, rear buildings should be orientated to the north* *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)*	**COMPLIES**	The proposed building faces the street and incorporates direct access from the street. The street frontage is to the North-East. The design of the building facilitates solar access.
Objective 3B-2 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*	**NON-COMPLIANCE**	Shadow diagrams indicate minor overshadowing of adjoining neighbouring to the North mid-winter.

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	open space and 4A Solar and daylight access		Overshadowing occurs to the adjoining neighbour to the south at 48 Chester Avenue. The worst case of over shadowing occurs at 2pm-4pm 21st June, refer to Shadow Diagrams on drawing P5-9400
3C Public domain interface			
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security	*Design guidance* *Terraces, balconies and courtyard apartments should have direct street entry, where appropriate* *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)*	**COMPLIES**	The street interface divides the public and private domain by front gardens, open spaces, balconies and fences, providing surveillance and improving visual privacy.
Objective 3C-2 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*	**COMPLIES**	Refer to landscape plan
3D Communal and public open space			
Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	*1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)*	**NON-COMPLIANCE**	Required: 25% OF THE SITE AREA (157m2) Proposed: N/A Not provided. Site has adequate access to public open space.
	2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	**NON-COMPLIANCE**	Communal open space not provided. Site has adequate access to public open space that achieves direct sunlight.
3E Deep soil zones			
Objective 3E-1 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	*1. Deep soil zones are to meet the following minimum requirements:* *Minimum Dimensions* *Greater than 1,500m2 with significant existing tree cover 6m* *Deep soil zone (% of site area)* *7%*	**COMPLIES**	Required: 7% OF THE SITE AREA (44m2) Proposed: 114.4m2 (18% of the site area)
3F Visual Privacy			

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Objective 3F-1 Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy	*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:* *over 25m (9+ storeys)* *Habitable rooms and balconies-12m* *Non-habitable rooms-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*	**NON-COMPLIANCE**	The Proposed Development does not achieve the 6m required setback between neighbouring sites, however, includes external fittings such as screens to balconies and minimal windows on the North and South to achieve visual privacy between neighbouring buildings. The neighbouring development 44 Chester Avenue is a residential flat building and the approved development application to the south at 48 Chester Avenue is a residential flat building. The two adjoining neighbours do not achieve the building separation required.
3G Pedestrian access and entries			
Objective 3G-1 Building entries and pedestrian access connects to and addresses the public domain	*<u>Design guidance</u>* *Multiple entries (including communal building entries and individual ground floor entries) should be provided to activate the street edge* *Entry locations relate to the street and subdivision pattern and the existing pedestrian network* *Building entries should be clearly identifiable and communal entries should be clearly distinguishable from private entries* *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*	**COMPLIES**	Suitable access is provided and clearly delineated
3H Vehicle Access			
Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes	*<u>Design guidance</u>* *Car park access should be integrated with the building's overall facade.* *Design solutions may include:*	**COMPLIES**	Carparking has been provided at the rear of the site to minimise visibility from the street. Driveway and access pathway into site have been separated to achieve safety between pedestrians and vehicles.

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	• the materials and colour palette to minimise visibility from the street *• security doors or gates at entries that 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*		
3J Bicycle and car parking			
Objective 3J-1 Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	*1. For development in the following locations:* *• on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less* *The car parking needs for a development must be provided off street*	**COMPLIES**	Proposed off-street parking provides 3 spaces.

Part 4 Designing the Building

ITEM	DESIGN CRITERIA	COMPLIANCE	DESIGN RESPONSE
Amenity			
4A Solar and Daylight access			
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	*. 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*	**COMPLIES**	2 hours solar access to living rooms and private open space areas in at least 70% of units

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	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**	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	**COMPLIES**	
4B Natural Ventilation			
Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	*1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the 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*	**COMPLIES**	7 of the 7 units (100%) achieve ventilation
	2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	**COMPLIES**	We confirm that no cross-over or cross-through apartment is greater than 18m.
4C Ceiling heights			
Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access	*1. Measured from finished floor level to finished ceiling level minimum ceiling heights are: Habitable rooms 2.7m Non-habitable 2.4m*	**COMPLIES**	
4D Apartment size and layout			
Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	*1. Apartments are required to have the following minimum internal areas: 1 bedroom 50m2 2 bedroom 70m2 3 bedroom 90m2*	**COMPLIES**	
	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	**COMPLIES**	

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Objective 4D-2 Environmental performance of the apartment is maximised	*1. Habitable room depths are limited to a maximum of 2.5 x the ceiling height*	**COMPLIES**	
	2. In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	**COMPLIES**	
Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs	*1. Master bedrooms have a minimum area of 10m2 and other bedrooms 9m2 (excluding wardrobe space)*	**COMPLIES**	
	2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space)	**COMPLIES**	
	3. 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	**COMPLIES**	
	4. The width of cross-over or cross through apartments are at least 4m internally to avoid deep narrow apartment layouts	**COMPLIES**	
4E Private open space and balconies			
Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity	*1. All apartments are required to have primary balconies as follows: 1 bedroom apartments Minimum Area 8m2 Minimum Depth 2m 2 bedroom apartments Minimum Area 10m2 Minimum Depth 2m 3+ bedroom apartments Minimum Area 12m2 Minimum Depth 2.4m*	**COMPLIES**	
4F Common circulation and spaces			
Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments	*1. The maximum number of apartments off a circulation core on a single level is eight*	**COMPLIES**	
4G Storage			

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Objective 4G-1 Adequate, well designed storage is provided in each apartment	*1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:* • *1 bedroom apartments 6m3* • *2 bedroom apartments 8m3* • *3+ bedroom apartments 10m3* *At least 50% of the required storage is to be located within the apartment*	**COMPLIES**	
4H Acoustic privacy			
Objective 4H-1 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)* *Window and door openings are generally orientated away from noise sources*	**NON-COMPLIANCE**	
4H Noise and pollution			
Objective 4J-1 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 source and where possible buffered by other uses* *• non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces*	**NON-COMPLIANCE**	
Configuration			
4K Apartment mix			
Objective 4K-1 A range of	*Design guidance* *A variety of apartment types is provided*	**COMPLIES**	The development provides 1- and 2-bedroom units.

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apartment types and sizes is provided to cater for different household types now and into the future			
4M Facades			
Objective 4M-1 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*	**COMPLIES**	Varied building materials are proposed including finishes along the front facade
4N Roof design			
Objective 4N-1 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*	**COMPLIES**	Proposed roof design is a low skillion with 3º pitch
4O Landscape Design			
Objective 4O-1 Landscape design is viable and sustainable	*Recommended tree planting in deep soil zones* *Greater than 1,500m2 1 large tree or 2 medium trees per 80m2 of deep soil zone*	**COMPLIES**	
Building			
4Q Universal Design			
Objective 4Q-1 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 Livable Housing Guideline's silver level universal design features*	**COMPLIES**	All proposed units achieve silver liveability

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Objective 4Q-2 A variety of apartments with adaptable designs are provided	*Design guidance* *Adaptable housing should be provided in accordance with the relevant council policy*	**NON-COMPLIANCE**	No adaptable unit provided. Site is affected by flooding in a PMF event.
Objective 4Q-3 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*	**COMPLIES**	
4S Mixed Use			
Objective 4S-1 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*	**N/A**	N/A
Objective 4S-2 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 from the street* *• commercial service areas are separated 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*	**N/A**	N/A
4T Awnings and signage			
Objective 4T-1 Awnings are well located and complement and integrate with the	*Design guidance*	**N/A**	N/A

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building design	*Awnings should be located along streets with high pedestrian activity and active frontages*		
Objective 4T-2 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*	**N/A**	N/A
4U Energy efficiency			
Objective 4U-1 Development incorporates passive environmental design	*Design guidance* *Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access)* *Well located, screened outdoor areas should be provided for clothes drying*	**COMPLIES**	Design facilitates natural light with habitable rooms
Objective 4U-2 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 than carpet* *• insulated roofs, walls and floors and seals on window and door openings* *• overhangs and shading devices such as awnings, blinds and screens*	**COMPLIES**	The proposal incorporates the use of design solutions to optimise heat storage in winter and heat transfer in summer. Screening provided to balconies and external façades maintains solar access
4V Water management and conservation			
Objective 4V-1 Potable water use is minimised	*Design guidance* *Water efficient fittings, appliances and wastewater reuse should be incorporated.* *Apartments should be individually metered* *Rainwater should be collected, stored and reused on site.* *Drought tolerant, low water use plants*	**COMPLIES**	Suitable water fittings and appliance will be provided. As per BASIX

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	should be used within landscaped areas.		
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	*Design guidance* *Water sensitive urban design systems are designed by a suitably qualified professional*	**COMPLIES**	Suitable designed water sensitive systems are facilitated by the design
4W Waste management			
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of 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.* *Waste and recycling storage areas should be well ventilated.* *Circulation design allows bins to be easily manoeuvred between storage and collection points.* *Temporary storage should be provided for large bulk items such as mattresses.* *A waste management plan should be prepared*	**COMPLIES**	Suitable designed waste management systems are facilitated by the design. A waste management plan has been provided for P5 submission
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	*Design guidance* *All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days' worth of waste and recycling.* *Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core* *For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses.* *Alternative waste disposal methods such as composting should be provided*	**COMPLIES**	
4X Building maintenance			
Objective 4X-1 Building design detail provides protection from weathering	*Design guidance* *A number of the following design*	**COMPLIES**	

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	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*		
Objective 4X-2 Systems and access enable ease of maintenance	*Design guidance* *Window design enables cleaning from the inside of the building.* *Building maintenance systems should be incorporated and integrated into the design of the building form, roof and façade.* *Design solutions do not require external scaffolding for maintenance access.* *Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems.* *Centralised maintenance, services and storage should be provided for communal open space areas within the building.*	**COMPLIES**	
Objective 4X-3 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*	**COMPLIES**	

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	• *robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors*		