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Part C -General Develo	oment Guidelines			
C.3 Building Sustainabili	ty / C3.3 Major Developments			
C3.3.2 General Requirements	As a minimum, all major developments should consider the best practice design principles and initiatives outlined in Appendix B. In addition, the following apply: 3. for developments with an estimated cost over \$30 million, projects should seek to achieve a minimum 4- star rating and aspire to achieve a 5-star rating using the most recent and relevant Green Star rating tool (or	Complies The proposal has an estimated cost over \$30 million.		
	equivalent)	The proposal will achieve a minimum 4-star green star building v.1 rating, refer to Appendix 13 .		
C3.3.4 National Construction Code (NCC)	Section J of the NCC requires the design of certain non-residential buildings to satisfy minimum standards to improve energy efficiency. These provisions relate to Class 3 and Class 5 to 9 buildings. Compliance is required to be shown at the Construction Certificate (CC) stage. However, the design of an environmentally sustainable building needs to be resolved at the development application stage. Therefore, a compliance statement, prepared by a suitably qualified person, must be submitted with the development application for all Class 3 and Class 5 to 9 buildings to confirm that the energy targets can be achieved in accordance with the 'Deemed to Satisfy' or 'Performance Solution' provisions under Section J of the NCC.	Complies A Section J report has been prepared for the proposal which addresses the minimum standards of the NCC - refer to Appendix 14 .		
	 Notes: The NCC recognises that the Green Star rating tool or NABERS Commitment Agreement can be used to satisfy the 'Performance Solution' provisions under Section J. Where BASIX is not applied to alterations and additions to Class 1 and 2 and Class 4 parts of buildings, the NCC Section J provisions will apply to ensure energy efficiency measures are incorporated 			
C3.3.6 National Australian Built Environment Rating Scheme (NABERS)	The Commercial Building Disclosure (CBD) Program is a regulatory program that requires energy efficiency information to be provided in most cases when commercial office space of 1,000m2 or more is offered for sale or lease. The program requires an up-to-date Building Energy Efficiency Certificate (BEEC). To obtain a Certificate an accredited assessor is required to undertake an assessment in accordance with the National Australian Built Environment Rating System (NABERS).	Complies The proposal will achieve a minimum 4-star green star building rating and 4-star NABERS, refer to Appendix 13 .		
	lots of scope for improvement. A five-star rating is deemed to be 'excellent' and a six-star rating indicates a market leading performance, with half the greenhouse gas emissions or water use of a five-star building.			

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	For more information regarding the Commercial Building Disclosure (CBD) Program, please refer to the Australian Government web site at: http://cbd.gov.au/			
	In addition to the mandatory requirements relating to NABERS Energy, and the owner's obligation to obtain a BEEC, NABERS can be used to rate several types of developments, including apartments, hotels, data centres and office buildings. NABERS can also be used to rate water, waste and indoor environment quality.			
	Following construction and occupation, the following types of development must demonstrate compliance with this DCP by signing a NABERS Energy Commitment Agreement to achieve a minimum five star rating for the base building, whole building or tenancies as appropriate:			
	 new residential developments comprising 10 or more apartments new commercial office buildings with a net lettable floor area of 1,000m2 or more alterations and additions or refurbishment of existing commercial office buildings with a net lettable area of 1,000m2 and estimated cost of work over \$750,000 			
	The NABERS Commitment Agreement must be submitted to the Department of Planning Industry and Environment (DPI&E), and a copy provided to Council prior to the issue of a Construction Certificate.			
	As part of the Commitment Agreement, the performance rating must be undertaken once the building is fully operational and 12 months of energy data collection. Upon completion, a copy of the assessment report should be submitted to Council for its records.			
	Notwithstanding the above, a NABERS Energy Commitment Agreement is not required where Council is satisfied that:			
	 the upgrade works would negatively impact on the heritage significance of a heritage listed item under Schedule 5 of WLEP 2012 			
	2. the costs associated with the energy efficiency upgrade works are unreasonable when compared to the overall estimated cost of works for the alterations, additions and refurbishment			
	Notes:			
	 Any application which may impact on a heritage item must be supported by a Heritage Impact Statement prepared by a suitably qualified heritage consultant. 			

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	Where it is asserted that the costs are unreasonable, the development application must be supported by a detailed cost report prepared by a registered Quantity Surveyor, itemising and verifying the cost of the required energy efficiency upgrade works.			
	for more information regarding NABERS, please reter to the Australian Government web site at: https://www.nabers.gov.au/			
C.4 Transport Requireme	ent for Development			
C4.1 Introduction	A. Parking and Traffic Studies	Complies,		
	All major development applications are to be accompanied by a parking and traffic impact study which	A Traffic Impact Statement has been		
	assesses the impact of development on the surrounding arterial and local road network. The study must also	prepared in support of the		
	identify the transport infrastructure requirements and the cost implications for the development proposal.	development application, refer to		
		Appendix 5.		
C4.2 Car parking Requirements	A. Parking Rates The number of car parking spaces to be provided on the site is to be determined in accordance with the table "Schedule of Car Parking Requirements". The uses referred to in the Schedule of Car Parking Requirements generally refer to the predominant use of the site. However, each separate type of use on the site is to be identified and the respective floor areas used for the purpose of calculating the total car parking requirement. If any spaces are provided which are in excess of the specified rates, these spaces will be included in the calculation of floor space ratio. Special requirements will be determined for individual cases where the use proposed cannot be identified with the uses in the Schedule. Such requirements will be related to the scale of the development, general standards established elsewhere, the intensity of the public use and also based on surveys of sites with similar uses at a similar scale (see Departures from Car Parking Rates in Part C.4.1B above). Where the amount of parking required is not a whole number, the number of spaces required will be rounded down to the nearest whole number. B. Calculation of Floor Areas	Complies The DCP parking requirements specified are noted to be "neither maximum nor minimum rates but are the rates to be satisfied in any application". The DCP establishes that a total of 105.9 car parking spots are required for the development. The proposed development provides a total of 106 car parking and therefore satisfies the DCP parking requirements.		

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	Where reference is made to floor area/ use area etc, th walls, fixed corridors and lobbies, stairs, lift wells, air conc vehicular access ways and parking areas, except where development which measures gross floor area. <u>D. Table: Schedule of Car Parking Requirements</u>	See Appendix 5 for more detail.		
	Land Use	Parkina Requirements		
	Residential			
	Shop Top Housing Studio - 0.5 spaces/dwelling 1 space / dwelling (other than studios)			
	Office / Business			
	Office / Business premises within Railway Precincts (besides those mentioned below) and Major Public Transport Corridors as defined in Clause C.4.1-E	1/110m ²		
	Retail			
	Shop*	1 space / 25m ²		
	<u>F. Attached dwellings, multi dwelling housing and reside</u> <u>Retail Development</u> In the case of mixed use development, calculations mu that visitor car spaces are to be determined using the a	ntial flat buildings / Industrial / Offic st be determined for each use sepa rea of the total development on th	e/ Business and arately, excepting e site.	
C4.3 Other Parking	A. Visitor Parking			Complies
Issues	Visitor parking must be suitably grouped, clearly marked consideration must be given to the location of visitor ca be required for residents' parking can be installed witho	I and conveniently located. For resi r parking spaces in order that any s ut impeding access to visitor space	dential areas, ecurity which may es. For further	The proposed parking allocation are provided in the Architectural Plans at Appendix 1 .

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	details see Part C.11: Safety by Design. Requirements for visitor parking are specified in the table "Schedule of Car Parking Requirements". For attached dwellings, multi dwelling housing and residential flat buildings, visitor car parking may be located forward of the building line where parking does not detrimentally impact on the streetscape. The	No stacked or mechanical carparking is proposed.		
	parking must be well landscaped with the use of absorptive surfaces such as pavers, grasscrete etc., to soften the appearance of these areas. Visitor parking spaces and parking spaces provided for the commercial component of any development are to be freely accessible at all times for the use of visitors and customers to the site. B. Car Parking for Adaptable Dwellings			
	Car parking facilities for adaptable busing must comply with the requirements of Part C6 of this Plan (Access, Mobility and Adaptability). All adaptable units must be allocated a car space. Disabled (accessible) parking is to be provided in accordance with Part C.6 of this Plan. <u>C. Stack Parking</u>			
	Stack parking describes the situation where the use of any parking space requires the movement of one or more other vehicles. Generally, Council does not favour this form of parking, due to issues with manoeuvrability and the possibility of vehicles being "parked in". Any proposal for stack parking must provide evidence that there is a real need for stack parking and that such a provision will not adversely affect the use of the site.			
	 For residential development, stack parking may be provided where the spaces can be allocated to the same dwelling. For other types of development, stack parking may be accepted for low turnover uses provided that: Not more than 25% of cars are to be stack parked; Provision is made in the design of the car park to enable reasonable shuffling of cars without the movement or the likely encouragement of reversing vehicles on or off the property. 			
	D. Mechanical Car Parking A mechanical car parking system is where cars are parked by mechanical means, rather than by the driver of the vehicle. Proponents for such a system will be required to advise Council why a mechanical parking system is considered more appropriate than conventional means of parking. The following principles must be considered when implementing mechanical car parking systems:			

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	 There is a demonstrated need for such a facility and that such a provision will not adversely affect the use of the site or immediate locality; Structural elements are to comply with industry standards, with particular emphasis on safety; Systems must not endanger persons or vehicles; Noise level kept to a minimum; Emergency measures predetermined to cope with an emergency; Queuing must not occur on-street; and Trained personnel are to operate the parking system. 			
	Mechanical parking systems are not suitable for visitor or disabled persons parking spaces. <u>E. Car Wash Bays</u> The provision of car wash bays is not encouraged. However, where car wash bays are proposed, the space must be connected to the sewer and serviced by recycled or tank stored water. Hydraulic details are to be provided with the development application.			
C4.4 Provision of Alternative Transport Facilities	A. Green Travel Plans A green travel plan is a package of initiatives to reduce car based travel. The objective of a Green Travel Plan is to encourage employees within an organisation to make greater use of public transport, cycling, walking and car sharing for commuting and work related journeys. Council may impose conditions of consent to a development consent requiring implementation of a Green Travel Plan for commercial or industrial development. At Council's discretion, requirements for on site car parking may be reduced on the basis of a written agreement between Council and the owner/ occupiers for implementation of a Green Travel Plan.	Capable of complying		
	B. Motorcycle Parking Motorcycle parking must be provided at a rate of 1 motorcycle space per 25 car spaces. These spaces are to have an area of 1.2 metres x 3 metres.	Complies The DCP rate requires provision of 5 motorcycle parking spaces. The proposed development includes 21 motorcycle parking spaces and is therefore compliant.		

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	C. Bicycle Parking	Complies	
	Bicycle parking facilities must be provided for commuting and recreational destinations of	The site is required to provide 9	
	 bicycle trips. In general every bicycle parking device/ storage area must: Enable wheels and frame to be locked to the device without damaging the bicycle; Be placed in public view and well lit for security purposes; Be in a convenient and accessible location outside pedestrian and vehicular movement paths; and Be protected from the weather. 	bicycle rail/racks and 6 bicycle lockers across the site. The proposal provides a single large bike storage with the ability to store	
	Design of bicycle parking facilities is to be in accordance with the provisions of AS 2890.3. Showers and	15 bicycles at basement level 01.	
	change facilities must be provided where more than three bicycle lockers are provided, and must be		
	located close to secure bicycle parking facilities for commercial and industrial development. The following is		
	provided as a guide for the number of bicycle places to be provided:		
	Bicycle lockers Bicycle rail/ racks Residential 1 per 10 units PLUS 1 per 12 units Office/business 1 per 600m ² PLUS 1 per 2500m ² Retail/ Restaurant 1 per 450m ² PLUS 1 per 150m ² Industrial 1 per 1500m ² of site area PLUS 1 per 2500m ² Table: Bicycle Parking Requirements Bicycle lockers are intended for use by residents/workers of the development and could therefore be included in secure areas of the building. Where car spaces within the development provide security devices for individual car spaces, these may be acceptable in place of providing bicycle lockers. Bicycle rails are intended for use by visitors to the building and must therefore be located in publicly accessible locations. Bicycle parking rates required for other land uses are to be determined on a merits		
C 1 E Davian	basis.		
Guidelines	 <u>A. Parking Spaces</u> All off-street parking provisions must comply with the current Australian Standard 2890 applying to Off Street Parking. All parking provision, swept path etc. are to suit a minimum 85th percentile vehicle or appropriate commercial vehicle, whichever is relevant. All minimum dimensions are to be dimensions clear of any obstructions. 	Complies The Traffic Report provided at Appendix 5 confirms the proposed scheme complies with the relevant standards.	

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	 The layout of designated car parking spaces must be organised so that the direction of movement through the area must be easily recognised and assisted where appropriate with adequate direction signs or pavement markings. In general, no designated car parking space may be located between the building line and the property alignment. In general, any designated car parking space accessed from a rear lane is to have a minimum setback of 1 metre with a 1 metre splay to the rear boundary. In general, all car parking spaces except those provided for single dwellings and dual occupancies 	The layout design of the basement car parking provides a logical direction of movement with adequate direction signs and pavement markings.		
	must be provided with adequate turning areas and aisle widths to ensure that all vehicles are able to move in a forward direction at all times when entering and leaving the site.	Adequate turning areas and aisle widths have been provided to		
	Dimensions of parking spaces 1. The dimensions of unenclosed car parking spaces clear of columns and dividing walls are to be: Minimum length: 5.4m for right angled parking Minimum width: 2.5m	support vehicles moving in a forward direction.		
	 Internal dimensions of single garages clear of obstructions are to be: Minimum length: 5.6m Minimum width: 3m with minimum car access opening free of any encroachment from jambs and fittings: 2.4m. 	A swept path analysis has been provided in the Traffic Report.		
	minimum 2500			
	 <u>C. Internal Manoeuvring Areas</u> On site turning facilities must be provided to permit the turning of vehicles likely to frequent the premises. The swept path design templates shown in the current Australian Standard 2890 must be used to determine the layout of service areas. Council may consider swept path templates from approved computer programs provided the appropriate class of vehicles are used and documentary evidence produced from vehicle manufacturers to support design parameters. Each submission will be treated on its own merits. 			

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	 <u>D. Vehicular Crossings</u> General Siting The location of any vehicular crossing from a public street to the property alignment must comply with the Australian Standard 2890 as well as being so situated that any vehicle turning from the street into the vehicular access driveway, or turning into the street from it, can be clearly seen by the driver of an approaching vehicle or pedestrians. The siting of driveways in terms of proximity to intersections must be in accordance with Australian Standard 2890. 			
	 Relationship of Driveways Driveways must be separated from each other at the kerb and at the alignment. No driveway must be located closer than 0.6m to the adjoining property and, if practicable, this distance must be increased to 1.2m for commercial land uses. The distance between adjacent driveways must be less than 1.5m or greater than 6m to deter vehicles from attempting to park between driveways and beside an insufficient section of kerb. A single combined ingress/ egress driveway must only be accepted for up to 35 car parking spaces. The entry & exit lanes of a combined driveway must be separated by a physical barrier (eg median island) at the property boundary alignment (situated wholly within the property) if there is any likelihood that vehicles entering and leaving the site simultaneously may obstruct or delay traffic flow. Driveway widths at the alignment and for at least one vehicle length within the property must be in accordance with Australian Standard 2890. 			
	 Levels and Gradients of Internal Driveways For all residential development: The gradient of the driveway across the footpath between the edge of the roadway and the boundary of the site should not exceed 1 in 20 (5%). All internal driveways shall be approximately level for the first 6 metres from the site boundary or any pedestrian way – maximum grade 1 in 20. For grades in excess of 1 in 8 (12.5%), a transitional grade will be required to prevent negotiating vehicles from scraping their undersides or bottoming. The transitional grade is calculated at half the sum of the 2 adjacent grades and is to be of minimum 2m in length. For dwelling houses and dual occupancy development, the gradient of the driveway within the property should: for the first 3 m of the driveway from the front boundary, have a gradient not steeper than 1 in 12; for the last 3m before the garage, carport or parking area not steeper than 1 in 8; and 			

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	 for the length not steeper than 1 in 4. For internal driveways of all other developments, the grade must comply with the current Australian Standard 2890. 			
	 <u>E. Ventilation of car parking areas</u> 1. For attached dwellings, multidwelling housing, residential flat buildings and shop top housing, natural ventilation is to be provided to all car parking areas including basement parking areas, and must be so designed that openings to the exterior of the building, at one point (e.g. at driveways) be no higher than 600mm above the floor level of the parking area to facilitate adequate dispersion of carbon monoxide from the area. Where full natural ventilation cannot be achieved in multistorey buildings, a combined system of natural and mechanical ventilation may be considered by Council. 2. Mechanical ventilation must be in accordance with the requirements of AS 1668.2: The use of mechanical ventilation and air conditioning in buildings - mechanical ventilation for acceptable indoor air quality, Section 4: Ventilation of enclosures used by vehicles with internal combustion engines. 	Complies Provision is made within the basement levels for car park ventilation		
C.4.8 Additional controls for shop top housing	 Minimum clear headroom in undercover car parking areas are to be 2.4m. Design of car parking structures Car parking should be located below street level and should not be visible from the street. Car parking should not take the place of shopfronts at street level. Car parking at or above ground level should be screened behind a facade which is visually integrated with the main building form. Parking at or above ground level should relate to the scale, massing, proportions, materials and finishes and should be designed as an integral part of the main facade. Vehicular entrances should not be located on the street facade, but to a side or rear facade where possible. Where it is necessary for vehicular access to be from the street frontage, this access should be well integrated into the streetscape. Garage doors, shutters and grilles should be set behind the front building line and should blend in with the appearance of the buildings. All car parking spaces must be adequately drained and line marked on the site. 	Complies Design of car parking structure The proposed underground car park provides minimum clear headroom of 2.4m and is consistent with the design for car parking structures identified. Vehicular access and driveways Vehicular basement access is provided from Hammond Lane. The proposal provides a 7.7m vehicular crossing to accommodate Council's		
	 Vehicular access and driveways No part of a vehicular crossing shall be located closer than 6m to an adjacent street alignment and closer than 1.2m to an adjacent property boundary. The maximum width of a singular vehicular crossing is to be 3m at the kerb. 	crossing to accommodate Council's 10.5m MRV truck.		

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	 3. Provide a minimum distance of 5.5m between the kerbline and the parking area for temporary off carriageway standing. Pedestrian access Provide safe and convenient pedestrian access from car parking and other public areas, with well co-ordinated signage, lighting, security, direct paths of travel with stairs and disabled access ramps. The additional provisions relating to site access and car parking in Part E, Specific Controls for Commercial 	Pedestrian Access Consideration for safe and convenient access is provided in the design of the proposal.			
C E Water Management	and shop top housing development should also be considered.				
C.5 Water Management	ate .				
C5.3.1 OSD for Major Developments	All major developments are required to provide OSD that is designed to capture and detain stormwater runoff for all storm events up to and including the 1% AEP storm event. The OSD system must be in accordance with Council's Technical Standard No.1 - Stormwater Management and AS/NZS3500.3. The Statement of Environmental Effects (SEE) and the Stormwater Management Plan submitted with a DA must address WSUD, recycling and pollution control measures (please refer to Technical Standard No.1 - Stormwater Management). The Stormwater Management Plan is required to be prepared by a suitably qualified engineer.	Complies An OSD is provided as part of the development application to capture and detain stormwater runoff in accordance with Council requirements. Refer to civil design/stormwater Plan in Appendix 3 and Appendix 4 for further details.			
C.6 Access, Mobility and Adaptability					
C.6.2.1- Building Code of Australia and Disability (Access to Premises-Buildings) Standards 2010.	All developments will be required to comply with the accessibility requirements of the Building Code of Australia and the Disability (Access to Premises- Buildings) Standards 2010 at Construction Certificate stage where they apply. Nevertheless at Development Application stage, sufficient consideration must be given to the Disability (Access to Premises- Buildings) Standard 2010 to demonstrate that at the detailed design stage for the purposes of a Construction Certificate the development will not require desian change to comply.	Complies The application is supported by an Access report, refer to Appendix 17 .			

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C.6.2.2 Accessible Car Parking	Accessible Car parking must comply with the design requirements of AS/NZS 2890.6 and the number of accessible spaces shall comply with the following table: Table: Number of Accessible Spaces to be Provided			Complies Refer to Architectural Plans and Traffic Report in Appendix 5 for further	
	Class 1a.	A single dwelling-house, terrace house, townhouse, row house, and villa house, or the like, which may be detached or separated by a common wall; or	Nil		details.
	Class 1b.	A dwelling-house used as a boarding house, hostel, group house, or the like, in which not more than 12 persons would ordinarily be resident. A building containing two or more sole-occupancy units each being a senarate dwelling excluding buildings of class 1	1 accessible space for each accessible or adaptable unit. Adaptable units to comply with Section C.6.2 of WDCP.		
	Class 3.	A residential building, other than a building of class 1 or 2 which is a common place of living for a number of unrelated persons, including: a) a boarding house, guest house, hostel, or lodging house; b) a residential part of a hotel or motel; c) a residential part of a school;	than 50 spaces. The greater of (a), (b) or (c): (a) 1 accessible space; (b) 1 accessible space for each accessible or adaptable unit; or (c) 3% of total car parking spaces. That is:		
	Class 4.	 d) accommodation for the aged, disabled or children; and e) a residential part of health- care related <u>building</u> which accommodates members of the staff. A dwelling in a building that is Class 5, 6, 7, 8 or 9 if it is the only dwelling 	10 to 33 spaces – 1 accessible space; 34 to 66 spaces – 2 accessible spaces; 67 to 100 spaces – 3 accessible spaces; 101 to 133 spaces – 4 spaces, etc. Adaptable units to comply with Section C.6.2 of WDCP.		
	Class 5.	in the <u>building</u> . An office <u>building</u> used for professional or commercial purposes, excluding buildings of class 6, 7, 8 or 9.	In parking areas with 5 or more spaces. The greater of (a) or (b): (a) 1 accessible space; or (b) 3% of total car parking spaces. That is: 5 to 33 spaces – 1 accessible space; 34 to 66 spaces – 2 accessible spaces; 67 to 100 spaces – 3 accessible spaces; 101 to 133 spaces – 4 spaces, etc.		
	Class 6.	A shop or other building for the sale of goods be retail or the supply of services direct to the public, including: a) an eating room, cafe, restaurant, milk or soft-drink bar; b) a dining room, bar <u>shop or kiosk</u> portion of a hotel or motel; c) a hairdresser's or barber's <u>shop;</u> d) public laundry; d) undertaker's establishment; or e) <u>market</u> or sales room, show room, or <u>service station</u> .	As above		
C.6.3 Adaptable	В.	Requirements for the provision of adaptable hou	sing units		Complies
Housing	The follow	wing table indicates the minimum requirements fo	or the provision of adaptable housing	dwellings.	

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	However it is recommended that applicants endeavour to provide additional adaptable housing features or additional adaptable dwellings where possible. Please note that the number of dwellings required is to be rounded up if 0.5 of a dwelling or more is required	The proposal includes 32 adaptable apartments out of the 64 total proposed or 50% of all dwellings
	Development Type Minimum Requirement Single storey attached dwellings, multi dwelling housing (eg attached or detached villas) 10% of units to be adaptable. Two storey attached dwellings, multi dwelling housing and residential flat buildings 25% of all dwellings to be adaptable. Three storey attached dwellings, multi dwelling housing and residential flat buildings 33% of all dwellings to be adaptable. Multi dwelling housing and residential flat buildings 35% of all dwellings to be adaptable. Multi dwellings housing and residential flat buildings 35% of all dwellings to be adaptable. Multi dwelling housing and residential flat buildings 36% of all dwellings to be adaptable. Multi dwellings buildings greater than 3 storeys. 50% of dwellings to be adaptable. Shop top housing If lift access is to be provided, 50% of all dwellings to be adaptable. Shop top housing All dwellings to be adaptable.	
	<u>C. Design Guidelines</u>	Complies Adaptable apartment layout plans
	<u>AS</u> 4299 sets out the requirements of adaptable housing.	are provided within the Architectural plans, refer to Appendix 1 .
	<u>AS</u> 4299 encourages the certification of adaptable houses into one of three classes of adaptable housing, A, B, and C. Appendix A of <u>AS</u> 4299 lists the schedule of features for each class of adaptable housing.	
	A house is classified as Class A, B or C depending on the number of features specified in <u>AS</u> 4299 that are incorporated in the design. <u>AS</u> 4299 designate features as being "essential", "first priority desirable", or "desirable" depending on their importance to a person with a disability.	
	An Adaptable House Class A is one in which all essential and desirable features are incorporated.	
	An Adaptable House Class B has all essential and at least 50% of desirable features, including all those designated <u>as</u> "first priority".	
	An Adaptable House Class C has all essential features incorporated.	
	To meet Council's minimum requirements, all adaptable housing dwellings shall be designed and	
	constructed to Adaptable House Class C- in accordance with AS 4299. However, Adaptable House Class A &	

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	Adaptable Class B is encouraged.		
	Applicants are to provide 'as built' drawings of the adap its pre- <u>adaptation</u> and post- <u>adaptation</u> stages at a <u>scale</u> be achieved shall also be provided.	otable housing dwellings showing the housing unit in <u>e</u> of 1:50. A description of how the <u>adaptation</u> is to	
	Examples of adaptable housing designs are located in A	ttachment 5.	
	D. Private Car Accommodation with Adaptable Ho Developments should provide the required number of pri C.4 of this Plan. However, all adaptable housing dwelling a car space. A <u>proportion</u> of the adaptable housing dwe provided as follows:	busing ivate car parking spaces in accordance with Part gs except for secondary dwellings must be allocated ellings are to have adaptable car parking spaces	Complies Based on the provision of 32 adaptable apartments, the DCP requires a minimum of 8 adaptable car parking spaces to be provided. The proposal parking provision is
	Number of adaptable housing dwellings	Number of adaptable car space	detailed in the Architectural Plans.
	1-4	1	
	5-9	2	All adaptable spaces are provided
	10-14	3	with a 2.5m head clearance.
	15-19 (etc)	4	
	In order to ensure distribution of adaptable car parking sy no more than 1 adaptable car space shall be provided of for each <u>dwelling</u> . The adaptable car spaces should comply with the follow 1. be located as close as practicable to and the <u>building</u> or to a wheelchair accessible li 2. have a firm surface, with a fall not exceedir 3. have a minimum length of 5.5 <u>m</u> , a minimum	paces between adaptable housing, as part of the parking requirements ving design requirements: be linked to an accessible entrance to ift by a continuous accessible path of travel; ng 1 in 40 in any direction; and n width of 3.2 <u>m</u> and a minimum <u>height</u> of 2.5 <u>m</u> .	

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C.8 Waste Management			
C.8.3.2 - General	A waste and recycling room shall be provided in all residential (excluding dwelling houses, secondary dwellings, semi detached dwellings or dual occupancies, attached dwellings and multi dwelling housing), office/ business /retail and industrial buildings for storage and treatment of waste and recycling and other waste arising on the premises.	Complies The areas allocated for waste storage and collection are located near the loading bay on the ground	
	Waste and recycling bins must be stored behind the property line at all times. Bins cannot be stored on the kerb. All waste and recycling bins serviced from the kerbside must be removed back behind the property line after collection on the same day of service (how this will be achieved must be stated in the RRMP or the CBWMC).	floor and include: • Residential waste room • Commercial waste room • Other waste room For further details, refer to the Operational Waste Management	
	All waste management facilities (eg waste and recycling rooms) must comply with the Building Code of Australia (BCA) and all relevant Australian Standards.	Plan at Appendix 12 . A BCA report is also provided at	
	In all residential developments, Council will provide all Mobile Garbage Bin (MGBs) and bulk container bins for garbage and recycling except for bulk bins specifically designed for waste compacting units. Council will carry out the maintenance on all bins except on bulk bins not supplied by Council. Council will not be	Appendix 16 which assesses the proposal against the BCA requirements.	
C.8.3.3 - Space	Sufficient space in the waste and recycling rooms must be provided for the equipment and bins to handle or manage all waste and recycling likely to be generated on the premises between collection periods (see Attachment 16 for dimensions of bulk bins and MGBs).	The space provided is sufficient to handle/manage all waste and recycling likely to be generated from the development.	
	Space must be provided within the kitchen or other convenient location, for the storage of waste and recycling for at least two days. Indicative waste and recycling generation rates for various commercial and residential developments are listed in Attachment 12 and 13.	Also refer to Traffic Report at Appendix 5 for further details on swept paths and waste vehicle	
C.8.3.4 - Access to garbage and	Where collection vehicles are required to access the waste and recycling room on private property all collection vehicles must be able to both enter and exit the premises in a forward direction. However, where	design compliance.	

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recycling rooms and communal bin areas	this is not possible it is permissible for the truck to reverse into a site, and exit in a forward direction. Where this is not possible due to demonstrated site constraints, Council's Waste Management Staff must be consulted, and may approve some other manner of ingress and egress. It is not acceptable for a truck to reverse out of a site.		
	Where a garbage truck is to enter private property to service bins, the driveway access to the waste and recycling room needs to be suitable for the collection vehicles in terms of width, strength and geometric design (see Attachment 14 for vehicle specifications). An engineer's report showing these geometric dimensions and the structural adequacy of the driveway and the vehicle travel path must also be supplied with the Occupation Certificate. The report will be supplied to the Council's Waste and Recycling Contractor as evidence of the strength of the driveway to support heavy vehicles.		
	When designing for waste collections to be carried out on private property a minimum obstructed height clearance of 3.8 m over all areas traversed by Council's refuse collection vehicles must be applied. The collection point where waste-loading operations will occur must be on a level surface away from gradients and vehicle ramps.		
	The path for MGBs between the waste and recycling room and the collection vehicle must be level and free of steps. The maximum travel distance between the storage point and the collection point for 240 litre MGBs must not exceed 15 metres. For 660 litre MGBs and for all bulk container bins including 1000, 1500L and 2000 litre the distance must not exceed 3 metres. Any proposed variations require further assessment and discussion with Council Waste Management Staff.		
C.8.3.5 - Amenity	The potential for noise, odour and vermin in the waste and recycling room must be minimised. To achieve this all waste and recycling awaiting collection is to be stored in a Council approved container (such as a MGB or bulk bin). The internal surface of garbage and recycling rooms must be smooth and washable. A sign posted on the door of the waste and recycling room should read, "please keep this door closed at all times when not in use".	Capable of Complying Council approved containers will be utilised on site for the storage of waste awaiting collection. Appropriate signage can be provided within the waste and	

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	An automatic deodoriser should be installed in enclosed waste and recycling rooms, especially where there are a large number of refuse bins.	recycling rooms to support good amenity. The waste and recycling rooms have	
	Waste and recycling rooms that are visible from outside the building must be constructed in such a manner as to have no detrimental visual impacts.	been designed to have no detrimental visual impacts and will not be visible from the public realm.	
C.8.3.6 - Location	The waste and recycling room must be located in a position that is convenient for both users and waste collection staff. It must also give consideration to streetscape, security of bins, neighbouring properties and internal amenity. In residential flat buildings and/or shop top housing developments over 3 storeys and with 18 or more units, waste and recycling rooms should be located in the basement or in an undercover car park.	Complies The location of the proposed waste and recycling rooms have been carefully considered to provide adequate access to both users and collection staff. These areas have been suitably integrated within the building and will not give rise to any adverse impacts to neighbouring properties.	
C.8.3.16 - Bin storage at the kerb	 Where waste collections will take place from the kerb a clear and unobstructed space of 3 metres must be allocated per house frontage to allow bins to be serviced without difficulty (this does not include the driveway to the property). A minimum gap of 1 m between trees or other obstacles such as poles must also be allowed for to minimise damage to bins or other structures while servicing bins. There must also be enough space so as not to cause an obstruction to pedestrians while the bins are on the kerb. Bins must also be able to be placed out on the kerb with a gap of 1 metre between each bin. Where a waste and recycling service is to be carried out at the kerb consideration must be given to the location of bus stops which may hinder the placement and servicing of bins from the kerb. Consideration also must be given to whether the nearest kerb is located on a roadway which can restrict garbage collection vehicles from stopping to service bins i.e. such as where "No stopping" or "clearway" signs are erected. 	N/A Bin collection will not occur at the kerb.	

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C.8.5 Specific Provisions – Office, Business Retail and Industrial Developments	 <u>C.8.5.1 - Submission Requirements</u> The applicant shall include: A Commercial/Industrial <u>Building</u> Waste Management Checklist (see Attachment 11) Details on <u>DA</u> plans of: The location of waste storage and recycling areas either per unit/per <u>shop</u> or located communally on-site Design details of waste storage and recycling areas. This should include, floor plan, with cross-sections and also show <u>building</u> materials and finishes If applicable, design details of garbage chute systems and any volume reduction equipment Access for collection vehicles. 	Complies An Operational Waste Management Plan has been provided in support of the Development Application in Appendix 12 .
C.8.6 Section D Specific Provisions – Shop Top Housing Developments	 General a) Where a residential development and office/ business/ retail development occupy the same site, the waste handling, storage and collection system for residential waste (from the residential area) and office/business /retail waste (from the office/business/retail area) are to be completely separate and self-contained. They must have separate keys and locking systems. b) The RRMP must identify the collection points and management systems for both residential and commercial waste streams. The waste handling and management system for each component of the shop top development must comply with the relevant section of this plan (e.g. separate residential and office/business/retail collection areas). 	Complies The handling, storage and collection system for residential and retail/business waste have been separated as part of the proposal. The Operational Waste Management provides further details in relation to collection points and management systems for both waste streams, refer to Appendix 12.
C.8.6.1 - Space	Sufficient space must be allocated in each waste and recycling storage room to store the amount of waste likely to be generated in each respective part of the development. See Attachment 12 and 13 for guidelines on office/business/retail and residential waste generation rates.	Complies The area to be provided for residential and retail waste rooms is sufficient to handle/manage all waste and recycling likely to be generated.

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C.8.6.2 - Access	Each waste and recycling room must be located in an area that is easily accessible for waste service	Complies
	collection vehicles and convenient to the users.	The waste and recycling rooms have
		been located in areas which are
		accessible to waste collection
		services.
C.8.6.3 - Amenity	Measures must be taken to ensure that noise and odour from the office/business/ retail waste facility does	Complies
	not impact on residents.	Appropriate mitigation measures
		have been identified in the
		Operational Waste Management
		Plan to address potential noise and
		odour impacts on residents.
C.8.6.4 - Management	Office/Business/retail tenants in a shop top development must be actively discouraged from using the residential waste facilities.	Complies
		A separate commercial waste room
		is provided for business premises.
		Tenants will be discouraged from
		using residential waste facilities.
C.8.6.5 - When to have	In some circumstances waste management responsibility can be internalised with each office/business	Complies
Communal facilities for	/retail unit maintaining their own bins (waste and recycling) and individual unit holders taking responsibility for putting them out for collection.	The proposed design has provided a
commercial units		separate commercial waste room
		adjacent to the loading zone, to
	In the following circumstances a communal area should be considered:	maintain active frontages across
		Hammond Lane and Gordon
	Where the design makes it difficult for all commercial units to have ready access to a collection point.	Avenue.
	Where site characteristics restrict entry of vehicles on to the site and bins must be brought to the kerb for	
	servicing.	The waste storage area has been
		designed to be easily adaptable to
	The waste storage and recycling area shall be designed to enable each separately tenanted or occupied	allow future changes in the use of the
	area within the building or complex to be provided with a designated and clearly identified space for the	building.

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C.11 Safety by Design	 housing of sufficient commercial bins to accommodate the quantity of waste and recycling material likely to be generated. The waste and recycling area should be flexible in design so as to allow for future changes in the use of the units. 1. Natural security of the street and the entry point of buildings can be achieved by 	Complies
	 Providing front entries with high visibility; Careful siting of shrubs and landscape elements; Lighting of pathways or hidden spaces. The use of high walls or fences is not considered to be an effective security measure because of the ability to conceal intruders and the potential for graffiti. Determine a functional hierarchy of spaces, leading from the public to private spaces with clear definition of territory and ownership, using landscaping, fencing or paving materials. Pedestrian site access and car parking are to be direct, clearly defined, visible and provided with adequate lighting. Entries to buildings should be clearly visible from the street and internal driveways, with general surveillance of the site and approaches to entries possible from inside the building. Arrange buildings to overlook public areas and communal streets to maximise surveillance. Avoid high fences and walls or high dense landscaping which can conceal intruders, adjacent to entries or windows, to ensure safety and surveillance. Provide security for common areas, communal open space, recreational areas by means of swipe cards, intercoms, etc. Provide clear lines of sight from parking areas to lobby areas and well lit routes. Use a clear numbering and naming system. 	The proposal has been designed in consideration of the crime prevention principles. Particularly, the proposal demonstrates a clear delineation of private and public spaces with the use of landscaping and paving materials. The communal open space on Level 2 has also been designed to encourage a sense of shared ownership and social interaction between the residents. Separate entry lobbies are provided for the residential and commercial components, which will ensure the security and amenity of the residents.
	Additional controls for car parking areas For all car parking areas (apart from car parking structures for single dwellings and dual occupancies), the following issues will be considered, and these or other relevant conditions of consent may be imposed where deemed necessary: 1. Entry to basement car parks, including pedestrian routes, must be available to tenants or residents only	Further, glazing will be provided for the ground floor retail tenancies, which facilitates passive surveillance for the public domain on Gordon Avenue and Hammond Lane.

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	 Private enclosed car parks are to contain security controlled access at the vehicular entry and exit points. Where appropriate, security devices such as intercoms, remote lock facilities and boom gates may be required. Consideration must be given to the location of visitor and disabled car parking spaces in order that any security which may be required for residents or tenants parking can be installed without impeding access to visitor spaces. Where visitor parking is provided within a secure parking area (basement or otherwise), suitable access provisions must be made such as a security intercom. Developments generating a significant amount of pedestrian movement throughout the car park (such as shopping centres or office car parks) are to establish clear and convenient pedestrian routes. These routes must minimise the number of points which cross vehicle paths and be appropriately marked to heighten driver awareness (e.g. painting, use of contrasting materials, lighting and/ or signage). The use of appropriate surveillance devices, such as help points, emergency phones and patrolling security staff may be required in larger car park developments. All proposed lighting of the carparking areas must comply with Australian Standard/ NZS 1158- the lighting of public roads and other public thoroughfares. In multi-level car parks, each car parking level is to contain identification signage to ensure legibility within the car park area. Car parks must be designed and located to maximise opportunities for casual surveillance. Car parks must be given to the installation of open style security grilles to enclose individual parking spaces. Hidden recesses must be avoided. Pedestrian access to buildings should be separate to vehicular access to the site. 	Adequate security measures will also be implemented, including security- controlled access at the vehicular entry, intercoms and CCTV etc. Therefore, the proposal is considered to provide adequate security for residents and visitors within the development.
C.14 Development	Controls	Capable of Complying
near Railway Corridors	Development located in the vicinity of a rail corridor or busy road needs to take into consideration the	The proposed development has
or Busy Roads	provisions of the State Environmental Planning Policy (Infrastructure) 2007 and the NSW Department of	taken into consideration the
	Planning "Development Near Rail Corridors and Busy Roads- Interim Guideline)"	provisions of the Transport and
		Infrastructure SEPP and the
	Performance Criteria	

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	 Development should be designed and constructed so as to: Protect the safety and integrity of key transport infrastructure; and Ensure that the development achieves an appropriate acoustic amenity by meeting the internal noise criteria as specified in the State Environmental Planning Policy (Infrastructure) 2007. 	Development Near Rail Corridors and Busy Roads – interim guideline.	
C.15 Undergrounding	All services are to be located underground for attached dwellings, multi dwelling housing, residential flat	Capable of Complying	
of Services	buildings, shop top housing and redevelopment of sites in business, office, retail and industrial zones. This		
	includes publicly owned land immediately outside the development site.		
Part E – Specific Control:	s for Commercial and Shop Top Housing Developments		
E1.1 Frontages	Width of allotment	Complies	
	1. Where development is proposed to exceed 11m in height or where vehicular access is only obtainable	Width of allotment	
	trom the primary street frontage a minimum width of the site at front alignment of 27m is required except	The proposed site achieves an	
	 Allotments should be amalgamated to achieve a satisfactory development, with specific regard to: provision of adequate space for landscaping and through-site links; 	allotment width of more than 27m.	
	 the general allotment pattern and the pattern of spacing of buildings in the commercial precises; and 	Site Access and Car Parking	
	 appropriate location for delivery access; and 	Vehicular access for deliveries, waste	
	 appropriate location for pedestrian and vehicular access. 	management and car parking is	
		provided to the site from Hammond	
	Site Access and Car Parking	Lane avoiding impacts on the	
	(Refer to Section C.4 for additional Transport requirements for Shop top housing and commercial	streetscape and active frontages	
	developments)		
	3. Site vehicular access for deliveries, waste management and car parking is to be from a secondary street	Complies	
	where the alternative is available to minimise disruption to the primary street trontage.	In an effort to limit vehicle entry points	
	priority to pedestrians by maintaining a constant arade for the footpath crossing for pedestrians. Before	to the building, and maintain a	
	the exit from the site, speed bumps and or warning signs to give way to pedestrians shall be provided.	prominent active frontage, all	
	The vehicle crossing area of the footpath shall be identified by pavement blending with the footpath	vehicular entrances are consolidated	
	5 The entry portal for a driveway is to be minimised in width to no more than 5 metres in order to minimise	onto the secondary street Hammond	
	the disruption to the physical appearance of the streetscape. The head clearance of the entry portal	Lane. Notwithstanding, separate	

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	 shall be no more than 2.4 metres except where the portal is also an entry to the loading dock in which case the head clearance shall be a minimum of 3.6 metres. Ancillary car parking must be provided at and/or below ground level. Council may require a restriction on use over the title of the land that limits the use of car spaces to the residents or business owners and employees that occupy the building and their short term visitors. Vehicular movements for loading and unloading and customer car parking should be separated where possible to avoid conflict and congestion. In shop top housing buildings, entries to residential apartments are to be separated from commercial entries to provide security and an identifiable address for each of the different users. The provision of car share spaces in the basements of existing buildings including for non residents and tenants is encouraged. 	entrances/lobbies/lifts have been provided to commercial and residential components	
	 Interface with the Street Fronts 11. The ground level frontages shall be transparent to allow interaction with the public domain by observation of activity and/or products displayed internally. Use of roller shutters in lieu of glazed facades is not permissible unless a minimum 70% of the roller shutter is transparent. 12. External security shutters or any kind of security mesh, gates or similar are not permitted. Any kind of internal security shutter, mesh gate or similar, if provided must be located a minimum of 1 metre behind the facade of the premises facing public space or at the rear of any window display. 13. Spruiking (by a person or recording) where it can be heard from the public domain is not permitted. 14. External automatic teller machines (ATM) must be set back a minimum of 1.5 metres from the building line when adjacent to the public domain. Each side of the receipts or dockets must be incorporated in or adjacent to the ATM Retail or business premises (other than free standing kiosks) proposing a service counter facing the public domain must set back the counter a minimum of 1.5 metres from the entry façade of the premises. This is to ensure that queuing does not obstruct the footpath. 	Complies Ground floor active street frontages to Gordon Avenue and Hammond Lane comprise transparent glazing to allow interaction with the public domain. Driveway and building services have been largely located to the rear of the site on Hammond Lane to maximise active frontages along the front and side of the site via Gordon Avenue and Hammond Lane.	
E.1.2 Density, Use and Height	 To maintain the commercial character and retain activity at street level, the ground floor or any level addressing the primary street is to predominantly comprise retail and shops, food and drink premises or business premises. Foyers or access to upper levels may also face the primary street. No more than 30% of the street frontage is to be used for vehicular and pedestrian access to lower and upper levels. A minimum of 60% gross floor space at street level is to be used for retail or business premises. 	Complies The proposed ground floor level comprises predominantly commercial/retail premises. No more than 30% of the street frontage is used for vehicular and	

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		pedestrian access to lower or upper levels. More than 60% of GFA at street level is provided for retail premises.
E.1.3 Design and Streetscape Design Qualities	Building massing and bulk 1. Buildings over 11m should have a defined podium and tower element. 2. The podium should be defined as a transition element to reflect the height and form of neighbouring buildings. This can be achieved by setbacks or changes in façade treatment, materials and colours. Applicants are required to carry out a site and context analysis prior to formulating a design to identify and consider the elements of the street and locality which must be taken into account in the design for building mass, bulk and provision of signage.	Complies The proposed development has a defined podium and tower element which acts as a transitioning element to reflect the height and form of the neighbouring buildings. It complements other buildings in the area and future desired character of Willoughby CBD.
E.1.4 Setbacks	 Front / street setback 1. Where the existing streetscape is characterised by ribbon development immediately on the boundary to the street frontage, the ground floor (and where existing two storey building façades prevail, the first floor) of the new development should maintain the existing streetscape character by incorporating a zero front setback. 2. First and second floor levels should be setback a minimum of an additional two metres from the street frontage (from that of the ground floor level below). Balconies, other than use of the podium level, shall not encroach into this setback. Note : Where both ground and first floor level incorporate a zero setback due to the existing streetscape character this provision will apply to the second floor level (see Diagram 2). 3. Third Floor and above: 5m for the third floor of the building with an increase of 1.2m for each storey of the building above the third floor (setback = 5m + 1.2m/storey above the third floor). The total required setback is to apply to all floors from the 3rd floor up (see diagram 3). 4. Balconies are not to encroach into the required setback of the level below (see Diagram 1). 5. Development with a frontage to the Pacific Highway is to provide a minimum 4 metres landscaped setback at ground level and a 4 metre setback below ground level. 6. Splay corners are to be provided to all street corners at street level. 	The site is subject to a site specific DCP at section E.3.7 which provides specific setback requirements for the site – refer to WDCP Section E.3.7 below.

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	 <u>Side Setbacks</u> 7. Minimum setback from side boundaries: Ground Floor: Zero setback; First and Second Floor: Zero setback for maximum of 50% of the length of the side boundary and located within the front half of the site; Side boundary setbacks for first and second floors for the remainder of the building are to comply with the building envelope determined by a line projected horizontally at 300 from the side boundary from half way along the boundary towards the rear of the site (where side boundaries step the projected envelope shall also step accordingly)- see Diagram below; and Third Floor and Above: 3m for the third floor (i.e. setback = 3m + 1.2m/storey above the third floor). The total required setback is to be applied to all floors from the third floor up. 	
	 <u>Rear Setbacks</u> 8. Minimum setback from rear boundaries: Ground floor adjoining a residential boundary: minimum 3m Ground floor adjoining a public laneway: minimum 2m Note: Total wall height for ground floors should not be greater than 5 metres. Where ground floor wall height exceeds 5m, including parapets, the setback should be increased at a rate of 1:1 (additional 100mm whole ground floor setback for additional 100mm in height). Zero setback is allowed at ground level where adjoining a commercial zone. For land adjoining commercial, industrial, R3 (land with a height of 12 metres) or R4 zoned land at the rear-Upper Floors (all floors above ground floor): a minimum of 3 metres from the line of the ground floor rear wall below the first floor, with an increase of 1.2m for each storey of the building above first floor level (see diagram under Rear Setbacks above). For land adjoining R2 or R3 (height limit of 9m) zoned Land at the rear whether or not the land is separated by a lane way Upper Floors (all floors above ground floor): a minimum of 6 metres from the line of the ground floor rear wall below the first floor): a minimum of 1.2m for the second level, 3m for the third level, 1.2m for the fourth level and 3m for the fifth level. These requirements may be achieved by stepping each floor away from the rear boundary and from each floor level below. 	

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	 <u>Balconies and Verandahs</u> 10. Balconies and verandahs other than rear balconies may encroach upon the prescribed side and rear setbacks providing that the encroachment: produces no adverse effect on the amenity (privacy, solar access etc.) of the adjoining properties; the encroaching balcony or verandah must not be enclosed, except by balustrades or any dividing wall; and does not encroach upon the required side setback so as to be closer than two metres to the side boundary. 	The site is subject to a site specific DCP at section E.3.7 which provides specific setback requirements for the site – refer to WDCP Section E.3.7 below.
	11. Rear balconies or planter boxes may not project beyond the line of the required setback of the level below.	
E.1.5 Building Depth	 Development should have a maximum depth of 20m. Developments that propose buildings with a depth greater than 20m must demonstrate how satisfactory natural lighting and ventilation are to be achieved. 	Complies The proposed architectural drawings demonstrate how solar and cross ventilation will be achieved in accordance with SEPP 65 requirements. Refer to Appendix 1 and 28 for demonstration of natural ventilation and solar access.
E1.6 Landscaping Requirements	 A three metre wide landscaped setback area is to be provided along a rear boundary adjoining residentially zoned land as a buffer between the properties to maintain privacy and visual amenity of the residential land. The setback area is to incorporate evergreen tree planting along the rear boundary to maintain visual privacy to adjoining properties. A two metre wide landscaped setback area is to be provided along a boundary to a rear lane to soften the appearance of the development. A minimum one metre wide planter box planted with dense screen planting is to be provided along the edge of any balcony or terrace at first floor level facing a low density residential area. (Residential R2 or R3 (land with a 9m height limit). All other balconies (other than to the street frontage) facing a low density residential area should incorporate planter boxes facing these boundaries with a minimum internal width of 400mm. 	The site is subject to a site specific DCP at section E.3.7 which provides specific setback requirements for the site – refer to WDCP Section E.3.7 below.

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	Note: The planter box is not included in the minimum 2 metre dimension required for balconies to be included as required open space.		
	 <u>Additional landscaping controls for shop top development</u> 5. A minimum of 20% of podium and a minimum of 20% of rooftop open space is to be provided as vegetated area (turf, gardens and planters) 		
	 Location of site landscaping Landscaping should be provided on site in the following locations : within rear boundary setback areas and any side boundary setbacks at upper level; where a driveway is provided along a side boundary, provide a continuous planting strip of minimum 1m along that side boundary; and the area between the boundary and any recreational structures such as a swimming pool, tennis courts etc. to provide privacy and reduce the impact of these structures on adjacent residents. 		
E.1.7 Open Space Requirements for Shop Top Housing Developments	Private Open Space 1. Private open space for Shop top housing must be provided as follows: Studio and 1 Bedroom dwelling 10m² 2 bedroom dwelling 10m² 3+ bedroom dwelling 15m² For developments up to and including 15 An additional 5m² per dwelling is required dwellings where no communal open space is provided • a minimum single area of 10m², Minimum dimensions for areas to be counted as private open space: • a minimum dimension of 2m; • not to be enclosed; and • be accessible from the main living areas of the dwelling. Communal Open Space 10 the dwelling. 1. Communal open space for shop top housing for development in excess of 15 dwellings must be provided as follows:	Private Open SpaceThe proposal has been designed to meet the requirements for balconies and open space as outlined in Part 4E of the ADG. Clause 6A of SEPP 65 states that if a DCP contains provisions that specify requirements, standards or controls in relation to private open space and balconies (as contained in the ADG), those provisions are of no effect. 	

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	16 dwellings + 30m² for the first 15 dwellings plus 10m² per additional dwelling Minimum area 30m² Minimum dimension 5m Maximum proportion of the communal open space that can be used as an adjoining internal room. 20% 2. Where it can be demonstrated that it contributes to the usability of the communal outdoor area, Council will consider a maximum of 20% of the required communal open space being provided as an adjoining internal communal room for uses such as leisure, sporting activities, kitchenette and toilet.	comply with the measurements identified for this clause.
E.1.8 Privacy	Acoustic privacy Performance criteria 1. Development is to be designed and constructed for effective sound insulation against road and rail traffic noise and the need for reasonable acoustic privacy for occupants of the development and neighbouring properties. 2. The use of noise resistant construction techniques may be used to reduce the infiltration of noise into buildings. These may include: - the mass and materials, including insulation, selected for the walls and roof; - the use of thicker or double glazing to windows; - limitation of the proportion of openings to solid walls; and - the insulation of cracks and gaps in the façade facing the noise source. 3. Mechanical plant and equipment should be designed and located to minimise noise nuisance, particularly in business zones where retail and commercial uses may impact on residential development. See also E1.11. 4. Council may require a noise assessment report to be submitted by a qualified acoustic consultant to identify noise mitigation measures. Visual privacy	Complies Acoustic Privacy An Acoustic Report is provided at Appendix 6 in support of the Development Application. <u>Visual Privacy/Screening</u> The proposal has been appropriately designed to ensure no adverse amenity impacts on the use or enjoyment of the adjoining properties

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	 Performance Criteria 1. Minimise overlooking of dwellings by: a) Limiting windows and balconies that face directly onto windows, balconies or private open spaces of adjoining dwellings; b) Avoid windows being opposite and in close proximity to each other; and 	
	 c) Splaying location of windows to minimise direct views. d) Using level changes, planter boxes and other techniques to minimise direct views. <u>Screening</u> <i>Controls</i> 1. Where windows or balconies are within 12m of windows or balconies of dwellings, some form of screen 	
F 1.9 Views and Vistas	Performance Criteria	Complies
	 Existing views and vistas from and to commercial/residential precinct should be maintained. The sense of entry into a commercial precinct should be heightened by development which maintains and enhances the views and vistas from vehicular and pedestrian approaches. Where possible, dwelling units should be designed with living areas facing views. However, windows should be positioned to avoid overlooking of adjoining property to gain views. View sharing from within buildings Care should be taken to protect the views from existing buildings and potential views from adjoining future developments. 	The proposal has been designed in accordance with setbacks that have been established as part of a site- specific DCP. Setbacks account for existing views and vistas of the surrounding area, and the desired future character of the area as an extension to Chatswood CBD.

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	 The proposed development should be designed to maintain significant views where possible or achieve a degree of view sharing between properties. Where it is not possible for existing view levels to be maintained, any potential disruption to the primary view lines of adjoining developments should be minimised. The Site and Context Analysis prior to preparation of a proposal must identify any significant views from the site and adjoining properties, including the public domain. 	
E.1.10 Solar Access and Overshadowing	 Performance Criteria 1. Minimise the degree of overshadowing of adjacent buildings or open space by using measures such as variation to wall setbacks, roof form and building height and significant public areas. 2. Control the desired amount of solar access to habitable rooms and recreational open space by considering building siting and orientation, height, placement of windows including the height of window sills, use of sun shading devices and location and species of planting. Controls 1. Shadow diagrams must be submitted to illustrate compliance with the controls. 2. The north facing windows of living areas and the principal portion of the recreational open space of adjoining residential buildings should have at least 3 hours of sunlight between 9am and 3pm on June 22. Where existing overshadowing by buildings and fences is greater than this, sunlight should not be reduced by more than 20% 	Complies Shadow diagrams have been submitted as part of the Development Application and are provided in Appendix 1 .
E.1.11 Service Facilities		Complies
and Amenities	Performance Criteria	Electrical Requirements
	<u>1. Electrical requirements</u>	The proposed substation is able to be
	Substation facilities are to be to Energy Australia requirements and if able to be viewed from the street, must	accessed from the street and is
	be screened by landscaping to a height of at least 1.5m. Substations should preferably be located below	adequately screened by
	ground level or adjacent to the rear boundary if a rear lane exists.	landscaping.
		Plant And Equipment

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	2. Plant and Equipment	All plant and equipment will be
	All plant and equipment shall be acoustically treated to ensure that noise generation does not exceed	acoustically treated to ensure that
	5 dBA above the background noise level at the boundary of the site at all times.	noise generation does not exceed
		the relevant standards.
	Additional Requirements for Shop Top Housing	
	3. Site services and facilities (such as letterboxes and drying yards) should be designed:	Additional Requirements + Utility
	- to enable safe and convenient access by residents;	<u>Services</u>
	 in an aesthetically sensitive way; 	Site services and facilities are
	 to have regard to the amenity of adjoining developments and streetscape; 	provided to meet the expected
	- to require minimal maintenance; and	needs of the users and had been
	 to be visually integrated with the development. 	appropriately incorporated into the
		building design
	4. Facilities such as laundries and storage areas should:	
	 meet the anticipated needs of the users; 	
	- be convenient and secure in terms of access; and	
	– have adequate lighting.	
	Utility services	
	Utility services should be provided to:	
	5. Meet the expected needs of the users;	
	- considered at the design stage and not as an afterthought;	
	- be visually harmonious with the development and the streetscape; and	
	- be separated from entry lobby and foyer areas (where applicable).	
	Controls	
	1. The design, location and construction of utility services must satisfactorily meet the requirements of both	
	the relevant servicing authority and Council.	

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	Letterboxes 2. Letter boxes must be provided in accordance with Australia Post's Requirements for the Positioning and Dimensions of Mail Boxes in new Commercial and Residential Developments. 3. Within shop top housing development, there should be a separately identifiable residential address and entry.	Letterboxes will be appropriately located in the residential lobby with a separately identifiable residential address and entry to the commercial/retail entrances.
	Laundry facilities and drying yards 4. Laundry facilities should be incorporated into each dwelling unit. 5. Drying yards and balconies are not to be located forward of the building line or within the setback to any street frontage and should not be visible from any public areas by the use of screens or landscaping.	Laundry facilities have also been appropriately designed within each unit.
	Public/common toilet 8. Where a residential building contains more than 10 dwelling units, a toilet and washbasin must be provided in a convenient and accessible location at or near ground level for use by all who visit or reside on the premises.	
E.1.12 Reflectivity	 Building materials and finishes which minimise adverse reflectivity are to be used. The use of glass of more than 20% reflectivity or other highly reflective external materials and finish are not permitted. Mirrored glass is not to be used on building exteriors. Shade, angle or treat glass areas with horizontal, vertical or diagonal shading devices to reduce reflected solar radiation. 	Complies The proposed building materials and finishes have been appropriately selected to ensure no adverse amenity impacts associated with reflectivity.
Part E Specific Controls f	or Commercial and Shop Top Housing Development	
E.3 Chatswood City Cen	tre	
Landscaping	 Landscaping in the city centre shall consider and ameliorate the microclimatic circumstances of a site in particular adverse wind, noise and shadowing impacts. a) Street trees shall be provided in accordance with Council's Street Tree Policy for Chatswood City Centre. b) Planting selection shall give priority to species that are native to the Willoughby area. A list of species is available from Council. In addition selection shall consider the microclimatic circumstances of a site. 	Complies A Landscape Design Report (refer to Appendix 2) details the landscaping outcome for the site. This includes

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	of maintenance (including issues of leaf and branch litter and root penetration) and drought resistant qualities. c) Landscaping shall be used as an alternative to manage adverse microclimatic impacts such as wind or western sun. These potential adverse impacts shall be identified in the site context analysis required elsewhere in this Plan.	
Public Art	2. Gateway sites may use public art to highlight the site as an entry point into Chatswood. The public art may be combined with landscaping.	Complies A public art component is included as part of the proposal which is integrated into the development of the site. Refer to Section 3.8 and the Architectural Design Statement at Appendix 28 of the SEE for further details.
City Living Impacts	 Shop top housing development in Chatswood City Centre shall provide amelioration measures to mitigate the impacts of city living including but not limited to noise, vibration, overshadowing, glare, traffic and city events and activities. Notwithstanding subclause 1, residents in Chatswood City Centre must accept a level of impact from city life and activity. 	Complies The proposal has considered the potential impacts associated with city living and has provided a design which mitigates environmental impacts as far as practicable.
Amenity of Sleeping Accommodation and Avoidance of Overcrowding	1. Shop top housing development and residential flat development must provide and its future owners of dwellings or managing agents must maintain a minimum of 5.5 square metres of floor space per person in any sleeping room or cubicle.	Capable of Complying
Frontage	1. In the Chatswood City Centre, where an alternative delivery and car parking access is available from a secondary street the minimum frontage required is 20 metres.	Complies The proposal is consistent with the minimum frontage requirement.

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Solar Access and Overshadowing	1. In Chatswood City Centre any development shall not reduce the existing levels of sunlight access in the Gardens of Remembrance, Chatswood Park and Oval, the Concourse public plaza areas and Victoria Walk in the period between 11.30 am and 2pm in mid-winter.	Complies No reduction in sunlight access is expected to occur to the locations identified by this provision.	
Site Specific DCP for 5-9 Gordon Avenue, Chatswood			
E.3.7 5-9 Gordon Avenue, Chatswood			

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Control	Provision	Assessment
1. General	The controls contained in this Site-Specific Development Control Plan applies to 5-9 Gordon Avenue, Chatswood.	Capable of complying
	Figure 1: Site Map	
	 Objectives of the Plan The aims and objectives of this Plan are to: Provide Guidelines for a mixed-use development on the site Provide a development that ensures the viability of adjoining and surrounding sites for future development. Minimise traffic impacts on the surrounding road network. Ensure development on the site minimises impacts to the amenity of neighbouring residential properties Provide landscaping in and surrounding the site that enhances the presentation of the site as well as the amenity of the development. Achieves architectural and urban design excellence. Maximise activation to Gordon Avenue and Hammond Lane 	s. ie

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Control	Provision	Assessment
2. Built Form	Controls 1. The maximum tower floor plate that applies to this site for residential towers above a podium is 700m2. 2. The width of each side of any tower should be minimised and design elements that contribute to building bulk should be minimised. 3. The building layout is to be in accordance with Figure 2.	Assessment Complies The proposed tower floor plate is 318.7m ² which is well below 700m ² . The tower design has been progressed from the winning design competition scheme and presents as being slender. It generally complies with the setbacks at WDCP Figure 2. Refer to Section 7.1 of the SEE for further discussion.

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3. Height of Building	Controls	Complies	
	1. The maximum building height is to include all structures located at roof level, including lift over runs and	The proposed building height	
	any other architectural features.	includes all structures at roof level	
	2. All roof top lift over runs or exposed structures are to be integrated with the building.	and all exposed structures are	
	3. Flat roof areas shall incorporate useable outdoor recreation space where suitable, within the maximum	integrated with the building.	
	building height.	All suitable flat roof areas are	
		incorporated as useable outdoor	
		recreation space.	
4. Setbacks and Street	Controls	Complies	
Frontage Heights	1. The building setbacks are to be in accordance with Figure 3 (Setbacks and street frontage heights).	The proposal is compliant with the	
	Setbacks are as follows:	identified setbacks in accordance	
	a) Gordon Avenue and Hammond Lane Frontage	with WDCP Figure 3, refer to the	
	i) 6-14 metre street wall height at front boundary	architectural drawings at Appendix 1	
	ii) Minimum 3 metre setback above streetwall	and further discussion at Section 7.1	
		of the SEE.	
	b) In regards the tower, a minimum of 1:20 ratio of the setback to building height above the		
	podium (e.g. tower to be setback 3 metre above podium for a 60 metre building, 4.5 metre setback	Street wall heights are compliant with	
	for a 90 metre building	an 8.6m height.	
		Subsequent setbacks above the	
		streetwall and podium are applied.	

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	Figure 3: Setbacks and Street Frontage Heights 2. In addition to Control 1: a) Setbacks may be greater and street wall heights may be lower.	
	b) Additional ground level setbacks are sought that contribute to public realm.	
5. Building Exterior	Controls	Complies
	encroach into required setbacks	facades are articulated and
		incorporate recesses and projecting
	2. Extensive blank walls shall be avoided at street level.	

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6. Amenity	Controls 1. A Wind Assessment shall be submitted at Development Application Stage. 2. A detailed Acoustic Assessment shall be submitted at Development Application Stage. 3. Residential units shall be designed to maximise solar access, cross ventilation, visual and acoustic privacy.	Assessment elements that do not encroach on setbacks. Extensive blank walls are avoided. The proposal is substantially the same as the winning design competition scheme. Complies The proposal includes a Wind Assessment, refer to Appendix 11 and further discussion at Section 7.10 of the SEE. The proposal includes an Acoustic Assessment, refer to Appendix 6 and further discussion at Section 7.9 of the SEE. The proposal is designed to maximise
		solar access, cross ventilation, and acoustic privacy, refer to Appendix 1 and further discussion at Section 6.7 of the SEE.
7. Open Space and Landscaping	 <u>Controls</u> 1. Open space at ground level shall be utilised as publicly accessible open space. 2. All roofs up to 30 metres from ground are to be green roofs. These are to provide a balance of passive and active green spaces that maximise solar access. 3. A minimum of 2 hours of sun access is to be provided to the public open space on the site. 4. Public domain improvements shall be provided to all street frontages to Council requirements. 	Capable of Complying Open space at ground level is proposed to be publicly accessible and will receive a minimum of 2hrs solar access to Hammond Lane.

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	 5. A minimum of 20% of the site is to be provided as soft landscaping, which may be located on Ground, Podium and roof top levels or green walls of buildings. 6. Deep soil planting is to be provided within the setback to Gordon Avenue, Hammond Lane and setback to the northern (rear) boundary. Deep soil plantings include trees and shrubs, and are to be unimpeded by buildings or structures below ground. 7. A Landscape Plan is to be provided at Development Application stage detailing all public domain at ground level, street tree planting, planting and space allocation at podium and roof top levels. This is to include species, container size at planting, spacing and approximate size at maturity. 8. Street tree planting is at the cost of the proponent, with location and species to be determined in consultation with Council at Development Application stage. 9. All existing aerial cables which may include for electricity, communications and other cables connecting to street poles and buildings around the site shall be removed and installed underground in accordance with the requirements of the relevant service authorities. Ausgrid lighting poles are to be provided to the requirements of Ausgrid for street lighting and shall be positioned compatible to the landscaping design around the site. 	 Public domain improvements are provided along all street frontages, refer to Appendix 1. Deep soil planting is provided along the north boundary of the site. Refer to further discussion at Section 7.4 of the SEE. The provision of setbacks along Hammond Lane limit opportunity for deep soil planting. A Landscape Plan is provided, refer to Appendix 2.
8. Links	 <u>Controls</u> 1. The development is to incorporate publicly accessible through site links and open space in accordance with Figure 4 below. 2. Through site links and open space in addition to Figure 4 is required on a site-by-site basis 3. All publicly accessible open space and links are to be the responsibility of the relevant ownership entity, with formal public access to be created over these grage. 	Complies The proposed development provides the identified through-site links along the 3m setback to Hammond Lane. All setbacks will provide public rights

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Control	Provision	Assessment
	Image: provide the state of	
9. Active Street	<u>Controls</u>	Complies
Frontages	1. At ground level buildings are to maximise active frontages to Gordon Avenue and Hammond Lane	The proposed development
	2. A building has an active street frontage if all premises on the ground floor of the building facing the street(s) are used for the purpose of commercial premises or non-residential purposes and provide elements of visual interest when viewed from the street.	maximises ground floor active frontages to Gordon Avenue and Hammond Lane.

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10. Traffic and Transport	 <u>Controls</u> 1. Vehicle access to/egress from the development is to be from one access point in Hammond Lane 2. Vehicle access and egress is to be designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create a high quality streetscape 3. All car parking and loading facilities are to be located below ground level 4. Other strategies for car parking reduction, such as reciprocal arrangements for sharing parking and car share, are to be included in any future Development Application 	Complies The proposed development includes one access to/egress from the development at Hammond Lane. All car parking is located at basement level 1 or below. One loading dock is provided at ground level. The design and location of parking and loading minimises conflict between pedestrians and vehicles.	
11. Waste Management, Loading and Services	 <u>Controls</u> All loading and unloading services are required to occur at basement level on-site. Other supporting functions such as garbage rooms, plant and other services are to be located in Basement levels. A Waste Management Plan shall be submitted at the Development Application stage. Substations are to be provided within buildings, not within the streets, open spaces or setbacks and not facing key active street frontages. Substations are to be designed to ensure protection of residents from Electro Magnetic Radiation (EMR) emissions. 	For more details refer to Appendix 5.CompliesThe loading and unloading servicesand supporting functions are locatedat ground floor level.Refer to Appendix 12 for a WasteManagement Plan.The substation is proposed to thenorth of the site. Refer to furtherdiscussion at Section 7.5 of the SEE.	
12. Design Excellence	<u>Controls</u> 1. All developments that have a height of 35m or more are subject to a competitive design process.	Complies The proposal has been subject to a competitive design process which has been undertaken in accordance	

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	2. The competitive design process must be undertaken in accordance with the Willoughby Design Excellence Policy and Willoughby Design Excellence Guidelines.	with Willoughby Design Excellence Policy. Refer to Appendix 27 for the design competition report.
13. Public Art	<u>Controls</u> Public Art is to be provided in accordance with Council's Public Art Policy.	Complies Refer to further discussion at Section 3.9 of the SEE and at Appendix 28.
14. Building Sustainability	<u>Controls</u> 1. A minimum of 5 stars GBCA building rating is expected. A higher rating is encouraged. An assessment report is to be submitted at Development Application stage.	Complies The proposed development achieves a 4-star Green Star Rating. Refer to ESD Report at Appendix 13 for further details.