

Annexure D – Residential Flat Design Code – Rules of Thumb

Guidelines / Rules of thumb	Comment
Local Context	
Primary Development Controls	FSR (MLEP 1998) - 3.14:1 (control 2:1) FSR (MLEP 2012) – 2.89:1 (control 3:1) Height – MLEP 1998 – Height MLEP 2012 – 2.4 m ceiling minimum
Building Depth – In general, an apartment depth of 10m – 18m is appropriate.	Apartment depths range from 10.5m - 13m. This is reasonable in this context.
<p>Building Separation – The code recommends that building separation increase in proportion to building height. Suggested separation between adjoining sites for a 4 storey/12m high development are as follows:</p> <ul style="list-style-type: none"> - 12m between habitable rooms/balconies - 9m between habitable rooms/balconies and non habitable rooms - 9m between non habitable rooms <p>The code also allows a 0m building separation in appropriate contexts such as party walls.</p>	<p>The proposal provides for the following building separation:</p> <p>Internal separation of the wings of the development ranges from 12.6m to 6.2 m between the units fronting Military Road, compared to those fronting Hornsell Lane.</p> <p>The proposal although not strictly complying with the codes building separation guidelines on the Hornsell Lane frontage, is suitably separated from neighbouring buildings in this urban context. The amended building separation achieved by Level 4 adequately increases in proportion to building height within the context of the desired future character of the locality.</p>
Street Setbacks – Setbacks typically vary from none in city centres to 10m on suburban streets.	<p>The street setback of the flat building from Military Road at level 3 varies from 3.0m to 5.5m at level 4.</p> <p>The setbacks of the proposal are consistent with neighbouring development and the desired future character of the locality identified in MLEP 2012. The setbacks allow for adequate passive surveillance and are satisfactory built form on both Military Road and Hornsell Lane.</p>

Side and Rear Setbacks	<p><i>Side setbacks</i></p> <p>The existing nil side setbacks are maintained at lower levels to the east and west.</p> <p>The building at levels 1 to 3 has a zero lot line. At Level 4 the amended proposal is setback 6.0 metres to the east. This is an increase from the 4.6 metre setback originally proposed.</p> <p>The proposal is built the property alignment on the western side at all levels. This reflects the similar situation for the adjoining building, albeit at a lower height.</p> <p><i>Rear setback</i></p> <p>The rear street setback of the flat building from Hornsell lane at Levels 2 and 3 is 1.5 m. The amended Level 4 is setback is 4.8m.</p> <p>The setbacks of the proposal are consistent with neighbouring development and the desired future character of the locality identified in MLEP 2012. The setbacks allow for adequate passive surveillance and are satisfactory built form on both Military Road and Hornsell Lane.</p>
Floorspace Ratio	<p>The proposal breaches the FSR control for MLEP 1998 by 54%. However, the proposal complies with Councils floorspace ratio requirement in MLEP 2012.</p>
<p style="text-align: center;">Site Design</p>	
<p>Site Configuration</p>	
<p>Deep Soil Zones - minimum of 25% of open space area of a site should be a deep soil zone. Exceptions may be made in urban areas where sites are built out, in which case stormwater treatment measures must be integrated with the design of the residential flat building.</p>	<p>The site is constrained by minimum soil depths due to the existing basement car park. This car park is proposed to be retained in largely its current form.</p> <p>The proposal provides for a total of 108.4m² of landscaped area, representing 7% of the site area.</p> <p>The landscape area is assessed as reasonable in that the proposal increases landscaped area from existing and its urban setting. In addition Stormwater will be captured by the proposed Rainwater tank system.</p>

Fences and Walls	<p>The proposal entails fencing along the Hornsell Lane frontage of up to 2.2m for the main entrance and up to 1.8m for the ground floor dwellings.</p> <p>A landscaped planter within the private open space of the Level 1 street facing dwellings adequately softens the appearance of the fencing. This fence style provides for a reasonable streetscape relationship whilst clearly defining public and private domains.</p>
Landscape Design	<p>Landscaping design on site generally comprises landscaping on structure on an internal courtyard. Planter boxes adjacent to the level 1 residential level fronting Hornsell Lane are also provided. . This landscaped design is adequate in terms of creating a buffer between the two wings of the development, and is an improvement to the existing landscaping on site.</p>
Open Space <ul style="list-style-type: none"> - 25% - 30% of site area should be devoted to communal open space. - Ground level apartments should contain a minimum of 25m² of open space, with a minimum dimension in one direction of 4m. 	<p>Communal Open Space</p> <p>The proposal provides for a total of 108.4m² of communal landscaped area, representing 7% of the site area.</p> <p>All apartments have private open space provided in the form of a balcony/terrace greater than 5 m by 2m.</p> <p>The deficiency in communal open space is assessed as reasonable in that built form is appropriately separated internally between the two wings of the residential component.</p> <p>In addition all dwellings contain reasonable amounts of private open space.</p>
Orientation	<p>62% of all apartments will receive the required solar access under SEPP 65.</p> <p>The orientation of the proposed flat building is assessed as reasonable it being noted that the building massing is such internal amenity is good, whilst ensuring that overshadowing impacts are minimised.</p>

<p>Planting on Structures – The applicable guidelines with regard to soil provision is provided below:</p> <ul style="list-style-type: none"> - Small Trees (4m canopy diameter at maturity) <ul style="list-style-type: none"> - minimum soil volume 9 cubic metres - minimum soil depth 800mm - approximate soil area 3.5m x 3.5m or equivalent 	<p>The plans submitted with the application do not nominate planting above the ground floor level.</p> <p>The sections submitted with the application nominate soil depths of approximately 400mm for internal central landscape courtyard. These soil depths and allocated planting spaces are assessed as adequate for the proposed trees and shrubs as indicated on the submitted landscaped plan.</p>
<p>Stormwater Management</p>	<p>Councils Development Engineer has reviewed the proposed Stormwater Management and has not raised objection, subject to recommended conditions.</p>
<p>Site Amenity</p>	
<p>Safety – Residential developments of more than 20 new dwellings require a formal crime risk assessment.</p>	<p>The applicant has provided Council with a formal crime risk analysis assessment and Crime Prevention Through Urban Design analysis. This is satisfactory.</p>
<p>Visual Privacy – Refer to Building Separation Minimum Standards</p>	<p>The ground floor units will not impact on the privacy of neighbouring buildings due to the proposed landscaping.</p> <p>Additional elements used to achieve visual privacy are as follows:</p> <ul style="list-style-type: none"> • Setbacks at upper levels; • Privacy screens; • Vertical blade walls between balconies; <p>Privacy to adjoining development is satisfactory.</p>
<p>Site Access</p>	
<p>Building Entry</p>	<p>Entry to the retail and residential components of the development are separated along Military Road, which is a desirable outcome.</p> <p>The proposed entry to the building is satisfactory, it being noted that the internal lift and foyer space is simple and safe in design.</p>
<p>Parking</p>	<p>The parking on site utilises the basement car parking associated with the existing retail use.</p> <p>All car parking spaces are accessible from Hornsell Lane, which is the logical service entry point for the subject site.</p>

Pedestrian Access	The proposal provides for good level access from the Military Road frontage of the site.
Vehicle Access <ul style="list-style-type: none"> - Generally limit the width of driveways to a maximum of 6m. - Locate vehicle entries away from main pedestrian entries on Secondary frontages 	The existing driveway is 7.4 metres in width. The vehicle entrance is located on Hornsell Lane away from the main pedestrian entry on Military Road.
Building Design	
Building Configuration	
Apartment Layout <ul style="list-style-type: none"> - Single aspect apartments should be limited in depth to 8m from a window. - The back of a kitchen should be no more than 8m from a window. - The width of cross through apartments over 15m deep should be more than 4m. - Minimum Apartment size of 50m² for one bedroom and 70m² for two bedroom apartments. 	<p>Only two of the apartments are single aspect. All kitchens are within 8.5 m of a window. The minimum width of the narrowest apartment is 4.8 metres.</p> <p>The apartments generally comply with the minimum apartment size rule of thumb.</p>
Apartment Mix – Provide a variety of apartment types for housing choice and equitable housing access.	The proposal provides for an apartment mix of one and two bedroom apartments with some three bedroom units at upper levels. This apartment mix is assessed as reasonable due to surrounding densities, access to public transport and the relative lack of developments of this type with the Mosman Local Government Area.
Balconies – Primary balconies should have a minimum depth of 2m.	All primary balconies are accessed from main living areas and are deeper than the 2m rule of thumb.
Ceiling Heights – 2.7m minimum for habitable rooms and 2.4m minimum for non habitable rooms.	<p>The proposed ground floor ceiling height is 3.6 metres, which is consistent with a retail space.</p> <p>The proposal provides for minimum floor to ceiling heights of 2.7m to the residential component.</p>
Flexibility – Apartments must be designed to afford flexible living arrangements and satisfactory working arrangements. Apartments must be adaptable.	<p>Three of the apartments or 8% of the yield are adaptable and accessible.</p> <p>The proposal has sufficiently flexible floor plates to accommodate changing living circumstances.</p>

<p>Ground Floor Apartments – Optimise the number of ground floor apartments with separate entries and provide ground floor apartments with access to private open space, preferably as a terrace or garden.</p>	<p>Due to the ground floor retail component and the differences between the proposed finished floor levels and street level, separate access to apartments are not feasible. A separate residential pedestrian entry is proposed from both Military Road, and from the basement car park.</p>
<p>Internal Circulation – The number of dwellings accessible from a single core/corridor should be limited to 8.</p>	<p>The ground floor level contains 6 apartments and Level 3 contains 7 apartments accessed from a single corridor complying with the rule of thumb.</p> <p>Levels 1 and 2 each contain 11 apartments accessed via a shared corridor. The internal circulation of Level 1 and 2 is assessed reasonable in that the light well adjacent to lift adequately creates appropriate ventilation and the location of the corridor does not negatively impact on apartment layouts.</p>
<p>Mixed Use</p>	<p>Multiple dwellings are permissible in the 3(a1) zone. The retail component contributes towards the Spit Junction Business zone.</p>
<p>Storage</p> <ul style="list-style-type: none"> - one bedroom dwellings require 6m³ of storage area - two bedroom dwellings require 8m³ of storage area. <p>The applicable section within the rules of thumb stipulates that 50% of the required storage needs to be provided within each apartment.</p>	<p>Linen and storage cupboards are shown on all apartments. The amended plans submitted with the application nominate adequate basement level storage allocated to individual units as well.</p>
<p>Acoustic Privacy</p>	<p>The design of the apartments appropriately sites bedrooms and living areas away from noise sources. Conditions of consent are included in the recommendation for appropriate acoustic privacy.</p>
<p>Daylight Access</p> <ul style="list-style-type: none"> - 70% of the living rooms and private open space of apartments should receive a minimum of two hours direct sunlight. - No more than 10 single aspect south facing apartments. 	<p>The plans submitted with the Development Application detail that 62% of apartments receive greater than 2 hours of direct sunlight on June 21.</p>

<p>Natural Ventilation</p> <p>- 60% of residential dwellings should be naturally cross ventilated.</p> <p>25% of kitchens within a development should have access to natural ventilation.</p>	<p>The plans submitted with the Development Application detail that 95% of dwellings are naturally cross ventilated.</p> <p>Kitchens have access to natural ventilation, though open plan design and dual aspect layout. The kitchens are generally within 8m of windows.</p>
<p>Awnings and Signage</p>	<p>The plans submitted with the Development Application include a traditional box awning. This awning is consistent with the Heritage and Conservation requirements of the Council.</p>
<p>Facades</p>	<p>The proposal contains a three storey street wall. The presentation of the street wall balances strong horizontal and vertical framing elements with associated setbacks at upper level.</p> <p>The façade is appropriately modulated with the incorporation of balconies and does not negatively impact on the streetscape.</p>
<p>Roof Design</p>	<p>The flat roof form of the residential flat building is appropriate within this local context which includes numerous examples of similar roof forms.</p> <p>The lift over run is relatively discrete and will not be significantly visible from the public domain.</p>
<p>Energy Efficiency</p>	<p>The submitted BASIX Certificate demonstrates compliance with the required BASIX Commitments.</p>
<p>Maintenance</p>	<p>The design of the building does not pose significant issues with relation to access for maintenance.</p>
<p>Waste Management – Supply waste management plans as part of the Development Application Submission as per the NSW Waste Board.</p>	<p>The applicant has submitted a waste management plan with the subject Development Application. Conditions of consent are included within the recommendation which ensure appropriate waste management.</p>
<p>Water Conservation – Rainwater is not to be collected from roofs coated with lead – or bitumen based paints, or from asbestos – cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.</p>	<p>Documentation submitted with the application details energy efficient hot water systems.</p>