

The Hills Development Control Plan (DCP) 2012

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THE
HILLS
Sydney's Garden Shire



Part B Section 5 Residential Flat Building

B5

In Force 21 May 2019

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1. INTRODUCTION

This Section of the DCP must be read in conjunction with Part A – Introduction of this DCP.

1.1. LAND TO WHICH THIS SECTION OF THE PLAN APPLIES

This Section of the DCP applies to land where, under the provisions of The Hills Local Environmental Plan (LEP) 2012, residential flat buildings are a permissible use. The provisions of this Section also apply to shop top housing where specifically identified in the Part B Section 8 - Shop Top Housing of this DCP.

1.2. ACCESS AND MOBILITY

This Section of the DCP seeks to ensure equitable access to suitable housing is provided for all people and should be read in conjunction with the following policies and legislation where applicable:

Disability Discrimination Act 1992 and Disability (Access to Premises - Buildings) Standards

The Disability Discrimination Act 1992 aims to eliminate discrimination against people on the grounds of disability and includes provisions which make it unlawful to discriminate against a person with disability in relation to access to, or use of, premises.

The Disability (Access to Premises - Buildings) Standards prescribes a set of design and construction standards covering access to new buildings or an extension to/modification of an existing building. Compliance with the Premises Standards ensures compliance with the requirements of the Disability Discrimination Act.

National Construction Code and Australian Standards

The National Construction Code (NCC) is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia. The NCC includes provisions that mirror the Premises Standards to ensure reasonable access to buildings for people with a disability.

Australian Standards referred to in this DCP:

Standard No.	Description
AS1428.1	Design for access and mobility – general requirements for access – New building work
AS1428.2	Design for access and mobility – general requirements for access – Enhanced and additional requirements – Buildings and facilities
AS4299	Adaptable housing
AS2890.6	Parking facilities - Off-street parking for people with disabilities

1.3. STATE ENVIRONMENTAL PLANNING POLICY NO. 65 (SEPP 65) – DESIGN QUALITY OF RESIDENTIAL FLAT DEVELOPMENT

Refer to State Environmental Planning Policy No. 65.

2. AIMS AND OBJECTIVES OF THIS SECTION OF THE DCP

OBJECTIVES

Council's objectives for residential flat building development are:

- (i) Encourage a high standard of aesthetically pleasing and functional residential flat building developments that sympathetically relate to adjoining and nearby developments.
- (ii) Ensure that development will not detrimentally affect the environment of any adjoining lands and ensure that satisfactory measures are incorporated to ameliorate any impacts arising from the proposed development.
- (iii) Encourage innovative and imaginative designs with particular emphasis on the integration of buildings and landscaped areas that add to the character of the neighbourhood.
- (iv) Provide high levels of amenity and safety for future residents of any residential flat building development.

- (v) To ensure that residential flat building developments incorporate the principles of Ecologically Sustainable Development.

3. OBJECTIVES AND DEVELOPMENT CONTROLS

Objectives and development controls for residential flat buildings are set out in the following sections.

In addition to the policies, guidelines and documents specified in section 1.4 of Part A - Introduction, this Residential Flat Building Section is to be read in conjunction with other relevant Sections including:

- Part C Section 1 – Parking
- Part C Section 2 – Signage
- Part C Section 3 – Landscaping
- Part C Section 4 – Heritage
- Part C Section 6 – Flood Controlled Land

A checklist identifying the development controls is provided as a summary in Appendix A – Development Control Calculations/Compliance Sheet within this section.

3.1. SITE REQUIREMENTS

OBJECTIVES

- (i) To ensure development sites have sufficient areas to provide adequate access, parking, landscaping and building separation.
- (ii) To provide for the orderly development of residential land through the consolidation of lots.
- (iii) To ensure development on a particular site has due regard to adjoining developments in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

- (a) The minimum road frontage requirement is 30 metres.
- (b) Development sites shall not be accessed via a right of way and/or access handle. Access driveways should be centrally located within any proposed residential flat building development site.
- (c) A residential flat building development shall not isolate adjoining lots so that they are incapable of multi dwelling housing development, meaning there will be insufficient area to meet the

minimum site area requirement in Clause 4.1A *Minimum lot sizes for dual occupancy, multi dwelling housing and residential flat buildings* of the LEP 2012.

SUBMISSION REQUIREMENTS

- Site plan
- Location and general description of any adjoining developments.

3.2. SITE ANALYSIS

OBJECTIVES

- (i) To encourage a comprehensive approach to site planning, design and assessment of development.
- (ii) To facilitate assessment of how future buildings relate to their immediate surroundings and each other.
- (iii) To facilitate development of a design that minimises the negative impacts on the amenity of adjoining commercial or residential development in accordance with Council's ESD objective 7.
- (iv) To ensure development is compatible with land capability.
- (v) To ensure during consideration of the site layout and design, that disturbance to the natural environment is minimised in accordance with Council's ESD objective 4.

DEVELOPMENT CONTROLS

- (a) Development is to be designed to respect site constraints such as topography, drainage, soil landscapes, flora, fauna and bushfire hazard.
- (b) Development on land adjoining bushland reserves should incorporate measures (such as setbacks and buffers) to prevent any impact on the reserves.
- (c) Development is to be sited so as to minimise the impact of the development on the amenity of adjoining residences while recognising the character of the area.
- (d) Siting of development is to take into account solar passive design principles.

SUBMISSION REQUIREMENTS

- Site Analysis. An example of a site analysis diagram is shown in Figure 1. The site analysis

provided at pre-lodgement stage must include an Isometric Drawing as shown in Figure 2.

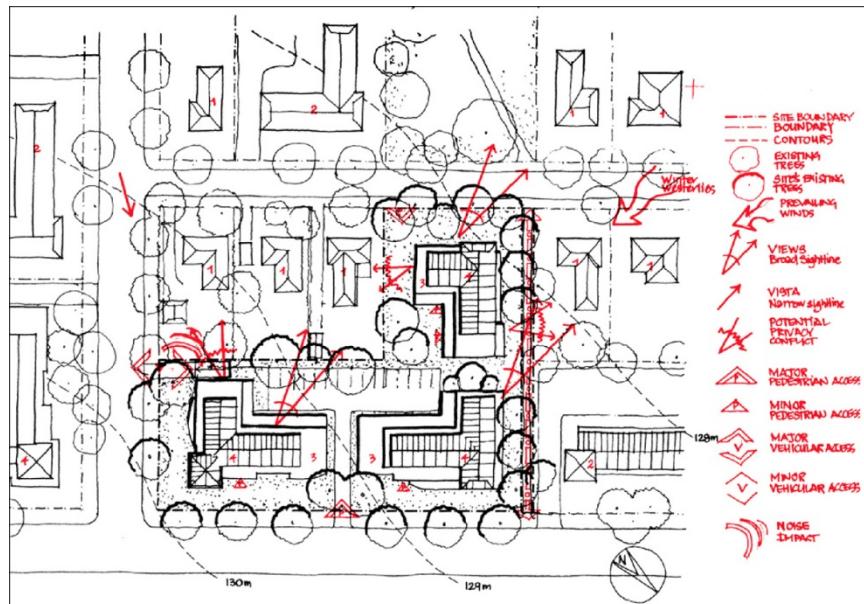


Figure 1 Site Analysis

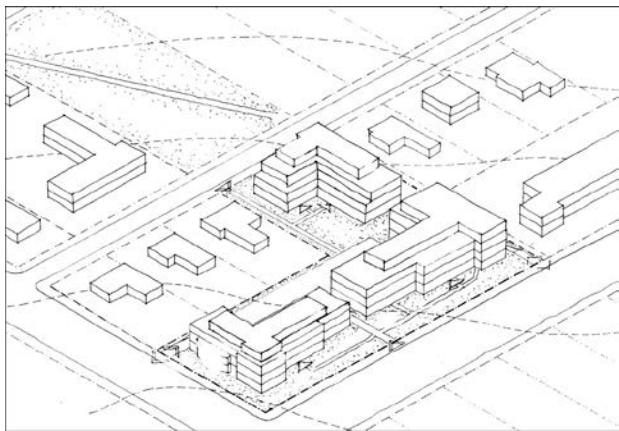


Figure 2 Isometric Drawing

Isometric Drawing

- An isometric drawing must be drawn to the same scale as the Site Plan and Site Analysis (1:500 or 1:1000), and include the following:
 - Contours clearly marked – natural and man-made differentiated;
 - Street patterns clearly identified;
 - Proposed common areas;
 - Proposed main entrances/exits; and
 - Proposed landscaped treatments/features.

3.3. SETBACKS – BUILDING ZONES

OBJECTIVES

- (i) *To provide setbacks that complement the setting and contributes to the streetscape and character of the street while allowing flexibility in siting of buildings.*
- (ii) *To ensure that the space in front of the building is sufficient to permit landscaping that will complement the building form and enhance the landscape character of the street.*
- (iii) *Side and rear setbacks are to be proportioned to the slope of the site having regard to the height and relationship of the buildings on adjoining properties.*
- (iv) *The setbacks of proposed buildings are to minimise any adverse impacts such as overshadowing and privacy on adjacent and adjoining properties.*
- (v) *To ensure placement of buildings takes into account the retention and protection of existing trees.*

Building Zone

The Building Zone identifies the area where buildings may be erected. No building or works (other than landscaping, driveway, drainage works, post boxes, pergolas and barbecues) will be permitted outside the building zone. This includes any work on basement parking areas.

The identification of a Building Zone as part of the Site Analysis process identifies the setbacks for any particular site. The process for identifying the setbacks is provided below.

1. Building Zone Requirement No 1 - Setbacks to Protect Trees

Setbacks are to be established so that any trees located within 10 metres of the front boundary, 8 metres of the rear boundary and 6 metres of any side boundary can be retained.

DEVELOPMENT CONTROLS

- (a) Where trees are identified in the site analysis and are located within the 10 metre front setback, 8 metre rear setback and 6 metre side setback, the Building Zone boundaries will be set so that all buildings are 5 metres from the trees or clear of the drip line of the trees (Figure 3) whichever is the greater distance. The distance must be measured from the outside of the tree trunk at ground level.

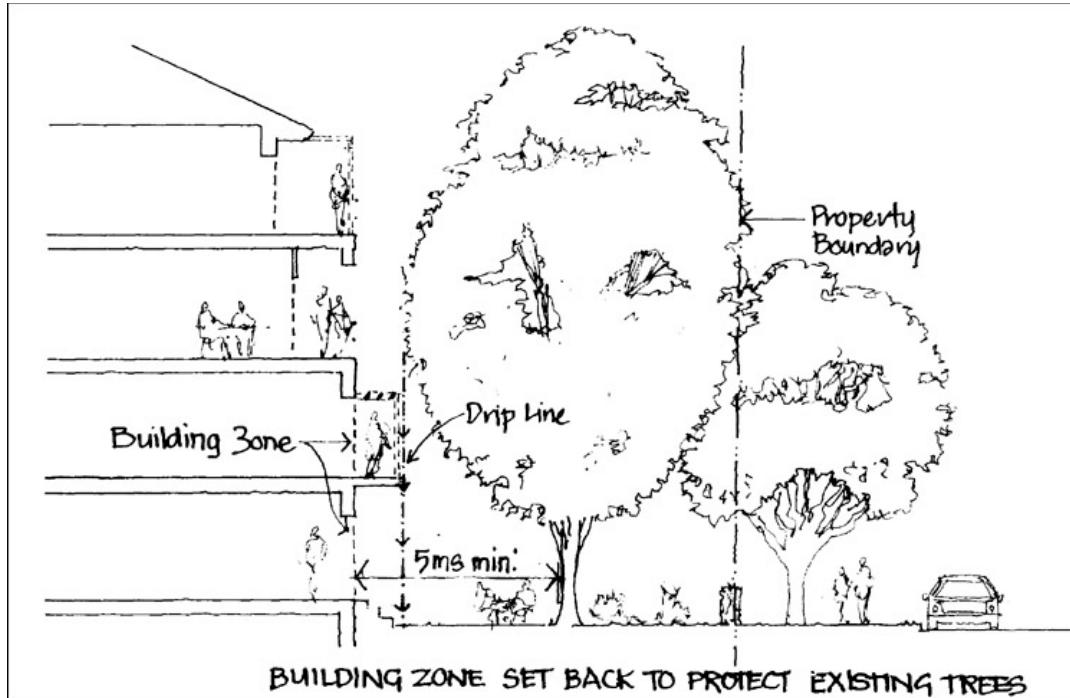


Figure 3 Building Zone Boundaries

2. Building Zone Requirement No 2 – Building Alignment

The setbacks outlined in Table 1 apply to residential flat building sites. Figures 4 and 5 provide a demonstration of how these may be applied.

DEVELOPMENT CONTROLS

- (a) Except where a greater setback is required to satisfy Building Zone Consideration No 1 - Setbacks to Protect Trees, the setbacks shall be in accordance with Table 1.

Table 1 Setbacks

Front (one street frontage)	10 metres
Front (two street frontages)	
Primary Frontage	10 metres
Secondary Frontage	6 metres
Side	6 metres
Rear	8 metres

- (b) Additional setback will be applied to sloping sites as calculated below:

$$S = \frac{H \times L}{4}$$

S = Side or Rear Setback

H = Height of building at the outmost wall from natural ground level to the ceiling of the uppermost floor.

L = Levels of building above natural ground level, with basement included as a level should it protrude more than 1m above natural ground level.

- (c) Building closer to the side boundary may be permissible, subject to ensuring there is no unreasonable adverse impact on the privacy or solar access of adjoining properties.

- (d) No balcony shall protrude into the setback area.

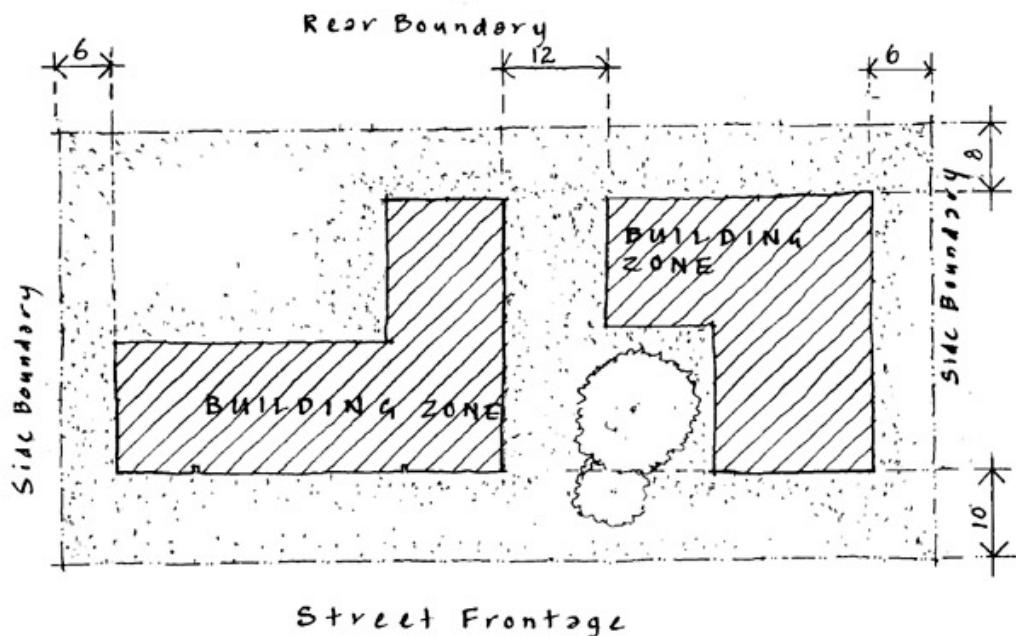


Figure 4 Ground Floor Building Zone Setbacks – One Street Frontage

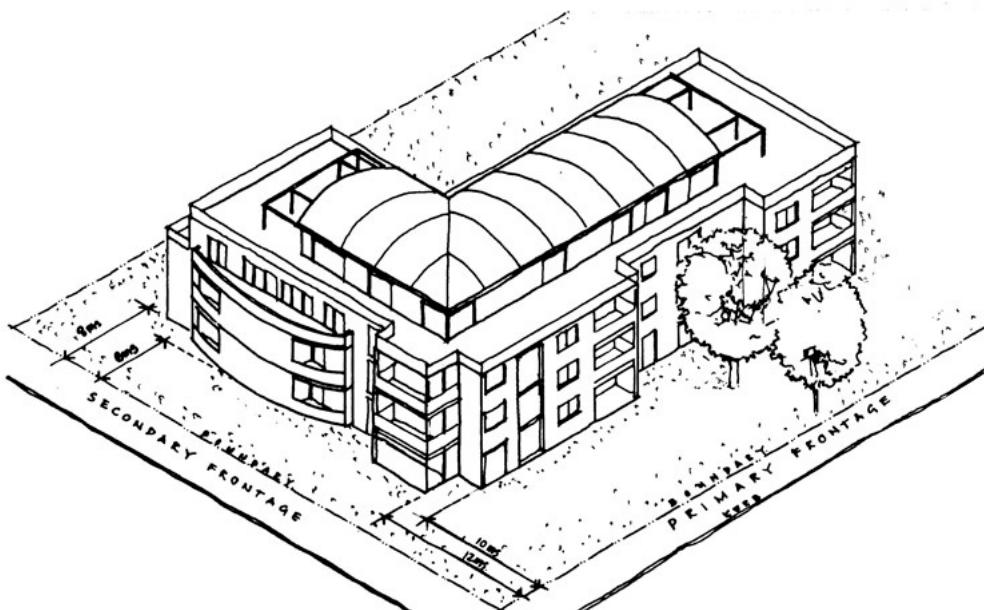


Figure 5 Building Zone Setbacks – Corner Site

3.4. BUILDING HEIGHTS

OBJECTIVES

- (i) To ensure that buildings reflect the existing landform of the neighbourhood, including ridgelines and drainage depressions.
- (ii) To protect privacy and amenity of surrounding allotments and residential development in accordance with Council's ESD objective 7.
- (iii) To minimise overshadowing of adjoining properties.

DEVELOPMENT CONTROLS

- (a) Developments on sloping sites are to be stepped so that the ground floor does not exceed one metre above natural ground level immediately below any point on the ground floor.
- (b) The floor level of any residential room must be no lower than one metre below natural ground level.
- (c) No building shall contain more than 4 storeys above natural ground level.

SUBMISSION REQUIREMENTS

- Shadow diagrams

3.5. BUILDING SEPARATION AND TREATMENT

OBJECTIVES

- (i) To ensure privacy within buildings.
- (ii) To avoid overlooking of living spaces and private open space.
- (iii) To minimise the visual impact of residential flat building developments by minimising the bulk and scale of residential flat buildings and promoting suitable landscaping between buildings.

DEVELOPMENT CONTROLS

- (a) The minimum separation between buildings is 12 metres.
- (b) The space between buildings must be capable of extensive landscaping utilising deep rooted planting. In cases where underground parking

limits the soil depth, landscape beds/tubs to provide additional soil depth, must be provided. Larger trees /shrubs must be integrated into the landscape design to ensure suitable planting is achievable between buildings.

3.6. LANDSCAPE AREA

OBJECTIVES

- (i) To provide a satisfactory relationship between buildings, landscaping areas and adjoining developments.
- (ii) To minimise stormwater runoff and provide the opportunity for on-site groundwater recharge in accordance with Council's ESD objective 3.
- (iii) To ensure a high standard of environmental quality of residential flat building developments and the overall visual amenity and character of the neighbourhood.
- (iv) To ensure that landscaped areas can be efficiently maintained.
- (v) To ensure that existing trees are given every opportunity to be incorporated into the final design.
- (vi) To ensure a satisfactory relationship between buildings and open spaces.
- (vii) To ensure that vegetation removed as a part of the land development process is replaced by suitable indigenous species in accordance with Council's ESD objective 4.
- (viii) To avoid the creation of drainage and runoff problems through minimising the amount of impervious area.
- (ix) To minimise bulk and scale of the development.

DEVELOPMENT CONTROLS

- (a) The landscape area shall be a minimum of 50% of the area of the site. Such areas shall exclude building and driveway areas. Terraces and patios within one metre of natural ground level will be included in landscape area, including common open space above basement car park provided the area is grassed and suitably landscaped.
- (b) Landscaped areas must have minimum dimensions of 2 metres. Areas less than 2

- metres in width will be excluded from the landscape area calculation.
- (c) Existing trees and vegetation should be preserved especially those in the front setback. The existing tree canopy should be retained and enhanced wherever possible.
 - (d) All setbacks and any above ground car parking areas are to be landscaped and maintained to a high standard.
 - (e) Landscaping is to be provided in accordance with the provisions set out in Part C Section 3 - Landscaping of this DCP.
 - (f) Landscape treatments are to harmonise with building designs. They should reflect the scale of the building and should consist of trees, shrubs, groundcovers and grass.
 - (g) Native species are to be used to maintain a strong natural theme for the neighbourhood and owing to their low maintenance characteristics, relative fast growth, aesthetic appeal and suitability to the natural habitat.
 - (h) The landscape design should take into consideration the safety of residents and permit natural surveillance of common areas and pathways.

SUBMISSION REQUIREMENTS

- Landscape Plan

3.7. BUILDING LENGTH

OBJECTIVES

- (i) To reduce the visual bulk and scale of residential flat building developments.
- (ii) To ensure that developments will enhance and contribute to the streetscape and desired character of the future and existing neighbourhood.

DEVELOPMENT CONTROL

- (a) The maximum linear length of any residential flat building is to be 50 metres.

3.8. BUILDING DESIGN AND STREETSCAPE

OBJECTIVES

- (i) To ensure residential flat building development of a high standard based on appropriate building design and attention to detail, which integrates suitably into the existing or future urban environment.
- (ii) To achieve residential flat building developments that is of a high standard of design and construction in terms of both internal and external appearance.
- (iii) To ensure that developments are aesthetically pleasing, encourage creativity and diversity in design, incorporating architectural relief and modulation of facades to avoid a bulky or monotonous appearance.
- (iv) To ensure the appearance of residential flat building developments enhance the streetscape, complement adjoining and surrounding development in terms of scale and character.

DEVELOPMENT CONTROLS

- (a) Applicants must refer to Council's "Multi-Unit Housing: Urban Design Guidelines, 2002" which have been adopted by Council as a guide for the design of residential flat building development.
- (b) Designs must be in harmony in terms of form, mass, colour and structure with the existing and likely future development in the street.
- (c) The siting and design should seek to ensure a clear definition of the street edge and reinforce street corners. Building lines together with landscaping treatments should distinguish the public and private realms.
- (d) Developments must not be repetitive in design and should incorporate harmonious variations into design features such as verandas, entrances, facades etc.

Walls and Rooflines

- (e) Walls should be articulated in plan and section to reduce building bulk.
- (f) Walls should comprise a variety of colours to reduce monotony and add variety to the streetscape.

- (g) Walls should incorporate windows to enhance façade appearance.
- (h) Walls and roofs are the major elements that determine the development form, scale and bulk. Carefully designed walls with well-balanced vertical and horizontal proportions play a significant role in establishing the character of the development and the streetscape as a whole.
- (i) Break up large horizontal facades, whether walls or roofs, into smaller sections of no longer than 10 metres, with careful consideration given to materials and colours.
- (j) Enhance the façade through the use of well-proportioned and balanced projections and recesses.
- (k) Provide architectural features in the façade that give human scale at ground floor level, such as entry porches, pergolas and so on.

Garages

- (l) Any visible garage walls should be comprised of more than one material and colour to enhance visual attractiveness and interest.
- (m) Any ground level car parking, garages and/or basement garage doorways should be concealed or screened by planting from the street and public view, as much as possible.

Entrances

- (n) Entrances to residential flat buildings should be clearly visible from the public and semi-public areas. Lighting should be provided for safety at night. These entries contribute to the streetscape and character; therefore, they need to be considered in the design.
- (o) Building entries should be readily apparent from the street and clearly visible from inside the dwelling to improve casual surveillance.
- (p) The space around the building entrance should be sufficiently large to stand out and have a distinctive architectural form.
- (q) Site entries should be distinctive, attractive and welcoming.
- (r) Provide sheltered transitional areas around building entries.
- (s) All ground floor dwellings should have their own entry at ground level.

- (t) Building entries should be visible from, or address, the site front boundary. Building entries in walls should be clearly delineated and observable from the driveway.

Views and Siting

- (u) Siting of the building is to take advantage of any views to nearby/adjoining landscaped open space or any public reserve.
- (v) The siting and design of dwellings should also take advantage of any views to open space, public reserves and bushland to promote natural surveillance and to enhance the visual amenity of residents. Blank courtyard walls along boundaries shared with open space or reserves should be avoided and opportunities to create and orient dwellings to permit direct views from living areas into the open space/reserve should be pursued in design.
- (w) Dwellings that have courtyards facing a street or public place should be avoided. Where other design constraints dictate the need for a fence facing a public street or space. The design must comply with the controls specified in section 3.27 - Fencing of this Section of the DCP and consideration must be given to streetscape and visual impact issues

SUBMISSION REQUIREMENTS

- Elevations Plans.
- Design verification as required by SEPP 65 (Refer to section 1.2).

3.9. URBAN DESIGN GUIDELINES

OBJECTIVES

- (i) *To encourage urban design principles which reinforce the character of the precinct.*
- (ii) *To ensure that future development responds to and is compatible with the landscape, topography and visual setting of the area.*
- (iii) *To promote a built form of high architectural quality which complements existing streetscape character and improves the amenity of public space.*

DEVELOPMENT CONTROLS

- (a) Applications must demonstrate conformity with "Baulkham Hills Multi Unit Housing – Urban Design Guidelines, 2002" which has been adopted by Council as a guide for the design of residential flat buildings. This document also details desired future character statements for each precinct and sub-precinct.

SUBMISSION REQUIREMENTS

- Provide a detailed statement, which addresses the "Baulkham Hills Multi Unit Housing – Urban Design Guidelines 2002," – Section 6 - Precinct Character Statements and Section 7 - Sub-Precinct Character Statements.

3.10. DENSITY

OBJECTIVES

- (i) *To ensure residential flat building development does not over-tax existing services and facilities.*
- (ii) *To provide opportunities for a suitable density housing form that is compatible with the existing surrounding development.*

DEVELOPMENT CONTROLS

- (a) The maximum population density permitted is 175 persons per hectare with a desirable range between 150-175 persons per hectare. The density is based upon the occupancy rates in Table 2:

Table 2 Occupancy Rates

Dwelling Type	Occupancy Rate (Persons)
Existing dwelling	3.5
1 bedroom unit	1.3
2 bedroom unit	2.1
3 bedroom unit	2.7
4 bedroom unit	3.5

Note. The maximum density should not be considered as a desired yield for each site. The yield will be dependent on identifying designs that address the objectives of this Section of the DCP.

SUBMISSION REQUIREMENTS

- Provide details of the proposed density of the development.

3.11. UNIT LAYOUT AND DESIGN

OBJECTIVES

- (i) *To ensure that individual units are of a size suitable to meet the needs of residents.*
- (ii) *To ensure the layout of units is efficient and units achieve a high level of residential amenity.*
- (iii) *To provide a mix of residential flat types and sizes to accommodate a range of household types and to facilitate housing diversity.*
- (iv) *Address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.*
- (v) *To ensure designs utilise passive solar efficient layouts and maximise natural ventilation.*

DEVELOPMENT CONTROLS

Apartment Mix

- (a) No more than 25% of the dwelling yield is to comprise either studio or one bedroom apartments.
- (b) No less than 10% of the dwelling yield is to comprise apartments with three or more bedrooms.

Residential Flat Development (less than 30 units)

- (c) The minimum internal floor area for each unit, excluding common passageways, car parking spaces and balconies shall not be less than the following:

1 bedroom unit	75m ²
2 bedroom unit	110m ²
3 bedroom unit	135m ²

Residential Flat Development (30 or more units)

- (d) The minimum internal floor area for each unit, excluding common passageways, car parking spaces and balconies shall not be less than the following:

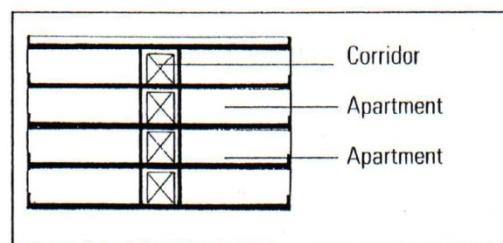
Apartment Size Category	Apartment Size
Type 1	
1 bedroom	50m ²
2 bedroom	70m ²
3 or more bedrooms	95m ²
Type 2	
1 bedroom	65m ²
2 bedroom	90m ²
3 or more bedrooms	120m ²
Type 3	
1 bedroom	75m ²
2 bedroom	110m ²
3 or more bedrooms	135m ²

- (e) Type 1 apartments shall not exceed 30% of the total number of 1, 2 and 3 bedroom apartments.
 (f) Type 2 apartments shall not exceed 30% of the total number of 1, 2 and 3 bedroom apartments.
 (g) All remaining apartments are to comply with the Type 3 apartment sizes.

All Residential Flat Buildings

- (h) Unit layouts that achieve the following are required:-
- Minimise corridors/circulation space and avoid dormant areas with little or no natural surveillance;
 - Permit sunlight access;
 - Achieve cross ventilation; and
 - Protect the visual and acoustic privacy of residents.
- (i) In this regard double loaded floor plans and single aspect units (Refer to Figure 6) must not be used unless:-
- Four (4) hours of direct sunlight is available for windows of primary living areas between 9am and 3pm on 21 June; and
 - Adequate ventilation can be achieved.

Figure 6 Double Loaded Floor Plan With Corridor On Every Floor



Double-loaded floor plan with corridor every floor

Source: Better Urban Living Guidelines for Urban Housing in NSW.

- (j) Floor to ceiling height must be in accordance with Building Code of Australia requirements. Where deeper floor plans are used higher floor to ceiling heights are encouraged to increase penetration of sunlight and air.

SUBMISSION REQUIREMENTS

- Site plan.
- Dimensioned development application plans including a schedule of floor areas for each dwelling. For developments containing 30 or more apartments the schedule is to specify the apartment size category for each apartment.

3.12. BUILDING MATERIALS**OBJECTIVES**

- (i) To promote integrated, visually harmonious and attractive buildings in residential areas.
- (j) To encourage the use of renewable, energy efficient materials that are durable and cost effective in accordance with Council's ESD objective 5.
- (iii) To reduce waste generation and wastage of resources in accordance with Council's ESD objective 6.
- (iv) To encourage consideration of the long-term impact of the production and use of materials used in construction of the development.

DEVELOPMENT CONTROLS

- (a) All building construction must comply with the Local Government Act-1993 Local Government Regulations and the Building Code of Australia.

- (b) Building materials and appearance play a significant role in establishing the character of new development. Consideration should be given to the existing character and streetscape in the design of new development. A mix of materials (at least two types not including glass windows) should be used in any elevation visible from the street or any adjoining property. Elevations dominated by rendered masonry finishes will not be acceptable.
- (c) Choice of materials should be based on consideration of both their environmental and economic costs.
- (d) Buildings materials should be selected carefully so as to reflect and complement the existing character of the street.
- (e) Graffiti resistant materials should be used in areas that are accessible by the general public and communal areas within the development.
- (f) Ensure that colours used are visually pleasing to the viewer and reflect the predominant colours in the area.
- (g) Avoid the use of materials and colours that would cause excessive glare.
- (h) The following factors must be considered when selecting materials:
 - Suitability for the purpose;
 - Durability;
 - Long term appearance;
 - Local environmental impacts;
 - Broader and longer term environmental impacts; and
 - The quantity of material required.
- (i) Avoid materials that are likely to contribute to poor internal air quality such as those generating formaldehyde or those that may create a breathing hazard in the case of fire (e.g. polyurethane).
- (j) Select materials that will minimise the long-term environmental impact over the whole life of the development.
- (k) Preference is to be given to materials derived from renewable sources or those that are sustainable and generate a lower environmental cost, recycled material or materials with low embodied energy, better lifecycle costs and durability. For example, use of sustainable timbers rather than old growth or rainforest timbers.

SUBMISSION REQUIREMENTS

- Schedule of materials.
- Streetscape Perspective of proposed development including landscaping.

3.13. OPEN SPACE

OBJECTIVES

- (i) To provide open space for recreation and for use by residents within residential flat buildings.
- (ii) To enhance the quality of the built environment by providing opportunities for landscaping.

Private Open Space

OBJECTIVES

- (i) To provide private outdoor living space that is an extension of the dwelling for the enjoyment of residents.
- (ii) To provide private outdoor living space that receives a reasonable quantity of sunshine during all months of the year.

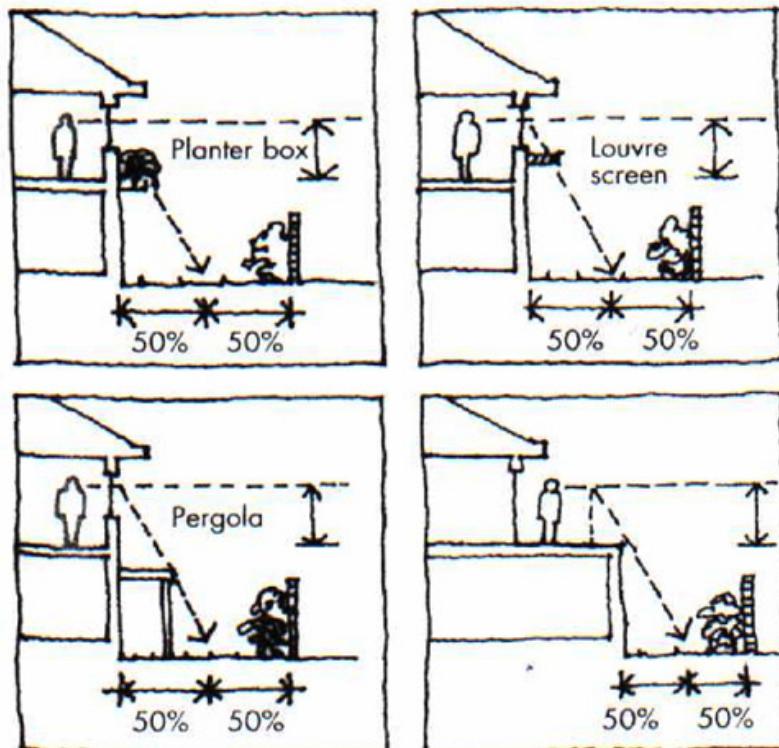
DEVELOPMENT CONTROLS

- (a) Private open space must be readily accessible from living areas of dwelling units.
- At Ground Level:
- (b) For dwellings with ground level access private open space shall be provided with a minimum width of 4 metres and depth of 3 metres.
- (c) This private open space shall be provided within one metre of natural ground and may be included as part of the minimum landscape area requirements.
- (d) Private (ground level) open space areas shall be enclosed with a wall/fence or landscape screen with an effective height of 1.8 metres from the finished ground level.
- (e) The design of the building and landscaping treatment should ensure the privacy of these ground level spaces. Enclosing screen walls or fences shall be designed to ensure privacy, both from communal open space or access ways and from dwellings and their courtyards.
- (f) Design techniques that protect the privacy of the courtyards by restricting overlooking from above

(g) are also encouraged. Potential techniques are shown in Figure 9 below.

Above Ground Level:

(h) In order to provide useable open space to dwellings above ground level, any balcony or terrace shall have a minimum area of 10m² and a minimum depth of 2.5 metres.



Techniques for providing visual privacy to a lower dwelling's private open space.

Figure 7 Protecting Privacy Of Courtyards

Source: Australia's Guide to Good Design – Residential.

Common Open Space

OBJECTIVES

- (i) To provide a functional open space area within the development for the informal recreation of all residential flat building residents and children's play.
- (ii) To provide opportunities for additional landscaping and retention of any significant features that add to the amenity of the site in accordance with Council's ESD objective 4. (iv)

DEVELOPMENT CONTROLS

- (a) In order to provide for the recreational needs of the residents a common open space area is to be provided in a singular large parcel. Such open space area is to include opportunities for both active and passive recreation facilities (i.e. equipment such as seating, shade structures, BBQ and children's play equipment for passive recreational use).
- (b) Large developments (greater than 20 dwellings) shall consider provision of a swimming pool, common room and hard stand outdoor play area.
- (c) The common open space is to be centrally located and such area shall be capable of surveillance from at least two dwellings for safety reasons.
- (d) The orientation and location of the open space should also take into consideration opportunities to maximise solar access to the open space during winter. It must receive at least four hours of sunlight between 9am and 3pm on 21 June.
- (e) The area provided shall be equivalent to the rate of 20m² per dwelling.
- (f) Common open space must be sufficient in size to enable it to be used for recreational activities, or be capable of growing substantial vegetation.
- (g) Common open space must be designed in conjunction with pedestrian pathways.

SUBMISSION REQUIREMENTS

- Plans are to indicate those areas including dimensions of any part of the site to be used for private and common open space.

3.14. SOLAR ACCESS

OBJECTIVES

- (i) To orient the development in a way that best allows for appropriate solar access and shading.
- (ii) To maximise natural lighting to internal living and open space areas in winter and provide adequate shading to internal areas and private open space during summer to improve residential amenity.
- (iii) To ensure no adverse overshadowing of adjoining allotments/developments.

Solar Access Design Considerations

DEVELOPMENT CONTROLS

- (a) Orient and design buildings to maximise the number of dwellings with direct sunlight where possible. Ideally, face the long axis of the development up to 30 degrees east and 20 degrees west of true north. This is illustrated in Figure 10.

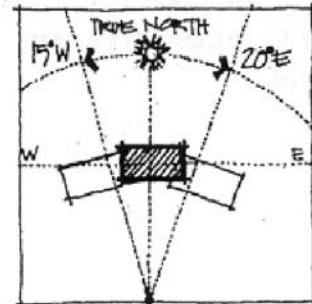
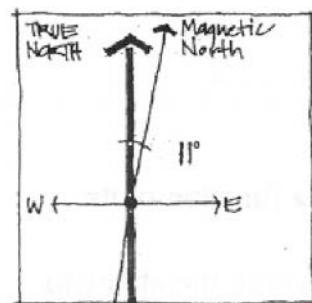
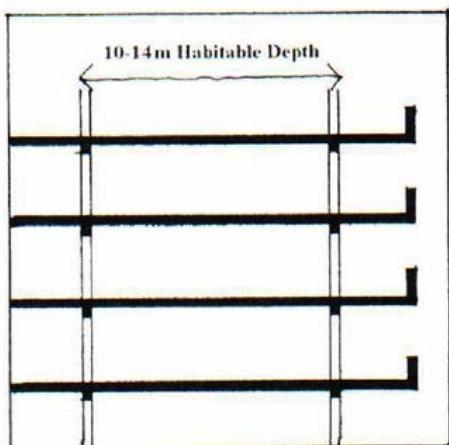


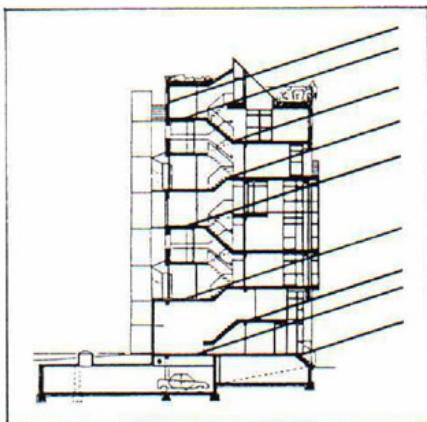
Figure 8 Building Orientation

- (b) Face living spaces to the north wherever possible.

- (c) Narrow footprint buildings and split level floor plans permit good solar access (Refer to Figure 9).
- (d) Main windows should have suitable shading or other solar control to avoid discomfort (shutters/blinds/screens/retractable awnings).
- (e) Use horizontal shading devices (for north facing windows) including eaves, verandas, pergolas, awnings and external horizontal blinds to allow low summer sun whilst providing shade from high summer sun.



Narrow footprint buildings allow good daylight access



Narrow buildings allow good daylight access.
Split level plans can enhance environmental quality

Figure 9 Designing For Solar Access

Source: Better Urban Living Guidelines for Urban Housing in NSW.

- (f) East and west facing windows can cause excess heat in summer. Minimise the size of east and west facing windows, or consider external vertical shading devices such as vertical blinds, blade walls and thick vegetation.

- (g) Shading elements are to be integrated into the overall elevation design.

Overshadowing

DEVELOPMENT CONTROLS

- (h) The common open space area must receive at least four hours of sunlight between 9am and 3pm on 21 June.
- (i) Buildings must be designed to ensure that adjoining residential buildings and the major part of their landscape receive at least four hours of sunlight between 9am and 3pm on 21 June.

SUBMISSION REQUIREMENTS

- Shadow Diagrams

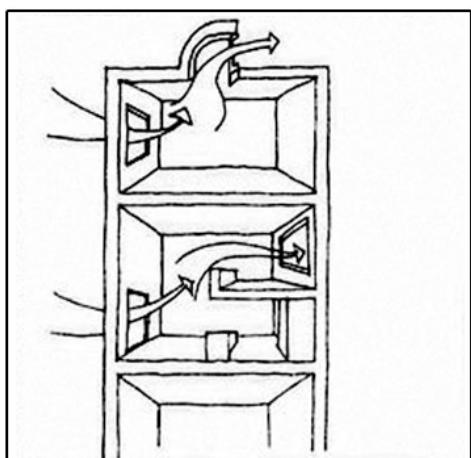
3.15. VENTILATION

OBJECTIVES

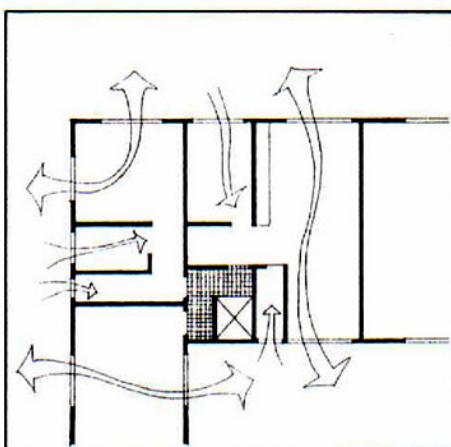
- (i) To maximise ventilation flows in each dwelling.
- (ii) To minimise the filtering of cold or warm air through gaps in the construction of each dwelling in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

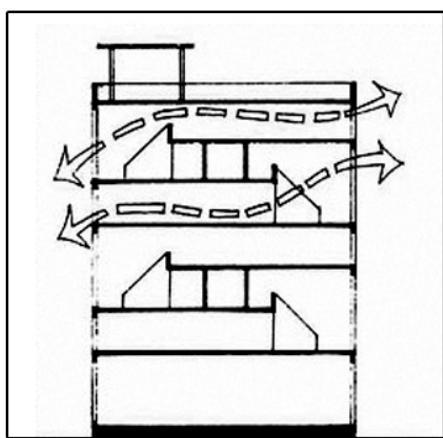
- (a) Consider ventilation in early design stages. Figure 10 identifies design options for achieving natural ventilation.
- (b) Consider prevailing breezes in relation to building orientation, window design and internal circulation.
- (c) Place windows to allow for cross ventilation i.e. on opposite sides of the building rather than adjacent walls where possible. These windows are to be lockable in a partly open position.
- (d) Promote air circulation and consider the installation of fans, roof vents, louvered windows and high-level windows to aid air circulation.
- (e) Provide security screen doors at unit entries.
- (f) Minimise air gaps by incorporating door and window seals.



Cross ventilation can be achieved through roof vents and air shafts. Apartments with mezzanines and two storey apartments assist in air movement.



Cross ventilation is best achieved through narrow floor plans



Good cross ventilation can be achieved with double orientation apartments, having split levels and corridors on alternative floors

Figure 10 Design Options - Ventilation

Source: Better Urban Living – Guidelines for Urban Housing in NSW.

3.16. LIGHTING

OBJECTIVE

- (i) To maximise the use of natural lighting and to minimise the energy consumption of residential flat building developments in accordance with Council's ESD objective 5.

DEVELOPMENT CONTROLS

- (a) Lighting is to be provided and installed in accordance with the Building Code of Australia.
- (b) Lighting must be adequate to ensure the security and safety of residents and visitors.
- (c) Maximise the use of natural lighting through window placement and skylights.
- (d) In common areas lights are to be time switched and energy efficient fitting should be used.
- (e) Motion detectors are to be used for unit entries, lobbies and outdoor security.
- (f) Incorporate dimmers motion detectors, and automatic turn-off switches where appropriate.
- (g) Provide separate switches for special purpose lights.

3.17. STORMWATER MANAGEMENT

OBJECTIVES

- (i) To control stormwater and to ensure that residential flat building developments do not increase downstream drainage flows or adversely impact adjoining and downstream properties.
- (ii) To ensure the integrity of watercourses is protected and enhanced in accordance with Council's ESD objective 4.
- (iii) To provide for the disposal of stormwater from the site in efficient, equitable and environmentally sensible ways in accordance with Council's ESD objective 3.
- (iv) To provide for on-site detention of site drainage.

DEVELOPMENT CONTROLS

- (a) Drainage easements will be required where the development property does not drain directly into the existing stormwater drainage system or a public road. Development Consent will not be

issued until the submission of documents demonstrating the creation of any necessary easements over downstream properties.

- (b) Discharge points are to be controlled and treated to prevent soil erosion, and may require energy dissipating devices on steeper topography, to Council's requirements.
- (c) Where necessary, downstream amplification of existing drainage facilities will be required including Council infrastructure if required.
- (d) Developments within the Upper Parramatta River Catchment must comply with any requirements of the Sydney Catchment Management Authority.
- (e) On-site detention, water recycling, or water quality management systems may be required to Council's and/or the Sydney Catchment Management Authority and/or the Hawkesbury Catchment requirements, to counteract an increase in stormwater runoff.
- (f) The design of drainage systems is to be in accordance with Council's Design Guidelines for Subdivisions/ Developments.
- (g) Water Sensitive Urban Design (WSUD) principles shall be employed in the management of the site's stormwater in terms of water retention, reuse and cleansing. In this regard the drainage design is to include measures to manage the water quality of stormwater runoff. At a minimum the design is to integrate bio-retention filters along roadways, driveways and within open space area.
- (h) On site detention tanks are only permitted in common areas within a proposed development (for example driveways, common open space) and not within private courtyards.

SUBMISSION REQUIREMENTS

- Preliminary Engineering Drainage Plans indicating the proposed drainage infrastructure.
- Details of easements to be created over downstream properties if they do not already exist, including the written concurrence of all the affected landowners.
 - If OSD is required, OSD plans must be submitted with the development application.

3.18. VEHICULAR ACCESS

OBJECTIVES

- (i) To ensure that vehicles may enter and exit residential flat building developments in a safe and efficient manner in accordance with Council's ESD objective 7.
- (ii) To maintain the performance of roads that provides an arterial or subarterial function in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROLS

- (a) Access to the site is to be in accordance with the requirements within Part C Section 1 – Parking of this DCP.
- (b) Adequate vehicular entry and exit and circulation areas are to be provided. The design must:
 - Provide a safe environment for both pedestrians and vehicles using the site and surrounding road networks;
 - Ensure vehicular ingress and egress to the site is in a forward direction at all times;
 - Provide for service vehicles where possible; and
 - Be designed to minimise the visual impact of hard paved areas.
- (c) The driveway shall be centrally located within the development and be a minimum of 10 metres from any side boundary or street.
- (d) Driveways are to have a minimum width of 6 metres at the property boundary for a distance of 6 metres within the development to ensure easy entry/exit of vehicles.
- (e) Driveway gradients shall be in accordance with Australian Standard – AS 2890.1 – Part 1 – Parking Facilities – Off Street Car Parking.

SUBMISSION REQUIREMENTS

- Applicants are required to submit plans and details with the development application of proposed vehicular access and circulation for Council's approval. Details must specifically relate to vehicular movement, layout and turning circles.

3.19. CAR PARKING

OBJECTIVES

- (i) To ensure that all car-parking demands generated by the development are accommodated on the development site.
- (ii) To protect the free flow of traffic into and out of residential flat building developments and the surrounding street network in accordance with Council's ESD objective 7.

DEVELOPMENT CONTROL

- (a) All car parking required by Council shall be provided on-site in accordance with the requirements of Part C Section 1 – Parking of this DCP.
- (b) On site car parking is to be provided at the following rates:

➤ 1 bedroom unit	1 space
➤ 2 or 3 bedrooms unit	2 spaces
- (c) Any car parking provided at ground level shall:
 - Comprise lockable single garages with minimum clear dimensions of 5.5 metres x 3.0 metres (exclusive of any storage area) and lockable double garages of 5.5 metres x 5.4 metres exclusive of storage area (not applicable to visitor parking);
 - Be enclosed in a manner that screens the vehicles from the street; and
 - Be separated from any adjoining property boundaries by a 2 metre wide landscaped strip.
- (d) Visitor parking:
 - Must be provided at the rate of 2 per 5 dwellings. The number required will be rounded up to the nearest whole number;
 - Have minimum dimensions of 5.5 metres x 2.6 metres; and
 - Must be made accessible at all times. Where visitor parking is proposed behind security gates, the access to visitor parking must be maintained through the operation of an intercom system installed at or near the gate.
- (e) The intercom shall be located to allow a free movement of traffic around the stationary vehicle using the intercom to ensure queuing does not adversely affect traffic or pedestrian movement on the street. A maximum driveway gradient of 5% for 6 metres before the intercom is required

to minimise problems associated with using the intercom on steep driveway gradients.

- (f) A separate vehicle turning facility should be provided between the intercom location and the security door to ensure visitor vehicles are able to manoeuvre and leave the site in a forward direction using a 3 point turn manoeuvre should the resident be unavailable or deny access to the visitor.
- (g) If the side boundary of any car parking space is a wall or fence or if it is obstructed (i.e. column) so that door opening is restricted 300mm must be added to the width. If the space is obstructed on both sides 600mm must be added.
- (h) Manoeuvring areas to all car parking spaces shall comply with the standards in Part C Section 1 – Parking. The layout must be designed to ensure vehicles utilising any parking spaces can enter and leave the site in a forward direction.
- (i) Parking areas within the front setback are discouraged and in this regard, no more than 2 spaces shall be provided within the setback area.
- (j) Developments in excess of 10 units are to provide pedestrian access from the street separate from the vehicular access.
- (k) Vehicle reversing bays or an alternative arrangement is to be provided at the end of aisles to ensure all parking spaces can be accessed in a satisfactory manner.
- (l) Resident car parking shall be safely secured with any opportunity for unauthorised entry minimised.
- (m) A carwash bay must be provided in accordance with Part C Section 1 - Parking.
- (n) All internal stairs that connect the car parking areas to the residential units are to be accessible only to the residents and their authorised visitors. All fire exits from the car parking areas must be designed to be independent from stairs that provide access to residential units.

SUBMISSION REQUIREMENTS

- Site Plan showing the number of car parking spaces, calculations and the dimensions of all parking spaces and driveway widths.

3.20. STORAGE

OBJECTIVES

- (i) To ensure that each dwelling has reasonable private storage space (storage requirements include household items either within the dwelling or in secure garage areas).

DEVELOPMENT CONTROLS

- (a) At least $10m^3$ must be provided for storage space per dwelling within a lockable garage. It must not encroach into the parking space, and must cover a minimum area of $5m^2$ with a minimum dimension of 2 metres required. The storage space shall be adjacent to a car space and not overhead.
- (b) A suitable secure area for storing garden maintenance should be provided.

SUBMISSION REQUIREMENTS

- Plans must show the designated storage area for each dwelling.

3.21. ACCESS AND ADAPTABILITY

In order to provide for disabled people and the ageing population, dwellings must be capable of adaptation so as to accommodate residents who may have special needs, declining mobility or sight. This is in addition to being appropriately designed for everyday pedestrian use.

OBJECTIVES

- (i) To ensure that developments provide appropriate and improved access and facilities for all persons (consistent with the provisions of Australian Standard AS1428.1).
- (ii) To encourage designers/developers to consider the needs of people who are mobility impaired and to provide greater than minimum requirements for access and road safety.
- (iii) To ensure that building design does not prevent access by people with disabilities.
- (iv) Incorporate design measures that are appropriate to people with disabilities.

DEVELOPMENT CONTROLS

- (a) All residential flat buildings must comply with the requirements of the Disability (Access to Premises – Buildings) Standards.
- (b) One visitor parking bay and one pick-up and drop-off bay for mobility impaired people must be provided complying with the provisions of AS 2890 for people with a disability, additional to the requirements for any visitor parking elsewhere in this DCP.
- (c) Adaptable or Accessible dwellings are to be provided in accordance with the table below:

No. of Dwellings	No. of Adaptable or Accessible Dwellings
5 or less	NIL
6-15	1
16-30	2
More than 30	10% of all dwelling units

Adaptable and Accessible dwellings are defined as follows:

- **Accessible Dwelling** means a dwelling unit that complies with Australian Standard 1428:2 and is suitable for occupation for a wheelchair user.
- **Adaptable Dwelling** means a dwelling unit that meets the specifications for a Class B Adaptable Dwelling in accordance with Australian Standard 4299.

Each Adaptable or Accessible dwelling shall have an accessible parking bay complying with Australian Standard 2890 for people with a disability. An accessible path of travel must be provided from the car parking space to the dwelling.

SUBMISSION REQUIREMENTS

- Any application for six or more dwellings must be accompanied by:
 - (i) An access report prepared by a suitably qualified person, demonstrating the proposed developments ability to comply with the access requirements contained in the Disability (Access to Premises – Buildings) Standards as well as Australian Standards;
 - AS 1428.1 General requirements for access –

- New building work;
- AS 1428.2 Enhanced and additional requirements – Buildings and facilities; and
 - AS 4299 Adaptable Housing

as relevant to the proposal.

- (ii) A pre and post-adaptation floor plan for adaptable housing.

3.22. PEDESTRIAN / BICYCLE LINKS

OBJECTIVES

- (i) To consider the needs of the residents with particular consideration to access requirements, safety and security.
- (ii) To ensure that appropriate pathways, with high levels of pedestrian amenity are provided for residents in the locality along identified desire lines in accordance with Council's ESD objective 9.
- (iii) To ensure provision is made for bicycle access and storage in accordance with Council's ESD objective 9.

Within the Site

DEVELOPMENT CONTROLS

- (a) Access to dwellings should be direct and without unnecessary barriers. All external and internal pathways and ramps should conform to the requirements set out in Australian Standard 1428 Parts 1 and 2.
- (b) Clearly defined pedestrian pathways are to be provided between proposed developments and proposed footpaths along sub-arterial roads.
- (c) Developments are to have adequate lighting in common and access areas to ensure the safety of residents and property.
- (d) Building and unit numbering and all signage is to be clear and easy to understand.
- (e) Pathway locations must ensure natural surveillance of the pathway from primary living areas of adjoining units. Dwelling entries must not be hidden from view and must be easily accessible.
- (f) A bicycle lockup facility is to be provided close to the main entry to the building.

Local Pedestrian Links

DEVELOPMENT CONTROLS

- (a) Where it is possible, a pedestrian link through the site must be provided as part of the development to increase the connectivity of the area for local pedestrians. The following factors should be considered when identifying the most appropriate location for the link of the pathway:-
 - The link must be no less than 3m wide;
 - It should be a straight-line link through the site linking streets or other public spaces; and
 - The link cannot include stairs and any ramps. It must have a reasonable gradient. Refer to AS 1428.1 Design for Access and Mobility and supplementary AS 1428.2.
- (b) The design and layout of any building adjoining and landscaped spaces adjoining the pathway should ensure there is natural surveillance of the pathway to protect the amenity of users. A solid fence along the boundary of the pathway restricting views of the pathway from adjoining properties will not be acceptable.
- (c) The pedestrian link must be dedicated to Council as a public footway and the footpath, and lighting must be provided at no cost to Council.

3.23. PRIVACY - VISUAL AND ACOUSTIC

OBJECTIVES

- (i) To site and design buildings to ensure visual privacy between dwellings in accordance with Council's ESD objective 7.
- (ii) To avoid overlooking of living spaces in dwellings and private open spaces.
- (iii) To contain noise within dwellings and communal areas without unreasonable transmission to adjoining dwellings.

DEVELOPMENT CONTROLS

- (a) Minimise direct overlooking of main internal living areas and private open space of dwellings both within and adjoining the development through building design, window locations and sizes, landscaping and screening devices (Refer to section 3.13 Open Space).

- (b) Consider the location of potential noise sources within the development such as common open space, service areas, driveways, and road frontage, and provide appropriate measures to protect acoustic privacy such as careful location of noise-sensitive rooms (bedrooms, main living areas) and double glazed windows.
- (c) Dwellings that adjoin arterial roads are to be designed to acceptable internal noise levels, based on AS 3671 – Road Traffic Noise Intrusion Guidelines.

SUBMISSION REQUIREMENTS

- Statement addressing AS 3671 – Road Traffic Noise Intrusion Guidelines.

3.24. SERVICES

OBJECTIVES

- (i) To ensure that the physical services necessary to support residential flat building development are available in accordance with Council's ESD objective 6.
- (ii) To ensure that service facilities are integrated with the design of the development and are suitably sized for the convenience of the occupants.

DEVELOPMENT CONTROLS

- (a) Development consent will not be granted until arrangements satisfactory to the relevant authorities are made for the provision of services.
- (b) Pump out sewage management systems are not considered acceptable for residential flat building developments.
- (c) Site services and facilities (such as letterboxes, clothes drying facilities and garbage facility compounds) shall be designed so as:
 - To provide safe and convenient access by residents and the service authority; and
 - Be visually integrated with the development and to have regard to the amenity of adjoining development and streetscape.
- (d) All electricity and telephone services on site must be underground.
- (e) Laundries shall be provided to each dwelling.

SUBMISSION REQUIREMENTS

- Preliminary discussions should be held with the service authorities listed below prior to submission of any application. Any advice provided by these authorities should be submitted with the application.
 - Sydney Water for potable and recycled water, sewage and drainage;
 - Telecommunications carrier for telephones and associated equipment;
 - Energy authority for underground electricity;
 - AGL for gas supplies; and
 - NSW Fire Brigades.
- Documentation to demonstrate how the objectives and development controls are satisfied.

3.25. WASTE MANAGEMENT – STORAGE AND FACILITIES

Waste collection for residential flat building developments must be undertaken in a safe, healthy and clean manner. Kerbside waste collection is considered unsuitable in most circumstances given the high number of bins required to await collection, the time taken to service the bins and amenity and safety issues. Accordingly, it is required that all developments provide for on-site waste collection either at grade or via a basement. Where this is not possible due to site-specific constraints, kerbside collection may be supported if it can be demonstrated that this arrangement will not create any adverse appearance, amenity and safety outcomes. Matters which will be considered with respect to collection arrangements include whether the development is located on a road with high traffic volumes, the number of bins required to service the development, the length of the street frontage/s of the site and any other relevant considerations. Reference should be made to Council's Bin Storage Facility Design Specification and discussions undertaken with Council's Resource Recovery Team.

OBJECTIVES

- (i) To minimise the overall environmental impacts of waste.
- (ii) To maximise, through appropriate design, the opportunities to deal with domestic waste

- according to the Waste Hierarchy as given in Council's ESD objective 6.*
- (iii) *To provide domestic waste management systems that allow for ease of use by occupants and safe and efficient service by collection contractors.*
 - (iv) *To encourage on-site waste collection.*
 - (v) *To provide waste storage and collection areas that are integrated with the design of the development.*
 - (vi) *To ensure minimum visual impact of the waste storage facilities.*
 - (vii) *To assist in achieving Federal and State Government waste minimisation targets.*

DEVELOPMENT CONTROLS

General

- (a) Waste collection and separation facilities must be provided for each dwelling. Each dwelling should have a waste storage cupboard in the kitchen capable of holding at least a single day's waste, and sufficient to enable separation of recyclable material.
- (b) On-site storage and collection of waste must be provided and integrated with the design of the development.
- (c) Sufficient clearance and manoeuvring space must be provided to allow Council's (or its contractor's) waste collection vehicles to enter and exit in a forward direction, collect waste and recyclables with minimal or no need for reversing and without impeding upon general access to, from or within the site. Applicants should liaise with Council's Resource Recovery Department on truck sizes, required turning paths and access/servicing arrangements.
- (d) Where Council is satisfied that on-site collection is not possible, bin storage areas must be located to allow bins to be wheeled to the street kerb over flat or ramped surfaces with a maximum grade of 7% (5% for bulk garbage bins) to be serviced by a garbage truck on a flat surface and not over steps, landscape edging or gutters.
- (e) All waste must be removed at regular intervals and not less frequently than once per week for garbage and fortnightly for recycling.

Storage and Facilities

- (f) Adequate storage for waste materials must be provided on site.

- (g) Waste storage and facilities must be convenient and accessible to the occupant(s) of all units. Storage areas must be accessible by wheelchair where dwellings do not have access to waste garbage chutes or recycling cupboards.
- (h) Adequate storage is to be provided for the number of bins required in accordance with the ratios provided below or as advised by Council's Resource Recovery Department:

GARBAGE	RECYCLING
An equivalent of 120 litres (minimum) available per unit per week (in the form of a shared bulk garbage bin)	For one bedroom units: 1 x 240 litre bin per four units
	For two bedroom units: 1 x 240 litre bin per three units
	For three bedroom units: 1 x 240 litre bin per two units
	For four bedroom units: 1 x 240 litre bin per unit

Note: The required number of bins will be assessed as part of the development application process and will be given as a condition of consent.

- (i) In locating and designing waste storage areas consideration must be given to screening views of the facility from any adjoining property or public place while still ensuring there is some natural surveillance from within the development to minimise vandalism and other anti-social activity. Communal storage areas should be located within reasonable travel distance from all dwellings within a development.
- (j) Waste storage areas must be kept clean, tidy and free from offensive odours at all times.
- (k) The design of the bin storage and collection facilities and on-going use by the occupants is to be addressed in the Design of Facilities and On-Going Management sections of the Waste Management Plan as required in the Submission Requirements of section 3.26 – Waste Management Planning. The design is to be in accordance with Council's Bin Storage Facility Design Specification available on Council's website.

3.26. WASTE MANAGEMENT PLANNING

OBJECTIVES

- (i) To promote improved project management and to reduce the demand for waste disposal during demolition and construction.
- (ii) To maximise, reuse and recycle building/construction materials.
- (iii) To encourage building designs and construction techniques that will minimise waste generation.
- (iv) Minimise waste generation to landfill via the waste hierarchy in accordance with Council's ESD objective 6.
- (v) To assist in achieving Federal and State Government waste minimisation targets.

Demolition

DEVELOPMENT CONTROLS

- (a) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.
- (b) Straight demolition should be replaced by a process of selective deconstruction and reuse of materials. Careful planning is also required for the correct removal and disposal of hazardous materials such as asbestos.
- (c) Project management must seek firstly to re-use and then secondly to recycle solid waste materials either on or off site. Waste disposal to landfill must be minimised to those materials that are not re-useable or recyclable.
- (d) When separated, materials are to be kept uncontaminated to guarantee the highest possible reuse value.
- (e) Details of waste sorting areas and vehicular access are to be provided on plan drawings.

Construction

DEVELOPMENT CONTROLS

- (a) Avoid oversupply and waste of materials by careful assessment of quantities needed.
- (b) The use of prefabricated components may reduce waste.
- (c) Re-use of materials and use of recycled material is desirable where possible.
- (d) Site operations should provide for planned work staging, at source separation, re-use and recycling of materials and ensure appropriate storage and collection of waste.
- (e) All asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with WorkCover Authority and Office of Environment and Heritage and Water requirements.

SUBMISSION REQUIREMENTS

- Waste Management Plan

3.27. FENCING

OBJECTIVE

- (i) To ensure that fencing does not detract from the overall visual amenity and character of the area.

DEVELOPMENT CONTROLS

- (a) The fencing materials chosen must protect the acoustic amenity and privacy of courtyards. Courtyard fences shall be constructed of masonry.
- (b) All boundary fencing/ walls fronting a street shall be setback a minimum of 2 metres, to permit landscaping, and shall include recesses and other architectural features.
- (c) All fencing or walls shall be combined and integrated with site landscaping.
- (d) The following fencing or finishes are not acceptable because of its poor visual appearance:
 - Pre-painted solid, metal fencing; or
 - Rendered finishes where the entire fence is fully rendered.

SUBMISSION REQUIREMENT

- Fencing details for the site, clearly showing the location, height and type of proposed fencing is to be submitted as part of the development application.

3.28. DEVELOPER CONTRIBUTIONS

Applicants should consult with Council's Section 94 Contributions Plan and Council Officers to determine the required amount of Section 94 Contributions payable.

4. INFORMATION REQUIRED FOR A DEVELOPMENT APPLICATION

In preparing plans applicants must also address the submission requirements listed in section 3 of this Section of the DCP relevant to the application. The following plans and details will be required with all residential flat building applications along with the relevant application form(s).

STATEMENT OF ENVIRONMENTAL EFFECTS

SITE PLANS

SITE ANALYSIS

- Refer to section 3.2.

ARCHITECTURAL PLANS

- Internal layout of unit/building (existing and proposed)
- Elevations

PRELIMINARY ENGINEERING DRAINAGE PLANS

- Including any On Site Detention Plans

LANDSCAPE PLAN

- These plans are to be in accordance with Part C Section 3 - Landscaping.

EARTHWORKS PLAN

SIGNAGE PLANS

- See Part C Section 2- Signage

STREETSCAPE PERSPECTIVE

MODEL

- For all developments comprising 10 or more units a scale model must be provided including adjoining properties at the time of the submission

of the development application and be on display for the duration of the public exhibition period.

- Should a model not be submitted with the application, an immediate "stop the clock" order be placed on the development application until the model is presented.

WASTE MANAGEMENT PLAN

DESIGN VERIFICATION

- As per SEPP 65 requirements.

BASIX CERTIFICATE

Note. Refer to Part A – Introduction section 4.0 for general lodgement requirements and detailed requirements to be included in each of the above documentation.

5. REFERENCES

Australian Council of Business Design Professionals, (2000) BDP Environment Design Guide.

Baulkham Hills Shire Council, 1997 Residential Development Strategy.

Baulkham Hills Shire Council, 1999 Urban Capability Assessment of Residential 2(a) Zones in Baulkham Hills Shire.

Department of Urban Affairs and Planning and the NSW Government Architect, 1998 Better Urban Living – Guidelines for Urban Housing in NSW.

Department of Urban Affairs and Planning State Environmental Planning Policy No. 53 - Metropolitan Residential Development.

Department of Urban Affairs and Planning State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development.

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APPENDIX A - DEVELOPMENT CONTROL CALCULATIONS/COMPLIANCE SHEET

Give appropriate detail and/or explanation where applicable to demonstrate compliance (or non-compliance) with the development controls in this Section of the DCP.

Development Controls		Proposed Development	Compliance
1	3.1 Site Requirements ➤ Min. frontage – 30m		
2	3.3 Setbacks – Building Zone ➤ 5 metres clear of existing trees (or the drip line) ➤ Complies with Table 1		
3	3.4 Building Heights		
4	3.5 Building Separation and Treatment 12 metre building separation		
5	3.6 Landscaped Area – 50%		
6	3.7 Building Length – max 50 metres		
7	3.8 Building Design & Streetscape		
8	3.9 Urban Design Guidelines Demonstrate conformity with “Baulkham Hills Multi Unit Housing – Urban Design Guidelines 2002”.		
9	3.10 Density ➤ 150-175 persons per Ha		
10	3.11 Unit Layout and Design ➤ 1 bedroom – 75m ² ➤ 2 bedroom – 110m ² ➤ 3 bedroom – 135m ²		
11	3.13 Open Space Private: ➤ Ground level – min 4 metres x 3 metres ➤ Above ground – min 10m ² , min. depth 2.5 metres Common: ➤ 20m ² per dwelling		

Development Controls		Proposed Development	Compliance
12	<p>3.14 Solar Access</p> <ul style="list-style-type: none"> ➢ Adjoining buildings & / open space areas – four hours between 9am & 3pm on 21 June ➢ Common open space – four hours between 9am & 3pm on 21 June 		
13	3.17 Stormwater Management		
14	<p>3.19 Car parking</p> <p>Rate per unit & visitor parking:</p> <ul style="list-style-type: none"> ➢ 1 bedroom – 1 space ➢ 2 or 3 bedroom – 2 spaces ➢ Visitor – 2 spaces per 5 dwellings ➢ Lockable single garages min. dimension – 5.5 metres x 3 metres (exclusive of storage) ➢ Lockable double garages min. dimension – 5.5 metres x 5 metres (exclusive of storage) ➢ Visitor parking dimensions – 5.5 metres x 2.6 metres <p>Manoeuvring and ramps:</p> <ul style="list-style-type: none"> ➢ The first 6 metres of the driveway inside the property boundary to be a maximum of 5% ➢ Ramp grades comply with Australian Standard 2890.1 ➢ Manoeuvring in accordance with Australian Standard 2890.1 		
15	<p>3.20 Storage</p> <p>10m³ with an area 5m² and dimension 2 metres.</p>		

Development Controls		Proposed Development	Compliance										
16	<p>3.21 Adaptability, Pedestrian Access & Safety</p> <ul style="list-style-type: none"> ➤ Adaptable or accessible housing provided in accordance with the following table; <table border="1"> <thead> <tr> <th>No. of Dwellings</th> <th>No. of Adaptable or Accessible Dwellings</th> </tr> </thead> <tbody> <tr> <td>5 or less</td> <td>NIL</td> </tr> <tr> <td>6-15</td> <td>1</td> </tr> <tr> <td>16-30</td> <td>2</td> </tr> <tr> <td>More than 30</td> <td>10% of all dwelling units</td> </tr> </tbody> </table> <ul style="list-style-type: none"> ➤ Compliance with Disability (Access to Premises – Buildings) Standards ➤ Disabled parking provided. 	No. of Dwellings	No. of Adaptable or Accessible Dwellings	5 or less	NIL	6-15	1	16-30	2	More than 30	10% of all dwelling units		
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