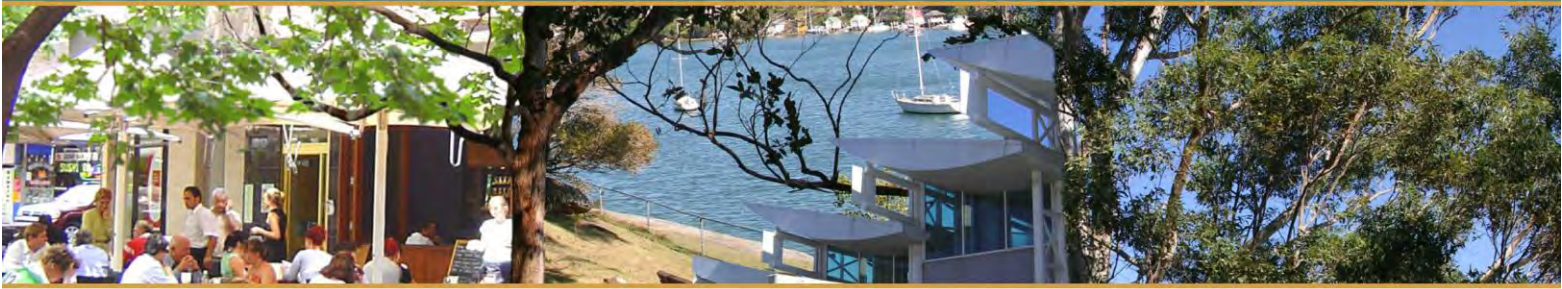


Lane Cove



Development Control Plan

Effective 22 February 2010

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Part C (Greenwich Conservation Area) - Godden Mackay Logan

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Part D (Little Lane) – Scape Strategy

Part F - Access Australia

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Part N - Scott Carver

The detailed contribution made by Councillors, the community and staff is also appreciated.

Part A

Introduction



A

- A.1 Introduction
- A.2 Submitting an application

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A.1 Introduction

1.1 Citation

This plan shall be known as the “Lane Cove Development Control Plan 2009” and has been prepared in accordance with Section 72 of the Environmental Planning and Assessment Act 1979 and Part 3 of the Environmental and Assessment Regulation 2000.

This plan replaces all DCPs formerly applying in Lane Cove Local Government Area (LGA).

1.2 Land Covered by the DCP

The Lane Cove Development Control Plan 2009 applies to all land within the Lane Cove LGA.

1.3 Interpretation

The Lane Cove Development Control Plan 2009 is referred to as “the DCP” throughout this document. The Lane Cove Local Environmental Plan 2009 is referred to as “the LEP” throughout this document.

Definitions for the interpretation of the provisions of the DCP are contained in the Dictionary within the LEP. Where definitions are required within this DCP that are not contained in the LEP they are described in the Dictionary at the back of this DCP.

1.4 How to use this Plan

Compliance with the provisions of this DCP does not necessarily guarantee that consent to a Development Application (DA) will be granted. Each DA will be assessed having regard to the LEP, this DCP, and the unique circumstances of the site, other matters listed in Section 79C of the Act and any other policies adopted by the consent authority.

Consistent application of the provisions of this DCP will be given high priority by the consent authority.

The DCP provides objectives and provisions for any development within the Lane Cove Local Government Area. The provisions of the DCP will assist with achieving high quality development that is responsive to the existing and desired future character of the area, best practice urban design and quality community outcomes for all neighbourhoods and centres within Lane Cove LGA.

The DCP is divided into Parts but several parts may apply to the one development. The parts include:

Part B - General controls that will apply to all developments irrespective of use or type

Part C – Residential Development

Part D – Commercial Development & Mixed Use

Part E – Industrial Development

Parts F to Q - Development issues such as acid sulphate soils or signage

Localities

Provisions for special areas, referred to as Localities, are contained within Parts C, D and E and include detailed provisions, and in some cases Block Plans, for those areas. Where detailed provisions are included, they prevail over the other provisions in the DCP.

How controls will be applied

General

Council's assessment of development applications will include some flexibility for numeric controls with an emphasis on achievement of stated objectives.

Block Plans

"Block plan" diagrams are intended to indicate the elements which should together comprise the urban design for the area. As such they are the starting point for consideration of development applications, and potential applicants are encouraged to discuss their needs and concepts in advance of design preparation. Before Council would approve a development, applicants must show a genuine attempt at site amalgamation, in accordance with the block plan. Achievement of stated objectives is the over-riding goal.

Nevertheless Council will assess development applications on a merit-based, flexible basis, taking into account factors including the realistic redevelopment potential/ timeframe of other sites in the vicinity. A priority will be the achievement of the floor space in the LEP, notwithstanding the DCP's provisions and controls.

1.5 Relationship to other documents

This DCP should be read in conjunction with the provisions of the EP & A Act 1979 and the Lane Cove LEP 2009. The provisions within this DCP are in addition to the provisions of the LEP. If there is any inconsistency between this DCP and the LEP, the LEP will prevail.

Relevant instruments applying to the land within Lane Cove Local Government Area can be obtained from a Section 149 Certificate. The onus is on the Applicant to check with Lane Cove Council to ensure they are referring to the latest amendment of this or other plans and to ensure any other strategies, studies or guidelines that may be relevant to their site is considered as part of a Development Application.

1.6 Savings Provisions

If a development application has been made before the commencement of this DCP in relation to land to which this DCP applies and the application has not been finally determined before that commencement, the application must be determined as if this DCP had not commenced.

1.7 Adoption of this DCP

This plan was adopted by Lane Cove Council on 19 October 2009 and came into effect on 22 February 2010. Amendments to the DCP are detailed in Attachment – Amendments.

A.2 Submitting an Application

2.1 General

Council generally encourages Applicants to talk to neighbours before lodging a development application.

2.2 SEPP (Exempt and Complying Development Codes) 2008

As part of its reform program for planning, the NSW Government has prepared the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, known as the Exempt and Complying SEPP. The Exempt and Complying SEPP provides the controls for certain housing and/or development to be approved as exempt or complying development, thereby not needing a development application.

It is the responsibility of the applicant to determine whether their proposal is able to be determined under the Exempt and Complying SEPP or whether it requires a full Development Application through Council. Enquiries to assist applicants to determine which route is appropriate can be made at Council's Customer Service Counter or by reviewing the guidelines and fact sheets provided by the State Government (www.planning.nsw.gov.au).

Proposed developments that do not fall within the criteria of the Exempt and Complying SEPP will be assessed by the Council as Development Applications under this DCP.

2.3 Notification of Development Applications

Lane Cove Council is required to notify Development Applications lodged for development consent under the Environmental Planning and Assessment Act 1979 as well as S96 applications to amend existing approvals.

2.4 Submission requirements and site analysis

Submission Requirements

Submission requirements are contained in Schedule 1 of the EP&A Act Regulations. Checklists for the information required for development applications are available at Council's Customer Service Counter or on the Lane Cove Council website (www.lanecove.nsw.gov.au).

Site Analysis

A site analysis is to be submitted with all development applications.

The aim of the site analysis is to ensure that the site layout and building design is sensitive to its environment. It must identify constraints and opportunities in relation to natural elements. Information required includes, but is not limited to the following:

- a) topography and shape;
- b) existing vegetation;
- c) site drainage and overland flow;
- d) climatic conditions including prevailing winds and solar access;

- e) existing development on the site,
- f) adjoining development;
- g) existing public transport services, pedestrian links and cycling pathways in the vicinity;
- h) restrictions to development such as easements.

For larger development, street elevations should be provided of the site and its adjacent development for a minimum of 2 lots either side of the subject land for dwellings and villas, and 5 lots either side for residential flat buildings and commercial development.

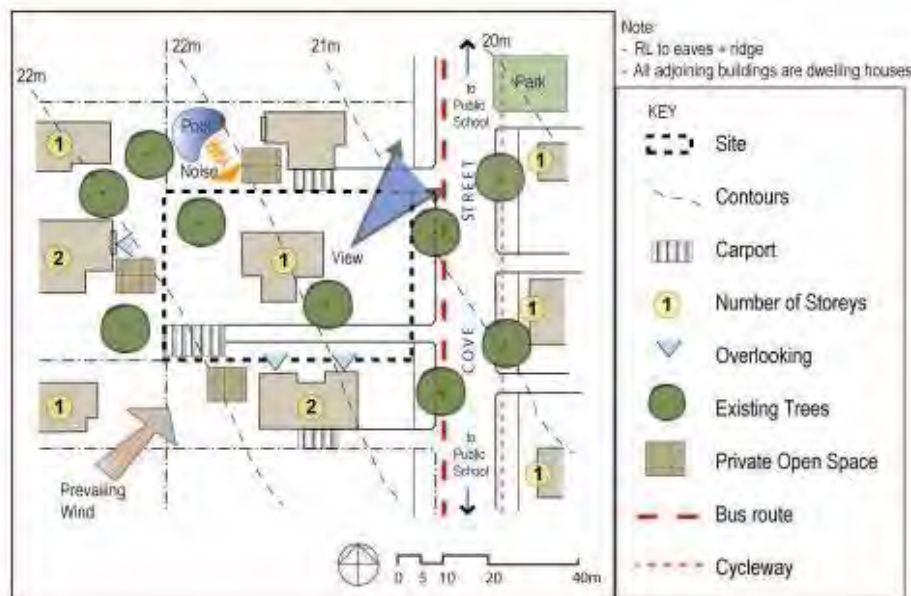


Figure 1 Site analysis

2.5 Pre – DA discussions

Applicants are encouraged to arrange discussions with Council officers prior to lodging an application. Such discussions enable the applicant to address likely issues and opportunities, based on the unique circumstances of their site, with officers prior to finalising the design of the scheme.

The discussions also provide the opportunity for Council officers to inform applicants of additional controls that may not have been considered.

At the Applicant's discretion, either formal or informal Pre-DA meetings can be arranged via Council's Customer Service Counter.

An informal pre-DA meeting would involve Council's Duty Planner and no charge is incurred. A formal pre-DA meeting involves a team of Council officers, the proceedings are minuted (and a copy made available to the applicant) and a fee is charged.

Part B

General Controls



B

- B.1 General Objectives for the DCP
- B.2 Public Domain
- B.3 Site Amalgamation and
Development on Isolated Sites
- B.4 View Sharing
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B.1 General Objectives for the DCP

Lane Cove is characterised by its urban bushland and vibrant community atmosphere. Bushland and parks make up more than 14% of the municipality. These areas are easily accessible to most residents and contribute significantly to the local character. The Lane Cove area is around 10km² and is home to more than 30 000 residents. It is the traditional home of the Cameraygal people, whose Aboriginal heritage sites can be found near the Lane Cove River foreshores. The natural attributes provide tranquillity and a sense of place for the community. Lane Cove is also close to the heart of Sydney, one of the world's busiest cities.

The aims of this plan are to achieve high quality development for all uses and building types throughout the Lane Cove LGA.

1.1 General Objectives

- I. The general objectives of this plan are to:-
 - a) Provide detailed planning provisions supplementing the Lane Cove LEP 2009.
 - b) Support the locality's sustainability in environmental, social and economic terms.
 - c) Conserve, protect and enhance the environmental and built heritage of Lane Cove.
 - d) Contribute to effective management of biodiversity.
 - e) To protect the quality of water catchments, encourage the use of water sensitive urban design and promote the adoption of whole of water cycle management principles.
 - f) Minimise any impacts of transition to higher residential and employment density zones.
 - g) Minimise any impacts of the redevelopment of uses not conforming to the zone they are in, by having regard to the scale and character of the surrounding neighbourhood.
 - h) Balance individual and community interests to preserve and, where appropriate, improve the existing character and amenity of the municipality.
 - i) Enhance the visual quality and functionality of the public and private domain interrelationship.
 - j) Achieve an overall character for neighbourhoods that enhances their sense of identity and place.
 - k) Provide a context for the economic vitality of centres.
 - l) To promote use of public transport, walking and cycling as the main forms of access, particularly within commercial centres.
 - m) Regulate the visual impact of all development within foreshore areas.
 - n) Further the goal of equal access for all residents and visitors.
 - o) Enhance opportunities for cultural experiences throughout the natural and built environment by promoting public art.

B.2 Public Domain

2.1 General

The public domain includes streets and laneways, parks, plazas and malls, as well as areas for café and restaurant seating, entries and foyers to buildings and the interface where buildings meet the street or an adjoining open space. This section should be read in relation to Council properties and to private properties having public access to them or adjacent to the public domain.

The quality of the public domain has an impact on how people relate to their surroundings and how they use the public domain. The public domain allows for freedom of movement, access to a range of services and activities. It provides space to relax in, meet friends, 'hang out', congregate and be entertained in. Above all, it contributes to community identity and sense of place.

Design of the public domain is important - too often buildings relate poorly to the public domain and public spaces are just the left over spaces between buildings. A well designed public domain is one which is accessible to all, encourages a diverse range of activities and users throughout an extended period of the day, and is safe and comfortable for all users. Successful streets and public spaces are the ones we enjoy walking along, shopping at or sitting in.

Objectives

The objectives for public domain are

- a) To provide public space that contributes to the identity and enjoyment of an area.
- b) To provide street furniture, landscaping works, water features, utilities, etc that contribute to the community's enjoyment of the public domain, but does not impede pedestrian movement and safety nor visual quality.
- c) To provide venues for public entertainment and expression of community identity.
- d) To provide areas for public art that contributes to the cultural life and enjoyment of the centre, and allows for community self expression.
- e) To provide pedestrian surfaces that are safe for all users, clearly demarcated and constructed from materials that provide consistency and continuity of streetscape.

Provisions

- a) All design should be in accordance with the relevant Public Domain Strategies that may be in place for precincts within the LGA and requirements of Australian Standards.
- b) Provide seating in public spaces that is not allocated to a specific use (e.g. a café) for people to 'hang out', take refuge and rest.
- c) Position seating or seating areas at the edge of footpaths where through movement is not blocked.
- d) Do not obscure pedestrian eye-level sight lines with landscaping or other street improvements.

- e) Keep public areas free from clutter and unclear level changes, having particular regard for accessibility.
- f) Maintain a high quality of lighting for security and amenity.
- g) Provide formal and informal spaces for public entertainment including multi-functional street furniture, e.g. a flat bench may become an informal plinth for performance artists.
- h) Provide at least one space within major and local centres that is large enough to hold an open air performance, small public gathering or market.
- i) Provide public notice boards and kiosks in locations where people will be gathering.
- j) Integrate artworks into the design of public spaces. Consider artworks that serve a dual role, e.g. as play equipment for children, informal seating or a marker for a meeting place.
- k) Consult with community groups in the design of artworks in public spaces.
- l) Except where negotiated with the Council, provide all footpath paving along property frontages in accordance with Council's specifications including requirements for disabled. The extent, nature and type of paving materials includes tactile surfaces in appropriate locations to assist the visually impaired
- m) Include water features in public spaces, building entrances, foyers, facades and rooftops
- n) Provide roof top gardens where practicable and permissible in commercial buildings and residential flat buildings.
- o) Plant trees where appropriate for shade, shelter and fauna and use native species and planting methods which minimise potable water consumption
- p) Where possible, make provision for bicycle parking spaces.

2.2 Public Domain Projects in St. Leonards

To achieve the desired future character for St Leonards there are a number of key public domain upgrades that are to be achieved through Voluntary Planning Agreements or Section 94 contributions (see Part D: Commercial Development and Mixed Use – Locality 1 – St Leonards and Marshall Avenue). These are:

- a) Upgrades to the Pacific Highway –
 - I. Widen the southern footpath including street trees, new paving, upgraded street lighting.
 - II. Establish additional traffic light crossing points at the junction outside the St. Leonards Station and the new proposed public open space on the south side of Pacific Hwy and to the east of the railway line at the northern end of Lithgow Street.
 - III. Upgrade (with RTA approval) the carriageway of Pacific Highway as a slightly raised zone with different road texture to clearly establish a higher level of pedestrian accessibility.
- b) Creation of a major public urban space–
 - I. Closure of the existing Christie Lane and providing a pedestrian link through the new development

- II. Create the public space by turning the northern part of Lithgow Street into a shared way with high quality pavers
 - III. Provide a new kiosk development adjacent to the existing underpass access that is to incorporate the access as a high quality safe pedestrian link
 - IV. Tier the public space to the south creating a series of terraces for outdoor seating and landscape elements.
 - V. Incorporate a bus layover on the rail bridge section of the public space with new bus shelters.
 - VI. Widen the pedestrian access over the rail bridge to a minimum of 3m clear to link the eastern and western sides of St Leonards.
 - VII. Provide pedestrian access through the public urban space to the new laneway, which is in effect the extension of Nicholson Street, Pacific Highway and the rail underpass.
 - VIII. Provide high quality landscape within the public open space and design it to mitigate the impact of winds from the south.
- c) Creation of a minor public open space –
- I. Enhance the existing open space by increasing its area and creating a higher quality landscape solution.
 - II. This minor public open space is to have larger green landscape areas than the urban square on the eastern side of the rail line.
 - III. Maintain and enhance the existing pedestrian connectivity to Canberra Ave.
- d) Redefinition of Friedlander Place –
- I. Incorporate Friedlander Place within a major development. Such development is to maintain a 24 hour, 7 day a week public access from Pacific Highway to Nicholson Street. This public link shall comply with AS 1428 for disability access and mobility.
 - II. The design of this area is to improve the pedestrian amenity and way finding through this link including the existing car park accesses.
- e) Street upgrades throughout the area.

B.3 Site Amalgamation and Development on Isolated Sites

3.1 General

Objectives

The objectives for site amalgamation and development on isolated sites are:

- a) To provide for a development that achieves the required employment and dwelling yields.
- b) To encourage the promotion and co-ordination of the orderly and economic use and development of land.
- c) To encourage site consolidation of allotments for development in order to promote the desired urban design outcomes and the efficient use of land and to avoid the creation of isolated sites.
- d) To encourage the development of existing isolated sites in a manner that responds to the desired built form pattern, site context and maintains a satisfactory level of amenity.

How controls will be applied

General

Council's assessment of development applications will include some flexibility for numeric controls with an emphasis on achievement of stated objectives.

Block Plans

"Block plan" diagrams have been inserted before exhibition of the DCP for several sections of the document. Council emphasises that these are intended to indicate the elements which should together comprise the urban design for the area. As such they are the starting -point for consideration of development applications and potential applicants are encouraged to discuss their needs and concepts in advance of design preparation. Before Council would approve a development, applicants must show a genuine attempt at site amalgamation, in accordance with the block plan. Achievement of stated objectives is the over-riding goal.

Nevertheless Council will assess development applications on a merit-based, flexible basis, taking into account factors including the realistic redevelopment potential/ timeframe of other sites in the vicinity. A priority will be the achievement of the floor space in the LEP, notwithstanding the DCP's provisions and controls.

Provisions

- a) Development for the purpose of residential flat buildings and high density housing should not result in the isolation of sites such that they cannot be developed in compliance with the relevant planning controls, including Lane Cove LEP 2009 and this DCP.
- b) Where a property is likely to be isolated by a proposed development and that property cannot satisfy the minimum lot requirements then negotiations between the owners of the properties should commence at an early stage and prior to the lodgement of the development application.

- c) Where no satisfactory result is achieved from the negotiations, the development application should include details of the negotiations between the owners of the properties. Council will require appropriate documentary evidence to demonstrate that a genuine and reasonable attempt has been made to purchase an isolated site based on a fair market value. At least one recent independent valuation is to be submitted as part of that evidence and is to account for reasonable expenses likely to be incurred by the owner of the isolated site in the sale of the property.
- d) The level of negotiation and any offers made for the isolated site are matters that can be given weight in the consideration of the development application. The amount of weight will depend on the level of negotiation, whether any offers are deemed reasonable or unreasonable, any relevant planning requirements and the provisions of s 79C of the Environmental Planning and Assessment Act 1979.
- e) Where amalgamation of the isolated site is not feasible, the applicant will be required to demonstrate that an orderly and economic use and development of the separate site can be achieved as part of their Development Application.
- f) If variations to the planning controls would be required, such as non compliance with a minimum allotment size, any assessment of the proposal would include whether both sites would be able to achieve a development of appropriate urban form with an acceptable level of amenity.
- g) To assist in this assessment, an envelope for the isolated site may be prepared which indicates height, setbacks, resultant site coverage (both building and basement). This should be schematic but of sufficient detail to understand the relationship between the subject application and the isolated site and the likely impacts the developments will have on each other, particularly solar access and privacy impacts for residential development and the traffic impacts of separate driveways if the development is on a main road.
- h) The subject application may need to be amended, such as by a further setback than the minimum in the planning controls, or the development potential of both sites reduced to enable reasonable development of the isolated site to occur while maintaining the amenity of both developments.

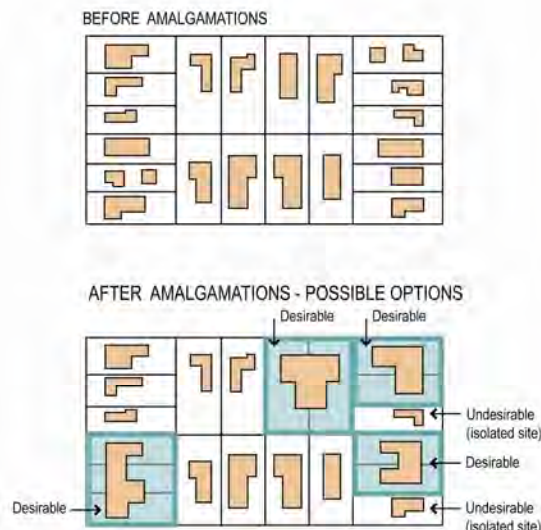


Diagram No. 1 – Isolation of sites (residential example)

- i) The development of existing isolated sites is not to detract from the character of the streetscape and is to achieve a satisfactory level of amenity including solar access, visual and acoustic privacy.

- j) Development of existing isolated sites may not achieve the maximum potential density, particularly height and floor space ratio, and will be assessed on merit.
- k) Where adjacent sites are developing concurrently, site planning options for development as an amalgamated site are to be explored.
- l) Development proposals should be accompanied by a subdivision plan which achieves a consolidation of allotments.

B.4 View Sharing

Lane Cove Local Government Area is located over a number of peninsular areas including Greenwich, Linley Point, Longueville, Northwood and Riverview. The topography and natural landforms here offer spectacular public and private views to the Lane Cove and Parramatta River and the southern foreshore of the river as well as across numerous smaller bays and inlets. The areas of Lane Cove and St Leonards whilst not benefiting from the water, foreshore and city views, do have leafy district vistas to enjoy.

Views and vistas to these natural elements are enjoyed from public places including the foreshore reserves, parks and along the streets within the area. Buildings often contain or reinforce these views along the streets or as retain views as glimpses between buildings along side boundaries.

Public domain views are considered of higher value to the area than private views. Where view glimpses are available along side boundaries then these views are to be retained through the use of side setbacks and appropriate placement of the building and garages.

The sharing of all views is part of the character of the Lane Cove area and should be maintained where possible subject to how the view is obtained and whether the maintenance of such a view creates an unreasonable impost on adjoining land owners.

Views that are gained across other privately owned land are not “as of right”, as some may depend on the property that is overlooked maintaining a lower scale that is achievable under the LEP or may become obscured over time due to the growth of landscape within private gardens.

Objectives

The objectives for view sharing are:

- a) To ensure that public view corridors between buildings or along streets are retained and enhanced from streets or public spaces.
- b) To minimise the impact of new development on existing public and private views and vistas.
- c) To preserve or fairly share water views for foreshore residents.

Provisions

- a) Where existing views from public spaces are through the gaps between side setbacks of buildings, the length of the building and roof of any proposal should be oriented towards the view in order to minimise view obstruction. Refer Diagram No. 2.
- b) Existing or potential view corridors to the water from the street are to be protected as public view corridors by ensuring that fencing to the front boundary is open in character.
- c) Garages and outbuildings are not to be located within the view corridor and the required side setback is to be clear of all built form obstructions. Lightweight carport structures may be considered in side setbacks.

- d) Buildings on steeply sloping sites should adjust the height of the building envelope to follow the natural topography of the site
- e) To facilitate view sharing for residential developments, flat roofs or low mono-pitched roofs can be used where the design of the building and roof is integrated architecturally and where its appearance would be appropriate given the character of the street.
- f) Applicants may not be able to achieve the maximum permissible height in order to cater and facilitate view sharing. In such cases, concessions shall be given for side and rear setbacks subject to meeting the requirements for privacy, amenity and solar access to the adjoining neighbours. These concessions should be discussed with the Council Officers prior to the lodgement of Development Application.

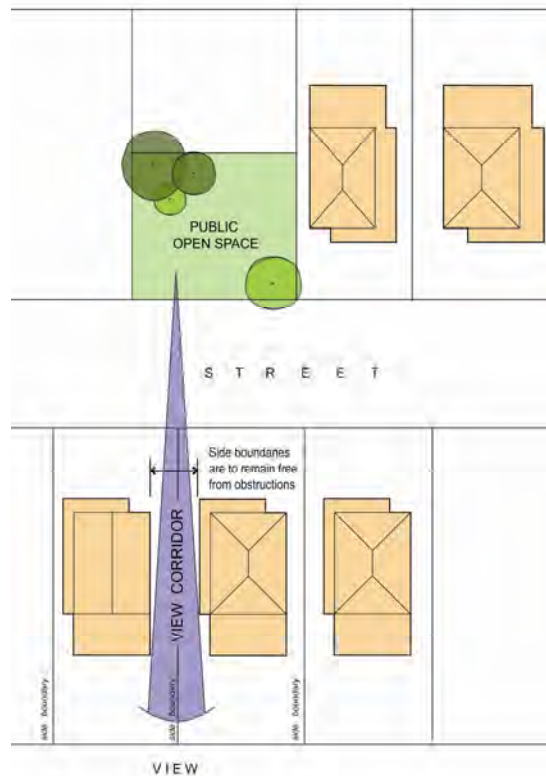


Diagram No. 2 – Capturing and sharing views

- g) Views from commercial development will not carry the same weight as views from dwellings.
- h) Development is not to unreasonably affect existing water views from living areas of adjoining dwellings. Views from bedrooms are not considered to have the same significance unless they are the only available views within the dwelling.
- i) In such cases the maintenance of the view will be tested against its reasonableness i.e. how the view is obtained and where the view is gained. For instance views that are gained by leaning out a side boundary window and looking obliquely across a number of lots will not be given weight against a view from the main living area window.
- j) Views will also be tested against the extent of view available. Where appropriate the views will also be tested against the view sharing principles stated by the Land and Environment Court.

B.5 Development in Foreshore Areas

5.1 Area of Application

This part applies only to structures or proposed structures located within 30m of the mean high water mark of Sydney Harbour, or the Lane Cove or Parramatta Rivers.

Objectives

The objective for development in foreshore areas is to:

- a) Maintain or enhance existing residential amenity and visual character of foreshore residential development by:-
 - i. Minimising the impact and prominence of foreshore development when viewed from the Lane Cove and Parramatta Rivers.
 - ii. Ensuring that the architecture of development that is highly visible from the rivers is not visually prominent, in character with the locality and minimises its bulk and scale.

Provisions

5.1.1 Building Design and Style

- a) Development within these areas should be of a design and use colours and materials that blend with existing foreshore vegetation.
- b) Applications proposing structures which are considered to be unreasonably prominent, have materials which contrast with existing landscape colours, have large extents of highly dominant colours, will not be approved.
- c) Development visible within these foreshore areas should be highly articulated where visible and should vary the alignment of the visible facade and roof line to minimise the overall bulk and scale of the development.
- d) Development is to be mitigated by extensive landscaping within private open space areas that creates a visual break between building massing to avoid the impression of continuous development cascading down the land slope to the water.

5.1.2 Building Height

- a) A maximum of 2 storeys plus basement is permissible at any point above ground level (existing). No building will be permitted to have an appearance (in elevation) exceeding three storeys in height.
- b) The maximum height to the underside of undercroft areas above ground level (existing) is to be 1.0m. Refer to controls relating to cut and fill for additional requirements.

5.1.3 Foreshore Setback Line

The Foreshore Setback Line will be established according to the following two tests:-

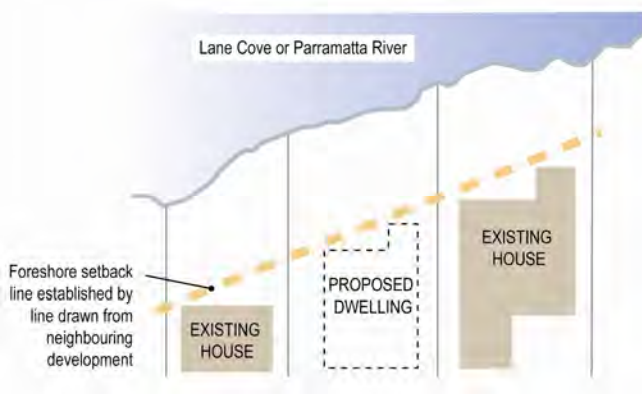


Diagram 3 – Test 1: Foreshore setback line with two neighbouring dwelling

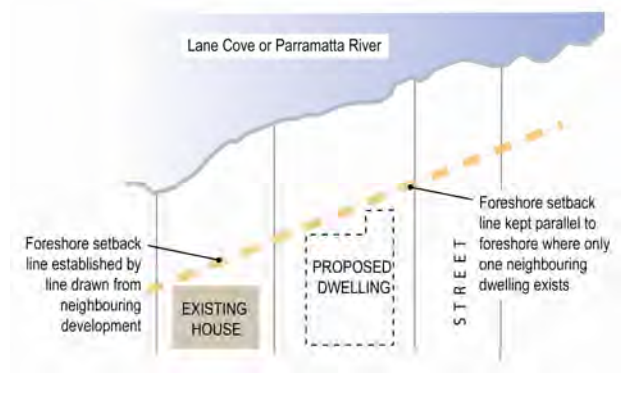


Diagram 4 – Test 1: Foreshore setback line with only one neighbourhood dwelling

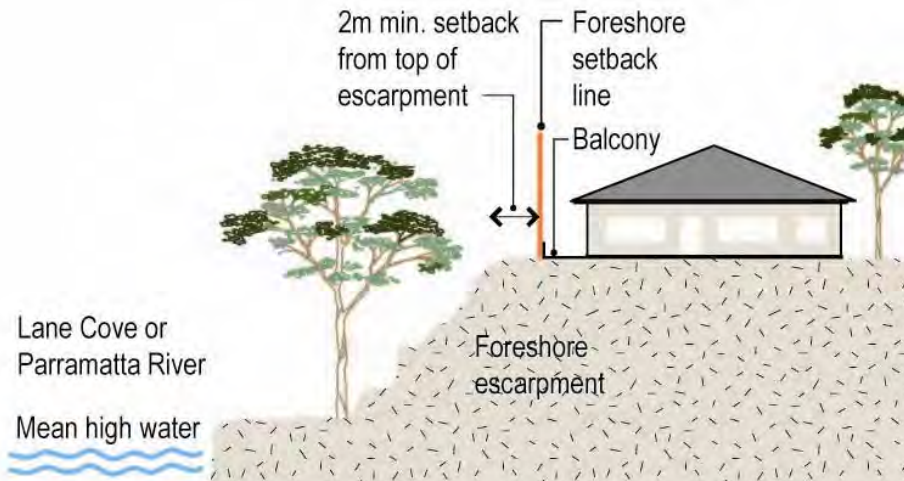


Diagram 5 – Test 2: Foreshore setback line - Foreshore escarpment

5.1.4 Building Design and Style within the Foreshore Setback Line

- a) A proposed dwelling will not be approved between the River and the Foreshore Setback Line.
- b) Structures such as swimming pools, stairs & landings, decks and boathouses may be acceptable within the Foreshore Setback Line subject to the:
 - i. design of the structure being in character with the locality;
 - ii. height of the structure (excluding boathouses which are to be single storey) being as close as practicable to the ground level (existing) and large unsightly undercroft areas are not created.
 - iii. use of colours and materials which blend with existing foreshore vegetation and landscape elements, and
 - iv. minimisation of visual clutter.

B.6 Environmental Management

6.1 Sunlight to Public Spaces

Sun access especially during lunchtime hours is desirable in all public spaces. Therefore overshadowing of major public or urban space should be avoided during the lunchtime period in commercial and retail centres throughout the Lane Cove LGA.

Objectives

The objectives for sunlight to public spaces are:

- a) To create public spaces with high amenity that encourages visitors to linger.
- b) To ensure that there is adequate sun access to publicly accessible spaces during winter at times of the day when the space is likely to have its highest use by visitors and residents.
- c) To provide sufficient sunlight access for the growth of mature landscaping.

Provisions

- a) New development must allow for a minimum of 2 hours of solar access to at least 50% of new and existing public open areas or plazas between the hours of 11am and 2pm on 21st June.
- b) The location of the sunlight during these hours for urban plazas is to be adjacent to building frontages to allow for outdoor seating during the lunchtime period.

6.2 Wind standards for St Leonards

Windy conditions can cause discomfort and danger to pedestrians, and downdrafts from buildings can inhibit the growth of street trees. Moderate wind movement however can enhance pedestrian comfort and assist with the dispersal of vehicle emissions and air-conditioning plant exhausts on busy roadways such as the Pacific Highway.

Analysis of wind conditions throughout major centres within Sydney indicates that downdrafts and wind tunnels in streets and public spaces can be avoided by setting towers back from lower podium structures at the street frontage, providing awnings and canopies sufficient to mitigate against strong wind downdrafts and by ensuring tower buildings are well spaced apart from each other to encourage breeze penetration to street level. The shape, location and height of buildings are to be designed to satisfy wind criteria for public safety and comfort at ground level.

Objectives

The objectives for wind standards are:

- a) To ensure that new developments satisfy nominated wind standards and maintain comfortable conditions for pedestrians.
- b) To ensure that the moderate breezes are able to penetrate the streets of the St Leonards centres.

Provisions

To ensure public safety and comfort the following maximum wind criteria are to be met by new buildings in St Leonards Centre:

- a) 13 metres/second along major streets and public places and 16 metres/second in all other streets.
- b) Design buildings to minimise the adverse wind effects on recreation facilities on podium terraces within developments.
- c) A Wind Effects Report is to be submitted with the DA for all buildings within the St Leonards precinct taller than 40m above street level.

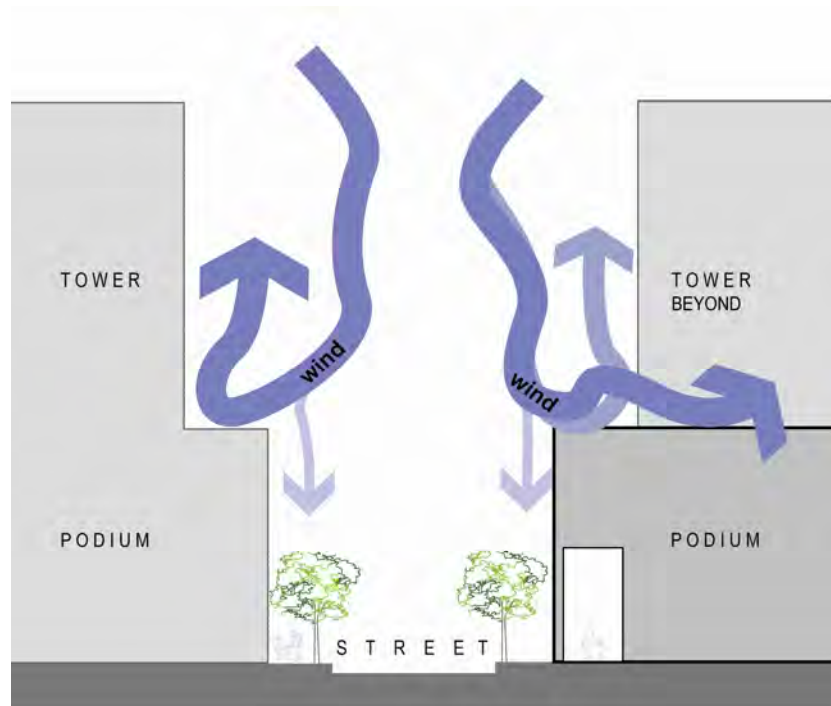


Diagram No.6 - Towers setback from podium to avoid wind tunnels and downdrafts

6.3 Energy and Water Efficiency for Buildings

Lane Cove Council is committed to achieving ecologically sustainable development. Sustainable development is development that uses, conserves and enhances the community's resources so that ecological processes are maintained and the total quality of life now and in the future is increased and balanced between the needs of mankind and other life sources.

Sustainability is about decision-making and strategic planning by Council and the community to integrate a balance of economic, environmental and social needs. One of the key principles to achieving sustainable development is ensuring that the present generation should ensure the health, diversity and productivity of the environment is maintained and enhanced for future generations and that in doing so biological diversity and ecological integrity is conserved. All development within the Lane Cove Local Government Area is required to demonstrate its sustainability whether for alterations and additions or for new development. There are a number of State Government standards that must be satisfied as part of any Development Application. Where such standards do not apply then the requirements within this section must be met.

Objectives

The objectives of this section are to:

- a) Consider a balance of economic, environmental, cultural and social elements to enhance the quality of life in Lane Cove.
- b) Ensure that developments are water and energy efficient.
- c) Reduce the quantity of urban stormwater run off.
- d) Ensure reasonable daylight and passive solar access to all development and provide adequate ambient lighting and minimise the need for artificial lighting during daylight hours.
- e) Provide building users with the ability to adjust the quantity of daylight to suit their needs.
- f) Minimise the use of mechanical ventilation particularly air conditioning and maximize the opportunities for natural ventilation including cross ventilation for residential uses.
- g) Minimise fossil fuel use and greenhouse gas emissions through the promotion of energy efficiency in the design of building envelopes and internal layouts, construction and use of buildings.
- h) Ensure that materials are sourced from renewable sources and are capable of recycling wherever possible.

Provisions:

All development:

- a) Incorporate passive solar design techniques to optimise heat storage within the building in winter and heat transfer in summer.
- b) Improve the control of mechanical heating and cooling by designing systems to allow individual control of different rooms, zones or tenancies combined with the ability to open windows and facades for natural ventilation when the climatic conditions allow.
- c) Orientation of building and facade design of all developments should capture and manage solar access, natural ventilation and breezes into the building.
- d) Provide external sun shading - vertical shading for east and west windows and horizontal sun shading for north facing windows.
- e) Use high performance glass with minimal glare impacts where possible
- f) The use of light wells as the primary source of daylight is prohibited for habitable rooms. Where they are proposed for other rooms or spaces they are to have a minimum dimension of at least 6m by 12m.
- g) All developments are to capture and reuse rainwater for irrigation of landscape areas and for apartments, townhouses, villas and mixed use or commercial development also for toilet flushing and washing machines.

Commercial and mixed use development (commercial component):

- h) The design of any new mixed use (commercial component) or commercial building including the base building, its services and fit outs must be capable of achieving a minimum 5 star rating under the National Australian Built Environment Rating System (NABERS) Building Greenhouse Rating Scheme.
- i) In this regard, the following information is required to be lodged with the certifying authority (Council or NABERS Accredited Assessor) prior to the issue of a Construction Certificate:
 - I. Provide evidence that a Commitment Agreement has been entered into with NABERS, to deliver this star rating for the base building (services traditionally

supplied as 'common' to tenants, such as air conditioning, lifts and common area lighting) or for the whole building where the applicant is to occupy the building. Applicants should contact NABERS to obtain the current version of this document or call the Department of the Environment, Climate Change, Energy and Water (DECCW), the NABERS National Administrator for further information and to discuss the Commitment Agreement process further.

- II. Applicants will design and construct the premises at the NABERS Energy Level nominated in the Commitment Agreement and Notify the DECCEW when premises have reached full operation.
- III. Applicants will provide all data as requested by the NABERS Accredited Assessor so that the Performance Rating can be completed within the time required.

B.7 Developments near Busy Roads and Rail Corridors

Major roads and rail operations generate noise and vibration, and people living and working near major transport corridors can be adversely affected. In addition, major roads can impact on air quality due to the volume of traffic they carry.

The Infrastructure SEPP commenced on 1 January 2008 to facilitate the effective delivery of infrastructure across the State. More specifically, the Infrastructure SEPP refers to guidelines which must be taken into account where development is proposed in, or adjacent to, specific roads and railway corridors.

The guidelines assists in the planning, design and assessment of development in, or adjacent to, rail corridors and busy roads.

Busy road: defined as

Roads specified in Clause 102 of the Infrastructure SEPP: a freeway, tollway or a transitway or any other road with an average annual traffic (AADT) volume of more than 40,000 vehicles (based on the traffic volume data provided on the website of the RTA).

Any other road – with an average annual daily traffic (AADT) volume of more than 20,000 vehicles (based on the traffic volume data published on the website of the RTA)

Any other road – with a high level of truck movements or bus traffic.

Rail corridor: as defined by clause 78 of the Infrastructure SEPP.

Land that is owned, leased managed or controlled by a public authority for the purpose of a railway or rail infrastructure facilities, or

Land that is zoned under an environmental planning instrument predominantly or solely for the development for purpose of a railway or rail infrastructure facilities, or

Land in respect of which the Minister has granted approval under Part 3A or (before its repeal) Division 4 of Part 5 of the Act for the carrying out of development (or for a concept plan for a project comprising or including development) for the purpose of a railway or rail infrastructure facilities.

Objectives

The objectives of this section are:

- a) To ensure an appropriate acoustic amenity can be achieved for development near transport corridors, particularly residential development and other noise sensitive land uses.
- b) To provide additional acoustic design or mitigation measures that may be necessary.

Provisions

- a) Acoustic assessments for noise sensitive developments as defined in clauses 87 and 102 of the Infrastructure SEPP may be required if located in the vicinity of a rail corridor or busy roads.

- b) For residential and the residential part of any mixed use development, appropriate measures must be taken to ensure that the following LAeq levels are not exceeded:
 - I. in any bedroom in the building : 35dB(A) at any time 10pm–7am
 - II. anywhere else in the building (other than a garage, kitchen, bathroom or hallway): 40dB(A) at any time.
- c) Increase the separation between the road/rail noise sources and the noise sensitive area. As an indication, doubling the distance from the noise source to the receiver will normally reduce the noise levels by between 3dBA and 6dBA.
- d) Sleeping areas and other habitable areas should be placed on the side of the building furthest from the source of noise (road or rail line). Conversely rooms which are less sensitive (laundries, bathrooms, storage rooms, corridors, stairwells, etc.) should be placed on the noisy side of the building to act as a noise buffer. An additional way of minimising the intrusion of noise is to minimise the number of doors and openable windows on the noisy side of the dwelling.
- e) Staggered townhouses, for example, can be arranged to shield most windows from traffic noise whilst allowing them to be opened for natural ventilation
- f) Provide noise barriers through -
 - I. An existing feature, such as a natural slope or an elevated road
 - II. A purpose designed feature such as a well designed solid boundary fence
 - III. A purpose designed feature of the building, such as a partially enclosed carport
 - IV. A purpose designed building which acts as a barrier block.

B.8 Safety and Security

A safe and secure environment encourages activity, vitality and viability, enabling a greater level of security. Planning and design can identify and address safety and security issues through the use of environmental and technical measures.

Objectives

The objectives of safety and security are to:

- a) Address safety, security and crime prevention requirements in the planning and design of development.
- b) Reduce opportunities for crime through environmental design and the provision of natural and technical surveillance opportunities.
- c) Control access through the provision of physical or implied barriers which can be used to attract, channel or restrict the movement of people.
- d) Implement territorial reinforcement by encouraging community ownership of public space.
- e) Promote space management by ensuring that public open space is effectively utilised and maintained.

Provisions

- a) Ensure that the building design allows for casual surveillance of access ways, entries and driveways.
- b) Avoid creating blind corners and dark alcoves that provide concealment opportunities in entry areas, pathways, stairwells, hallways and car parks.
- c) Provide a clear line of sight between one public or communal circulation space and the next.
- d) Provide entrances which are in visually prominent positions and which are easily identifiable, with visible numbering.
- e) Provide adequate lighting of all pedestrian access ways, parking areas and building entries. Such lighting should be on a timer or movement detector to reduce energy consumption and glare nuisance.
- f) Provide clear lines of sight and well-lit routes throughout the development.
- g) For large scale retail, commercial, motel and Senior's Living development with a GFA of over 5,000m², provide a 'Safer by Design' assessment in accordance with the Crime Prevention Through Environmental Design (CPTED) principles from a qualified consultant.
- h) A formal crime risk assessment is to be carried out and provided as part of any development application for development of more than 20 new dwellings.
- i) Provide security access controls where appropriate.
- j) Public pedestrian areas within developments as well as communal access ways within multi-unit developments are to provide non-slip pavement surfaces.
- k) High density residential and mixed use development buildings should contain multiple stairs/ lift cores which limit the number of dwellings with access from the circulation core.

8.1 Activation

8.1.1 General

- a) Development is to be well connected to the street and contribute to the accessibility of the public domain
- b) Minimise the impact of services and vehicle access on the street character, activation and amenity of the street and public spaces by:
 - I. Limiting the extent of blank walls and service doors to the street where possible particularly for major residential and mixed use or commercial development
 - II. Limiting the number of vehicle access points by combining service and vehicle access points wherever possible for larger developments
 - III. Considering opportunities for shared vehicle access for multiple developments where possible
 - IV. Locating vehicle and service access points in secondary streets and laneways where available.
 - V. Improving the appearance of car parking and service entries
- c) Integrate artworks into the design of private development, in publicly accessible locations such as main entrances, lobbies, street frontages, gardens, walls and rooftops.
- d) All development is to face the street and/or public open spaces and provide uses at ground level that provide activity.

8.1.2 Residential development

- a) All ground floor apartments, villas, townhouses and attached or detached dwellings that have a street frontage other than battle axe blocks are to have direct access or entries from the street and at least one habitable room with windows facing the street.
- b) Dwellings on corner lots are to address and provide attractive facades to both streets.
- c) A dedicated pathway and gate is to be provided for each dwelling separate to any driveways and in the case of apartments also separate from the main entry to the overall development or building.
- d) Ground floor uses in mixed use or commercial buildings outside centres subject to the zoning are to be:
 - I. Live/work uses
 - II. Commercial suites and/or
 - III. Residential apartments
- e) Ground floor uses for mixed use or commercial uses within centres are to be:
 - I. Retail uses to all major retail streets
 - II. Commercial uses to secondary streets
 - III. Live/work uses or residential uses only where the street is not a major retail or secondary street within the centre.
- f) All ground floor uses are to have direct access from the street.
- g) All ground floor uses are to continue the street level into the building with any grade changes accommodated within the building.

8.2 Passive Surveillance

- a) All development at ground level is to offer passive surveillance for safety and security of residents and visitors.
- b) All development is to contribute to the safety of any public domain areas.
- c) Development is to optimise the visibility, functionality and safety of building entrances.
- d) Development is to improve at least some these opportunities for casual surveillance by:
 - I. For mixed use commercial or retail development - orienting active areas within tenancies to provide direct outlook (without blinds) to streets and other public areas.
 - II. For residential semi and detached dwellings - orienting habitable areas to provide direct outlook to the streets and other public areas.
 - III. Using bay windows and balconies to protrude beyond the main facade of the building to enable a wider angle of view to the street
 - IV. Using corner windows which provide oblique views to the street or open space
 - V. Providing casual views of common internal semi public areas such as lobbies, foyers, hallways, recreation areas for mixed use commercial developments.
- e) Minimise opportunities for concealment in all development.
- f) Control access to residential flats, commercial and mixed use development by:
 - I. Making adjoining uses, apartments or tenancies inaccessible from the balconies, roofs and windows of neighbouring buildings or dwellings
 - II. Separating and controlling the residential car parking component of developments from any other building use and from public and common areas
 - III. Providing direct access from car parks to apartment lobbies for residents
 - IV. Providing direct access from car parks to each floor of the development for all uses
 - V. Providing separate access for residents in mixed use buildings
 - VI. Providing an audio or video system at the entry or in the lobby for visitors to communicate with residents or tenants
 - VII. Providing keyed car parking access for residents

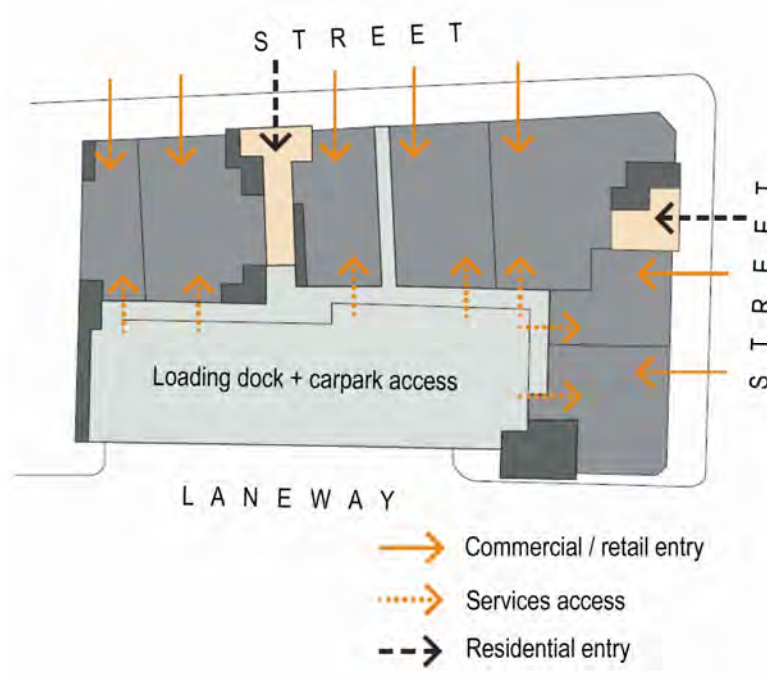


Diagram 7 - Building Address and Access

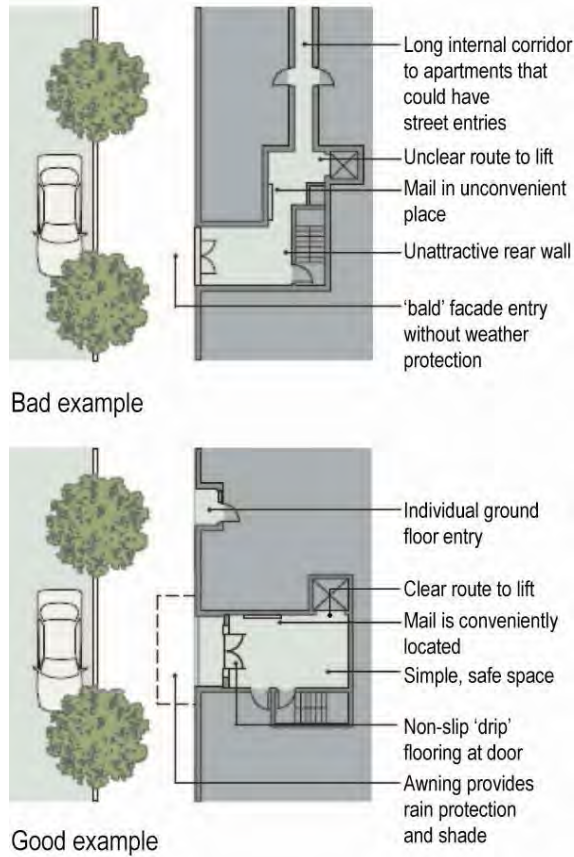


Diagram 8 Controlled Access – good and bad examples

B.9 Heritage

9.1 Heritage Items and the Conservation Area

- a) Ensure that new additions to heritage buildings are appropriate to the scale of the heritage item.
- b) Any alterations or additions to heritage buildings should be clearly discernible from the heritage fabric.
- c) Final occupancy of development associated with the heritage item should not be issued unless all works to the heritage item are also completed.
- d) Photographic records of all heritage listed items to be demolished or to be changed is to be undertaken prior to release of the construction certificate.
- e) A Heritage Impact Statement is to be prepared as part of any DA for a Heritage item or a site in the Greenwich Heritage Conservation Area..
- f) Development involving a heritage item may be required to be in accordance with an up-to-date Conservation Management Plan and/or Specific Element Conservation Policy (SECP).
- g) An archaeological assessment may be required by Council prior to excavation works on non-residential sites.

9.2 Adaptive reuse of heritage items

- a) A conservation architect is to be part of the design team for any Development Application (DA) for the adaptive re-use, additions and/or alterations to a heritage item.
- b) Adaptation of building interiors is to aim at maximum retention of original significant spaces and fabric while allowing for the adaptation to new uses.

9.3 Development in the vicinity of heritage items

- a) A Heritage Impact Statement is to be prepared as part of any DA for development “in the vicinity of a heritage item”.
- b) “In the vicinity of a heritage item” is to be interpreted as meaning “adjacent to or adjoining” that item.

Part C

Residential Development



- C.1 Dwelling Houses and Dual Occupancies
- C.2 Attached Dwellings and Multi-Dwelling Housing
- C.3 Residential Flat Buildings
- C.4 Residential Subdivision
- C.5 Boarding Houses

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C.1 Dwelling Houses and Dual Occupancies

1.1 Objectives for Dwelling Houses and Dual Occupancies

Objectives

The objectives for dwelling houses and dual occupancies are to:

- 1 Provide dwellings in landscaped lots.
- 2 Ensure new dwellings and alterations & additions to existing dwellings are well designed and compatible with the surrounding context and enhance the streetscape within the area.
- 3 Achieve a reasonable level of amenity for both development sites and neighbouring dwellings.

1.2 Streetscape

Objectives

The objectives for streetscape are to:

- 1 Achieve development of a scale and appearance which is in keeping with the predominant traditional or emerging street and neighbourhood character.
- 2 Ensure the existing landscape character of the area is maintained and enhanced.
- 3 Ensure the existing topography of the site is reinforced by dwelling design.
- 4 Ensure that dwellings provide passive surveillance, resident interaction and address the street or adjacent public open space.
- 5 Ensure that garages, carports and driveways do not dominate the dwelling or streetscape.
- 6 Ensure that satellite dishes do not visually detrimentally affect the streetscape.

Provisions

- a) Developments on sites with two or more frontages should address both frontages to promote interaction and add diversity to the streetscape.
- b) All housing is to address the street and offer passive surveillance to the street..
- c) Attached Dual Occupancies should not have a symmetrical appearance when viewed from the street and are to be designed as one building structure, both physically and in appearance.

1.3 Setbacks

Objectives

The objectives of setbacks are to:

- 7 Maintain the predominant street setback.
- 8 To enhance and maintain vegetation corridors through landscaping within front and rear gardens and side boundaries.
- 9 Side and rear setbacks are to provide building separation, sunlight, landscaping, ventilation, public views (if appropriate) for the dwelling and its neighbours.

Provisions

1.3.1 Front setbacks

- a) The front setback of the building shall be consistent with the prevailing setback along the street (refer Diagram No.1). Where there is no predominant setback within the street, the setback should be a minimum of 7.5m. Irregular sites may be considered on their merits.
- b) The secondary street setback for corner allotments is to be a minimum of 2.0m (refer Diagram No.1).
- c) The front setback is to be free of structures such as swimming pools and ancillary elements such as rainwater tanks and air conditioning units. In certain circumstances carports and garages may be permitted in the front setback (see Section 1.9 Car Parking).
- d) In general, no part of a building or above ground structure may encroach into a setback zone. Exceptions are awnings, balconies, blade walls, bay windows and other articulation elements up to a maximum of 500mm.

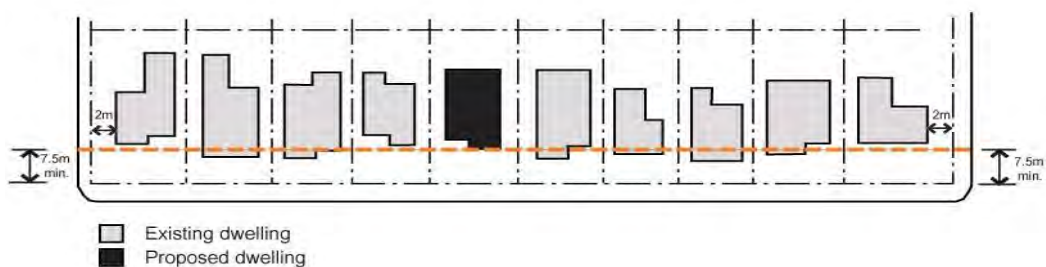


Diagram No. 1 – Predominant street setback

1.3.2 Side setbacks

- a) Side setbacks are to be a minimum of:
 - I. 1.2m for a single storey dwelling
 - II. 1.5m for a two storey dwelling.
 Irregular sites may be considered on their merits.

- b) First floor additions are to meet the above setback requirements. Where it can be demonstrated that there are no unreasonable amenity impacts, additions can maintain the existing setback of the floor below.
- c) A lesser setback may be considered for open carports, detached garages, steps and landings no more than 300mm above ground level (finished), where it can be demonstrated that there will be no unreasonable amenity impacts.

1.3.3 Setbacks in a detached dual occupancy

- a) The setback between dwellings in a detached dual occupancy is to be a minimum of 7m, with the exception of wide blocks, where both dwellings are placed side-by-side and face the same street, dwellings are to have 3m between them.

1.3.4 Rear setbacks

- a) A minimum rear setback for dwelling houses of 8m or 25% of the site depth (whichever is greater) is to be provided for sites up to 1000m² (refer to Diagram 2). The existing predominant rear setback and site constraints, especially for irregular sites, may be taken into account.
- b) A minimum rear setback for dwelling houses of 10m or 35% of the site depth (whichever is greater) is to be provided for sites more than 1000m² (refer to Diagram 2). The existing predominant rear setback and site constraints, especially for irregular sites, may be taken into account.

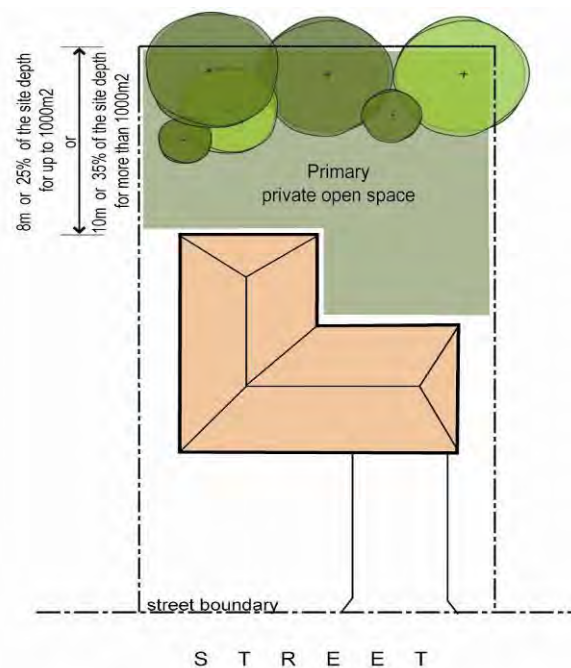


Diagram No. 2 - Rear setbacks

- c) A minimum rear setback of 6m for dual occupancies.
- d) Outbuildings, garages, carports, swimming pools, spas, decks and terraces may be located within the rear setback area.
- e) If a site adjoins bushland a greater setback may be required, see Part H - Bushland Protection.

1.4 Fences

Objectives

The objectives for fences are to:

- 1 Contribute positively to the streetscape character and design of the dwelling house.
- 2 Provide privacy and security to its residents.
- 3 Preserve public views across a property, where available, by utilising open style fencing.

Provisions

1.4.1 Front fences

Solid fences

- a) permitted up to 900mm above ground level (existing) on the front boundary.

Part solid and predominantly see through fences

- b) permitted up to 1200mm above ground level (existing) on the front boundary.
- c) permitted up to 1800mm above ground level (existing) setback at least 1m from the front boundary with the solid portion no higher than 600mm.
- d) for the see through portion, the width of the spacing between palings must be at least the same as the width of the palings.

On major roads

- e) major roads include the Pacific Hwy, Longueville Rd from Pacific Hwy to Epping Rd, Epping Rd, Burns Bay Rd south of Centennial Ave, Centennial Ave from Burns Bay Rd to Epping Rd and up to Mowbray Rd, The River Rd system (includes Penrose St east of Burns Bay Rd, Bridge St from River Rd west to Penrose St, River Rd West, Northwood Rd from River Rd West to River Rd East, River Rd East), Mowbray Rd and Greenwich Rd north of River Rd.
- f) a solid front fence to these major roads may be a maximum of 1.8m above ground level (existing). For acoustic reasons Council may consider a height up to 2m, and such fences may be of solid masonry construction for acoustic reasons.

Materials/retaining walls/overland flow

- g) front and side return fence material is to be to Council's satisfaction and is not to be lapped & capped timber or powder coated metal ("Colorbond") fencing.
- h) If required, retaining walls are to be integrated into the design of the fence.
- i) in areas of overland flow, fencing is to be of open construction and permit water flow.

Splays

- j) Splays may be required in accordance with AS 2890.1 for fences over 900mm, on major roads, corner allotments, where garages are in proximity to the front fence and on bicycle routes (see Lane Cove Bicycle Plan).

1.4.2 Side and rear fences

- Side fences behind the building line are to be a maximum of 1.8m in height above ground level.
- For corner allotments, the side return fences for the secondary street frontage is to match the height of the front fence back to the front building line.
- Powder coated metal (“Colorbond”) fences are not permitted on corner blocks.

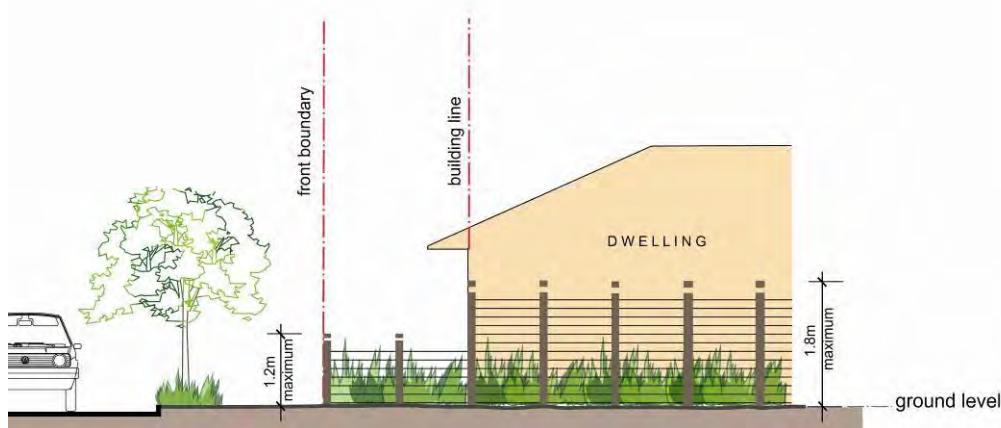


Diagram No.3- Front/side fence relationship

1.4.3 Fences on sites adjoining bushland

- Fences on sites adjoining a bushland reserve are to be constructed of cyclone wire, steel posts or the like, so as not to impact upon the continuity of the bushland into the residential allotment.
- Fencing colour is to blend with the adjoining bushland. A white fence is prohibited.

1.5 Landscaped Area

Objectives

The objectives for landscaped area are:

- To provide privacy and amenity.
- To retain and provide for significant vegetation, particularly large and medium sized trees and to provide continuous vegetation corridors.
- To conserve significant natural features of the site.
- To assist with on-site stormwater management.

Provisions

- A minimum of 35% of the site is to be landscaped area. A minimum width of 1m is required for inclusion as landscaped area.

- b) Proposals should seek to retain significant natural features on the site including mature trees, rocky outcrops and other major vegetation stands (including continuous vegetation corridors to the rear) by careful design of the dwelling and other structures.
- c) The landscaped area should be effectively distributed on the site to minimise the dominance of buildings, structures and paving when viewed from the street, public places and surrounding properties.
- d) Landscape plans for dual occupancies are to show any vegetation being replaced, and screening for privacy and visual amenity.
- e) Landscaping at front boundaries shared with bicycle routes should be less than 900mm in height and should not impede pedestrian and bicycle routes or reduce visibility to these pathways.



Diagram No. 4 – Continuous vegetation corridor at rear of properties

1.6 Cut and Fill

Objectives

The objectives for cut and fill in low density residential developments are to:

- 1 Retain the natural ground levels as much as possible of a site and its existing landforms particularly in relation to the street or adjacent private open space areas.
- 2 To achieve reasonable landscaping within development.
- 3 To minimise the extent of cut and fill and its impact along side boundaries.
- 4 To create a consistent relationship between the dwelling and the street.
- 5 To ensure that excavation and filling of a site does not result in unreasonable amenity impacts to adjoining dwellings.
- 6 To minimise change to water run-off patterns.

Provisions

- a) All dwellings are to relate to the existing topography of the land at the time of the adoption of this DCP.
- b) The area of the site contained within the building footprint can be excavated or filled only where it is necessary to reasonably construct a dwelling on steeply sloping sites.
- c) All dwellings are to adopt a split level approach to the design of the house to minimise excavation and fill and to achieve a design response that relates to the sloping topography of the site.
- d) Development is limited to a maximum depth of excavation or fill of 1m at any point on the site unless it is demonstrated that the site's slope is too steep to reasonably construct a 2 storey dwelling with this extent of excavation.
- e) In such circumstances, Council may consider increasing the depth of excavation between the underside of the lowest floor to any point on the site where:
 - I. large exposed undercroft areas are not created
 - II. the excavation does not create adverse impacts on the stability or amenity of adjoining properties or the public domain.
- f) Excavation or fill is not to result in the loss of any significant mature trees within the side, front or rear boundary setbacks.

1.7 Building Design

Objectives

The objectives are to:

- 1 Ensure new dwellings and alterations and additions to existing dwellings reinforce the typical bulk and scale of existing dwellings within the street and the area.
- 2 Ensure that alterations and additions to existing dwellings maintain the integrity of the design and style of the existing building.
- 3 Ensure elevations to the street and public domain are well proportioned and designed.
- 4 Minimise impact in terms of overshadowing, loss of privacy, light spillage to adjoining properties, loss of views and amenity.

Provisions

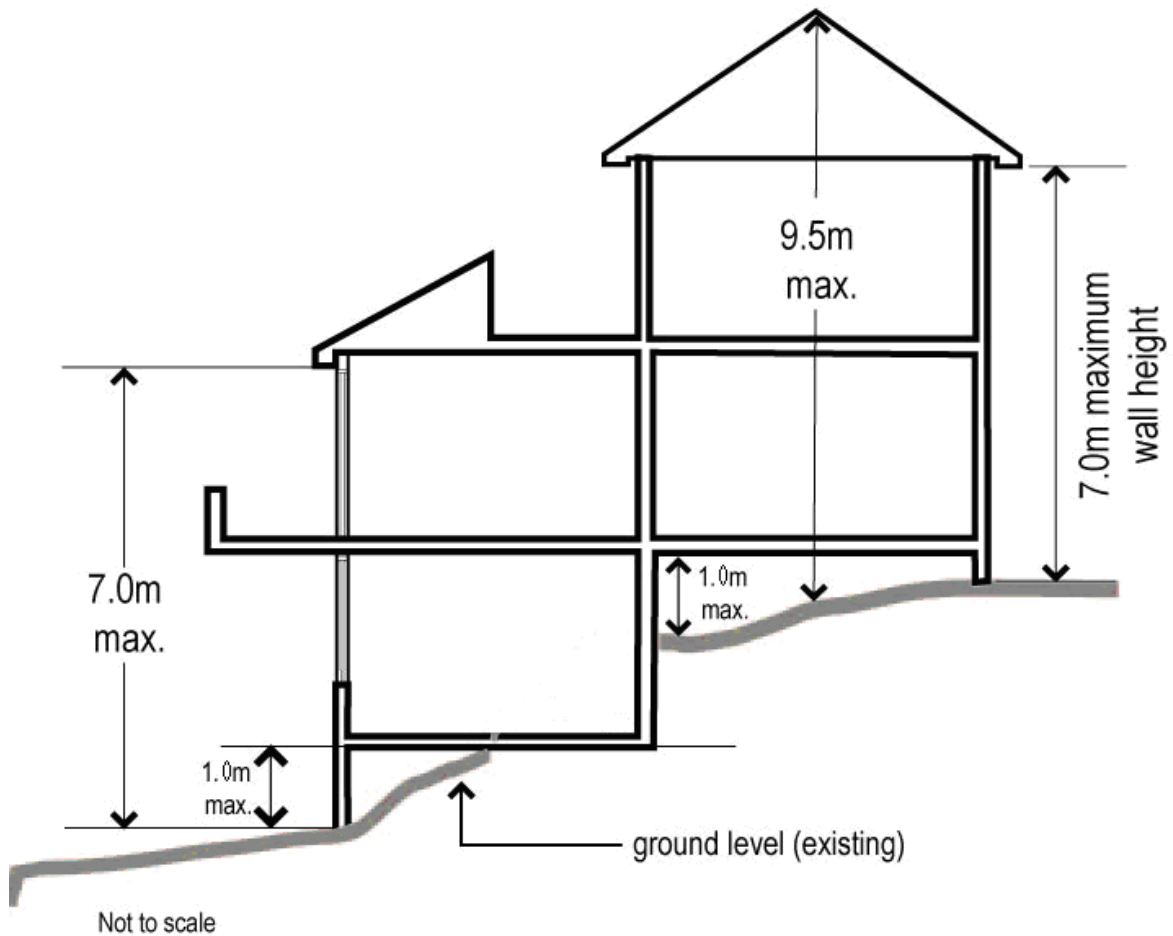


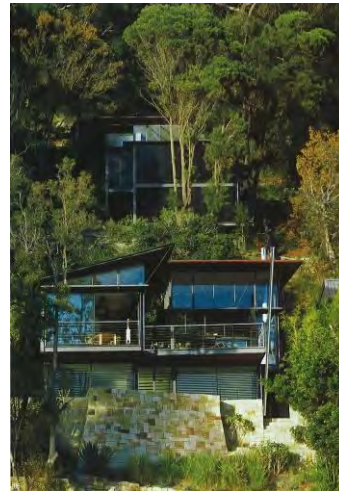
Diagram No. 5 - Dwelling House Height

1.7.1 Height

- The maximum wall height to the underside of eaves for any floor above ground level (existing) is 7.0m to minimise the bulk and massing.
- The maximum height to the underside of undercroft areas above ground level (existing) is to be 1.0m. Refer to controls relating to cut and fill for additional requirements.
- The maximum height of a parapet roof is to be 600mm above the maximum wall height of a dwelling.
- The maximum height for a pitched roof house is 9.5m above ground level (existing).
- A maximum of 2 storeys plus basement is permissible at any point above ground level (existing). No building will be permitted to have an appearance (in elevation) exceeding three storeys in height.
- In the case of a detached dual occupancy, the dwelling furthest from the street is to be single storey.

1.7.2 Architectural character and articulation

- a) Dwellings should provide a minimum of one major window from a habitable room directly overlooking the street or public open space area.
- b) Skylights within roofs are to be located so that they are not visible from the street.
- c) Attics will only be considered within existing roof forms. Attics in Mansard roofs are prohibited.
- d) Where habitable attic space is provided within a roof form then minor dormer windows are to be provided located away from the street frontage. Dormers are to be proportioned vertically and not horizontally.
- e) Metal deck roofs are to be a mid to dark range colour.



Photos 1 and 2 - Examples of good contemporary housing - efficient and thoughtful use of topography in dwelling design, natural materials and recessive colours used.



Photo 3 - The use of feature materials to express architectural design elements is encouraged.

1.8 Amenity

Objectives

The objectives for amenity are to:

- 1 To provide reasonable solar access to habitable rooms and recreational areas of new and existing developments.
- 2 To provide reasonable acoustic and visual privacy for neighbouring properties.
- 3 Minimise overlooking between adjoining dwellings and their private open spaces.

Provisions

1.8.1 Solar access and overshadowing

- a) Dwellings or additions shall be so designed and orientated so as to give reasonable sunlight to the habitable rooms and recreational areas of the subject site and adjoining premises between 9.00am and 3.00pm on 21st June. In particular, dwellings are to be so located and designed that a portion of windows of neighbouring dwellings receive at least 3 hours of sun between 9am and 3pm on 21st June.
- b) Council may accept reduction in solar access for the subject site and adjacent development if the topography and lot orientation is such that the 3 hour standard is considered unachievable.
- c) Where adjacent dwellings and their open space already receive less than 2 hours of sun then new development should seek to maintain this solar access where practicable.

1.8.2 Privacy – Visual and Acoustic

- a) Dwellings or additions shall be designed and orientated so that windows, balconies and decks are not situated directly opposite windows of the habitable rooms of any adjoining dwellings, unless privacy can be addressed.
- b) Roof terraces and decks above the upper storey are prohibited.
- c) Elevated decks, terraces or balconies greater than 1m above ground level (existing) to living areas are not to exceed a maximum depth of 3.0m. Deeper decks may be considered if privacy to adjoining properties is addressed.
- d) The noise generated by mechanical equipment of any sort must not exceed the background noise level by more than 5dB (A) when measured in or on the lot adjacent to the equipment. Where sound levels are exceeded, sound proofing measures will be required.

1.8.3 Private open space

- a) Where possible all dwellings are to have an area of private open space that receives northerly sun in winter.
- b) Where possible private open space is to be located directly accessible from a major living area within the dwelling and be on the same level as the living space or within 500mm of the floor level.
- c) Private outdoor open space can include a garden, terrace, paved area, deck or courtyard.
- d) The minimum area of one area of private open space per dwellings is 24m² with a minimum depth of 4m and a maximum gradient of 1:50.

1.9 Car parking

Objectives

The objectives for car parking are:

- 1 To provide off street parking for residents.
- 2 To ensure that the design of car parking structures is consistent with the dwelling and has minimal impact on the streetscape.

Provisions

(Note: For the purpose of floor area exemption from FSR calculation, a double garage is a maximum of 40m²).

- a) Carports are permitted within the front setback areas where:
 - I. The carport has an open design and has minimal impact on the streetscape
 - II. The carport does not have a trafficable roof
 - III. Open security gates (with a minimum of 50% openings) are permitted
 - IV. The carport posts are to be setback a minimum of 1.0m from the street alignment (refer Diagram 6).

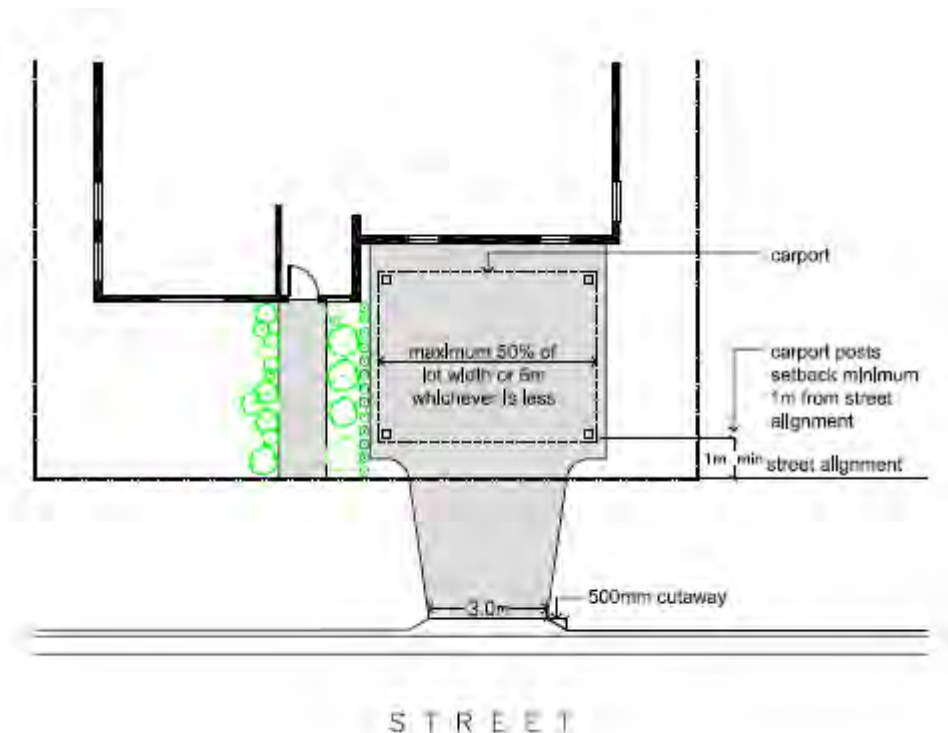


Diagram No. 6 – Carport width and location

- b) Garage doors are not to be installed on carports.

- c) On sloping sites, garages may be permitted in front of the building line if at least two thirds of the garage is below ground level (existing). The garage shall have a minimum setback of 1m from the street alignment and not have a trafficable roof.
- d) Where a water or bushland view is available beyond the carport to the public domain, then the carport design should be open in design and maximise the view opportunities.
- e) Garages and carports facing the street should not exceed 50% of the lot width or 6.0m, whichever is lesser (see Diagram 6).
- f) Materials for garage doors are to be sympathetic to the character of the street and the design of the dwelling, and are to be solid.
- g) Garage roofs are to be non-trafficable.

1.9.1 Driveways and pathways

- a) Driveways are to have a width of 3m at the kerb. Where there are design limitations, special consideration can be given to wider driveways (in accordance with AS 2890.1).
- b) 500mm cutaways are required on each side of the driveway where it meets the road (see Diagram 6).
- c) The material of the driveway from the lot boundary to the street carriageway is to match the adjacent footpath materials.
- d) Materials for the driveways, pathways or carport hardstands within the lot are to be concrete, small unit pavers, or consolidated gravel or granite, or other semi-permeable material. For pathways natural stone is also acceptable.
- e) Colours of driveways and pathway to the dwelling are to be muted and blended with the colours of the landscape and dwelling. Bold colours such as red, blue or green are prohibited.



Photo 4 - Use of different materials and colours to break up lengthy driveway.



Photo 5 - Blend of driveway and footpath materials minimises the impact of driveways.



Photo 6 - Use of pavers for pathway treatment to blend in with landscape of the dwelling.

1.9.2 Vehicular access

- a) Driveways and access ramps are to be designed in accordance with AS 2890.1 - 2004.
- b) Garage and carport entries are to be located from laneways wherever possible or secondary street frontages in the case of corner lots.
- c) Driveways for battle axe allotments should be designed to ensure that vehicles can enter and leave the lot/s in a forward direction. The minimum width of a battle axe carriageway is to be 3m.

1.10 Ancillary development

Ancillary developments are outbuildings and structures that are ancillary to and generally detached from the main dwelling. These elements should be small scale and visually compatible with the design of the dwelling in form, colours and materials. Examples of ancillary development are workshops, sheds, cubby houses, pools, tennis courts etc. Ancillary development should be considered as part of the preliminary design of the dwelling and site to minimise visual impact from public areas.

Objectives

The objectives for ancillary development are to:

- 1 Provide for ancillary development that enhances the amenity of residents without compromising the amenity of adjoining dwellings or the area.
- 2 Ensure that materials and colours are compatible with the surrounding natural environment and the dwelling.
- 3 Minimise visibility from public spaces.
- 4 Minimise acoustic impacts.
- 5 Ancillary development is to respond to site constraints i.e. topography, mature vegetation.

Provisions

1.10.1 Private Swimming Pools

- a) Swimming pools and spas are to be located behind the front building line and not on elevated decks.
- b) Applications for swimming pools and spas will be considered by Council on the basis of the provisions of The Swimming Pools Act, 1992, latest amendment, the Building Code of Australia, the relevant Australian Standards and the provisions of this Code.
- c) Pools and spas should not adversely affect the amenity and outlook of the neighbourhood particularly when viewed from waterways and foreshore areas.
- d) The waterline of the pool should be no closer than 3m to any dwelling and no closer than 1m from a side or rear boundary.
- e) Other than on steeply sloping sites, the coping of the pool should relate to ground level (existing) adjacent to the dwelling and not exceed 1.0m as the land falls away from the pool.
- f) On steeply sloping sites, the coping of the pool is not to be more than 1.8m above the ground level (existing).
- g) Where the coping of the pool is above ground level (existing) then the setback from the lot boundary is to be at a ratio of 1:1 to ensure the raised area of the pool does not impact on the amenity of adjoining neighbours.
- h) Pool height of greater than the ground level of adjoining dwellings may be permitted subject to privacy impact assessment on adjoining dwellings.
- i) Lighting if installed, to be arranged in such a manner as not to interfere with the amenity of the neighbourhood.
- j) The pool is to be kerbed and/or drained to prevent surface water gaining access to the pool or to the adjoining properties. Swimming pools must not adversely affect the existing stormwater management system.
- k) Pools are to be located at least 3 m from the trunk of a tree over 5 m in height, which is required to be retained on the site or is located on a neighbouring property.
- l) The pool pump/filter is to be located as far away as practicable from neighbouring dwellings and is to be enclosed in an acoustic enclosure that limits noise generated by the pump to not greater than 5dB(A) above the background noise level, measured at the boundary.

1.10.2 Tennis Courts

- a) Tennis courts will only be considered by Council where they do not require extensive cut and fill or the removal of significant trees.
- b) A tennis court shall be surrounded by a fence at least 3.65 m high, constructed of approved materials, in a recessive colour, and shall be kept in such repair as to be reasonably capable of preventing balls escaping onto adjoining properties.
- c) Fences to tennis courts are to be at least 3.0m from habitable rooms of adjoining properties.
- d) Courts are not to be illuminated beyond the hours of use between 7 am and 8 pm daily.

1.10.3 Outbuildings

- a) Outbuildings (including detached garages) are to be of a design, and use materials and colours, compatible with the locality.
- b) Outbuildings shall not exceed one storey up to a maximum of 3.6m in height. The maximum external wall height is 2.4m.
- c) Consideration may be given to proposals having a maximum height in excess of 3.6m where the proposal is sited on sloping ground, has a minimum setback of 900mm from the boundaries and Council is satisfied that the proposal will not materially affect the amenity of any adjoining site.
- d) The total area of outbuildings is not to exceed 50m².
- e) Outbuildings are to be located behind the front building line of the dwelling (except in the case of carports or garages in certain circumstances).
- f) Windows in outbuildings are to be located a minimum of 900mm from side or rear boundaries.
- g) Outbuildings are not to be located in view corridors and are not to be used as a dwelling.
- h) Attics in outbuildings are to be fully contained in the existing roof, accessed only by pull-down ladders and are not to contain windows.

1.11 Inclinator

- a) Inclinator are to be sited and screened to avoid adverse impacts on the natural environment and the amenity of adjoining dwellings.
- b) Inclinator are to be situated so that the rail is as close to the ground level (existing) as possible and shall be no closer than 1.5m from any side boundary.
- c) Inclinator length must be kept to a minimum.
- d) Suitable screening and/or screening by planting with suitable mature plants shall be provided. Details of screening and/or planting shall be submitted and approved prior to the release of the Construction Certificate.
- e) Inclinator shall be painted in an environmentally sympathetic colour.
- f) The following requirements are applicable to its installation and usage:
 - I. The L MAX noise level shall not exceed 60dB (A) when measured in immediate vicinity of the external structure of any adjoining premises.
 - II. The rail car/cage shall be of open design with a maximum height of 1m above car/cage floor level.
 - III. The track for the inclinator shall be continuously welded and the welds ground smooth.
 - IV. The inclinator shall be fitted with noise reduction buffers so that no metal to metal impacts during its operation and these buffers are to be maintained for the duration of the inclinator's life.
- g) All sites with an inclinator must also contain stairs as an alternative route.
- h) Prior to the issue of an Occupation Certificate for the dwelling a certificate is to be provided from the Work Cover Authority certifying that the inclinator complies with their requirements.

1.12 Battleaxe Allotments

A battleaxe allotment (also referred to as a hatchet-shaped allotment) generally has no direct frontage to a public road and relies on a legally-created right-of-way, carriageway or driveway for vehicular access to and from the nearest public road.

A battleaxe allotment is typically located at the rear of one or more of the 'parent' allotments and is the result of a re-subdivision of that allotment.

While this section applies to battleaxe development the generic controls of the Lane Cove Development Control Plan 2010 still apply.

1.12.1 Site Planning Elements – New Dwelling

Notwithstanding other relevant provisions of this DCP, proposals for new dwellings on existing or proposed battleaxe lots will be assessed on their merits having regard to the following matters:-

Objectives

The objectives for site planning elements for new dwellings to:

- 1 Achieve reasonable and equitable view-sharing and inter-allotment privacy arrangements by way of careful building design; careful location of facing windows, decks and other design elements; and landscaping which reflects and responds to the particular characteristics of the subject site;
- 2 Acknowledge the legal rights of the owner of the new battleaxe lot to construct a dwelling house on that lot, subject to compliance with the Lane Cove LEP, BCA and BASIX requirements.

Provisions

- a) Setbacks from boundaries will be determined having regard to the results of a detailed site analysis. Setbacks will be determined in accordance with the relevant provisions of this DCP. Where compliance with provisions is not achievable, site specific determinations on setbacks (based on site averages) can be made by Council.

1.12.2 Site Planning Elements – Subdivision Only

Provisions

- a) As a minimum, applications for a typical battleaxe subdivision (one new lot) must be accompanied by a site plan and/or Statement of Environmental Effects, plus pre-DA report, that demonstrate that the following matters have been covered in the design:-
 - Compliance with the minimum LEP Lot Size area and dimensional standards;
 - The ability of the site to be connected to all necessary utility services;
 - The ability of the site to retain and / or manage stormwater, including flows which might traverse adjoining downstream properties; and
 - Vehicular and pedestrian access from the nearest public road.

1.12.3 Access

Provisions

- a) The minimum lot size for any new battleaxe lot shall be as set out on the Lot Size Map of the Lane Cove LEP. In calculating the area of a lot resulting from a battleaxe subdivision,

the area of any accessway, right-of-carriageway or the like is to be included in the site area calculations.

- b) The maximum permissible grades for the access handles are to comply with AS 2890.1:2004 *“Parking Facilities Part 1: Off Street Parking”*.
- c) Site Planning must provide a suitable turning area to enable vehicles to turn and exit the site in a forward direction.
- d) To ensure that the creation of battle axe allotments does not result in additional vehicular crossings on classified roads.

1.12.4 Stormwater Management

Provisions

- a) The management of stormwater flows from a new battleaxe lot to existing downstream lots may involve easements between the respective owners, if so copies of such agreements are to be submitted with the subject development application.
- b) Stormwater runoff from access handles must be directed to kerbs or central dish drains and thence to a stormwater system that complies with Part O – Stormwater Management of Lane Cove Council’s Development Control Plan.
- c) On-site stormwater detention may be required for developments on battleaxe blocks for further details refer to Part O – Stormwater Management of Lane Cove Council’s Development Control Plan.

C.2 Attached Dwellings and Multi-Dwelling Housing

Attached dwellings broadly refer to terrace style dwellings on separate Torrens title allotments. Multi-dwelling housing broadly refers to townhouses and villa houses on strata titled allotments.

2.1 General Objectives

Objectives

The objectives for attached dwellings and multi-dwelling housing are to ensure:

- 1 Development is compatible and complementary to the visual and environmental character of surrounding residential areas.
- 2 There is a variety of the housing stock within the Municipality.
- 3 The protection of significant natural landscape features.
- 4 Housing is provided on low maintenance lots.

2.2 Site Area and Frontage

Provisions

- a) Attached dwelling and multi-dwelling housing proposals require:
 - I. A minimum site area of 1,000m² per development; and
 - II. A minimum site width at the front building line of 20m.
- b) If located west of Girraween St, attached dwellings and multi-dwelling housing proposals require:
 - I. A minimum site area of 750m² per development; and
 - II. A minimum site width at the front building line of 17m.
- c) An average site area 250sqm per attached dwelling or multi-dwelling unit (including common areas) is required.

2.3 Streetscape

Objectives

The objectives for streetscapes are:

- 5 To ensure the existing topography and landscape setting are enhanced and reinforced by new development.
- 6 To achieve development of a scale and appearance which is in keeping with the predominant traditional or emerging street and neighbourhood character.
- 7 To ensure that the development provides passive surveillance and addresses the street or adjacent public open space.
- 8 To achieve an appropriate human scale and enclosure to the street.
- 9 To encourage attractive street frontages and improve pedestrian amenity.
- 10 To enhance and maintain vegetation corridors.

Provisions

- a) New buildings are to recognise and respond to the lot pattern and rhythm of dwellings within the street.
- b) Dwellings are not to be positioned over driveways to basement car park where this results in an unacceptable impact on the visual amenity and continuity of the streetscape.
- c) Carports or garages are not permitted within the street setback.

2.4 Setbacks

Objectives

The objectives for setbacks are to:

- 1 Provide setbacks that complement the streetscape, allow flexibility in the siting of the buildings and control the balance of built form to landscape.
- 2 Provide open space for recreation.
- 3 Provide landscape to offer a visual buffer between dwellings.
- 4 Achieve a high level of amenity for dwellings, neighbouring dwellings and the public domain.
- 5 Ensure that each lot provides deep soil areas and landscaped private open space.

Provisions

2.4.1 Street setback

This is also the front setback for the dwelling addressing the street.

- a) It is to be a minimum of 6.0m except in R2 zones where the setback is to be 7.5m.
- b) The secondary street setback for corner allotments is to be a minimum of 2.0m.

- c) In general, no part of a building or above ground structure may encroach into a setback zone. Exceptions are awnings, balconies, blade walls, bay windows and other articulation elements up to a maximum of 500mm.

2.4.2 Front setback:

- a) A minimum of 2.0m for the dwellings within the development (refer to Diagram No. 7).
- b) Basement car parks are not to extend beyond the building envelope into the front setback.

2.4.3 Side setback

This refers to setbacks from both, site side boundaries and dwellings within a development (refer to Diagram No. 7). Attached dwellings do not need to comply where they attach to another dwelling within the development.

- a) A minimum of 1.2m for a single storey dwelling.
- b) A minimum of 1.5m for a two storey dwelling.

2.4.4 Rear setback

This refers to setbacks from both, the site rear boundary and dwellings within a development.

- a) A minimum of 3.0m.



Diagram No. 7 - Setbacks

2.5 Fences

The provisions for fences in the dwelling house section shall apply.

2.6 Landscaped Area

Objectives

The objectives for landscaped area are:

- 1 To provide privacy and amenity.
- 2 To retain and provide for significant vegetation, particularly large and medium sized trees and to provide continuous vegetation corridors.
- 3 To conserve significant natural features of the site.
- 4 To assist with on-site stormwater management.

Provisions

- a) Landscaping is to relate to the ground level of the dwelling by direct access from a living area.
- b) A minimum of 35% of the site is to be landscaped area with a minimum width of 3.0m. For attached dwellings, this refers to each allotment individually.
- c) Landscaping at front boundaries shared with bicycle routes should be less than 900mm in height and should not impede pedestrian and bicycle routes or reduce visibility to these pathways.

2.7 Cut and Fill

Refer to section 1.6 of this DCP Part for objectives and provisions regarding cut and fill.

2.8 Building Design

Objectives

The objectives for building design are:

- 1 To ensure that the appearance of development is of high visual quality and addresses the street.
- 2 To provide attractive building facades which establish identity and contribute to the streetscape.

Provisions

- a) Dwellings are to be oriented to face the street with additional dwellings oriented to follow the existing development pattern.
- b) The architectural style of development must be sympathetic to the adjoining and surrounding buildings in terms of height, materials, roof pitch and overall building character.

- c) Visual continuity of open space corridors and vegetation elements in the block is to be maintained by the position of buildings.
- d) The area of the site devoted to driveways and vehicle turning areas should be minimised.
- e) On sloping sites car parking may be located below the residential level of the dwelling.
- f) On sites with a slope in excess of 5% each dwelling is to have a separate ground floor level with the difference being equal to the average slope of the site.
- g) Side and rear facades are to be articulated to provide visual interest using windows, awnings, sun shading devices, upper storey setbacks or insets within the wall alignment.
- h) A mix of building materials and/or colours should be used to reduce the appearance of bulk and to integrate the buildings within the local area.
- i) Height
 - I. The maximum number of storeys for attached dwellings or townhouses in the R3 zone is 2 storey
 - II. The maximum number of storeys for a villa is 1 storey.
 - III. The minimum floor to ceiling height on ground floor is to be 2.7m and upper level(s) 2.4m.
- j) The minimum dwelling width is 5m (measured between the external walls).

2.9 Amenity

Objectives

The objective for amenity is:

- 1 To ensure that existing and future residents can enjoy reasonable privacy in their dwellings and private open space without being overlooked by adjoining neighbours.
- 2 To provide reasonable solar access to habitable rooms and recreational areas of new and existing developments.

Provisions

2.9.1 Privacy

- a) Development should be located and oriented to maximise visual and acoustic privacy between buildings.
- b) Building elements such as balconies and decks are to be designed to minimise overlooking of living areas and private open spaces of adjoining dwellings.
- c) The windows of dwellings are to be located so they do not provide direct and close views into the windows of other dwellings, particularly those of living areas.
- d) A minimum of 12m separation is required between buildings within the development site where habitable rooms face habitable rooms.
- e) A minimum of 9m separation is required between buildings within the development site where habitable rooms face non-habitable rooms or blank walls.

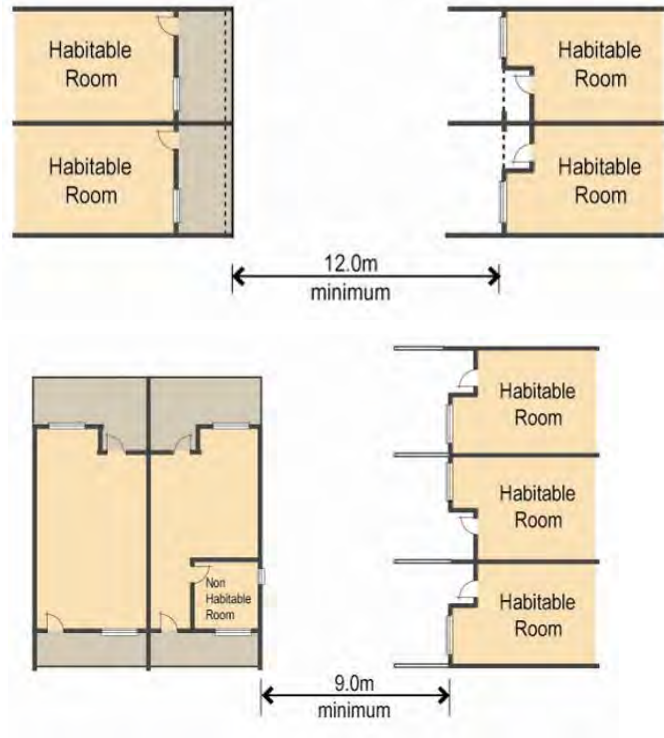


Diagram No. 8 – Building separation

- f) A minimum of 3m separation is required between buildings within the development site where non-habitable rooms/blank walls face other non-habitable rooms/ blank walls.



Diagram No. 9 – Building separation

- g) Council will require a report by an acoustic consultant to be submitted with development applications for multi dwelling housing developments on sites adjacent to noise generating sources such as major roads and rail corridors (see Part B – General Controls for provisions regarding development near busy roads and rail corridors).
- h) Internal habitable rooms of dwellings affected by high levels of external noise are to be designed to achieve internal noise levels of no greater than 50dBA.

2.9.2 Solar Access

- a) Dwellings within the development site and any residential development beyond the site are to receive a minimum of 3 hours sunlight to habitable rooms and to at least 50% of the private open space between 9am and 3pm on 21 June.
- b) Where existing development currently receives less sunlight than this requirement, this should not be unreasonably reduced. Shadow diagrams are required with development applications to show solar access and the extent of overshadowing.

2.9.3 Private and Communal Open Space

- a) Private open space is to be:
 - I. Directly accessible from the living area of the dwelling.
 - II. Located so as to maximise solar access.
 - III. A minimum of 4.0m dimension in any direction.
 - IV. A minimum unbuilt upon area of 50 m² per 2 or 3 bedroom dwelling.
 - V. A minimum unbuilt upon area of 75 m² per 4 or more bedroom dwelling.
- b) Private open space may be located on top of semi-basement parking. (Garage and carport roofs are to be non-trafficable).
- c) Private open space is to contain paving of at least 10m² per dwelling.
- d) Private open space will not be permitted in the front setback area.
- e) Communal open space is to be provided for a development of more than 5 townhouses or villas and is to be:
 - I. Located where it is highly visible and directly accessible to the maximum number of dwellings.
 - II. Designed with an integral role in the site, with uses such as circulation, BBQ, play areas or passive amenity.
 - III. Integrated with the deep soil zone to provide a landscaped setting with opportunities for large and medium size tree planting.
 - IV. A minimum of 10% of the site area.
 - V. Exclusive of shared driveway areas.

2.10 Number of Car Parking, Motorcycle and Bicycle Spaces

Objectives

The objectives for car parking are to:

- 1 Reduce on-site car parking in proximity to public transport.
- 2 Provide sufficient parking on site for the convenience of residents with adequate driveway and manoeuvring areas.
- 3 Minimise the negative visual impact of garages and parking structures.
- 4 Encourage sustainable transport.

Provisions

- a) Garage and carport roofs are to be non-trafficable.
- b) Semi-basement parking may protrude up to a maximum of 1.2m above the ground level (existing) subject to achieving a high quality design solution where ventilation grilles are not located to front or rear gardens.
- c) Driveway widths are to be kept to a minimum while complying with AS 2890.1 and AS2890.2.
- d) A Transport and Accessibility Report may be required by the Traffic Manager.

C.3 Residential Flat Buildings

3.1 General Objectives

Objectives

The objectives for residential flat buildings are:

- 1 To achieve a reasonable level of amenity for the residential flat buildings, neighbouring properties and the surrounding area.
- 2 To achieve sustainable development whilst providing a concentration of residents close to public transport and facilities.
- 3 To create entrances which provide a desirable residential identity for the development, orient visitors and contribute positively to the streetscape and building facade design.
- 4 To provide opportunities for lifestyle choice and dwelling mix.

3.2 Density

Provisions

- a) The minimum site area for residential flat developments is 1,500m².

3.3 Building Depth

Objectives

The objectives for building depth are:

- 1 To ensure that the bulk of the development is in scale with the existing or desired future context.
- 2 To provide adequate amenity for building occupants in terms of sun access, daylight and natural ventilation.
- 3 To provide for dual aspect dwellings.

Provisions

- a) The maximum residential flat building depth is to be 18 m.
- b) This depth is exclusive of balconies.

3.4 Building Width

Objectives

The objectives for building width are:

- 1 To avoid large continuous building bulk and massing.
- 2 To ensure that residential flat building responds to the character of the area.

Provisions

- a) The maximum overall width of the building fronting the street shall be 40m. Greater widths may be permissible if the proposed building articulation is satisfactory in the streetscape.

3.5 Setbacks

Objectives

The objectives for setbacks are:

- 1 To establish the desired spatial proportions of the street and define the street edge and provide a transition between public and private space.
- 2 To assist in achieving visual privacy to dwellings from the street.
- 3 To allow for street landscape character.

Provisions

3.5.1 Front/Street

- a) The front setback of the building shall be consistent with the prevailing setback along the street (refer Diagram No.1). However, Special Residential Areas subject to Block Plans should comply with the setback stated therein. Where there is no predominant setback within the street, and no Block Plan for the locality, the setback should be a minimum of 7.5m.
- b) The front setback area shall comprise terraces and gardens to the ground floor dwellings, deep soil zones, driveways and pathways.
- c) For corner allotments, the secondary setback requirement is the same as the side setback requirement for the proposed development.

3.5.2 Side and Rear

- a) To the boundary within the R4 zone, the minimum side and rear setback shall be:
 - 6m up to 4 storeys
 - 9m for 5-8 storeys
 - 12m for 9 storeys and above.
- b) To the boundary shared with R2 and R3 zones the minimum set back will be 9m if habitable rooms/balconies orient this side.

3.5.3 General

- a) In general, no part of a building or above ground structure may encroach into a setback zone. Exceptions are:
- I. Encroachments into the setback zone of up to 2m may be permitted for underground parking structures no more than 1.2m above ground level (existing), where there is no unreasonable effect on the streetscape. Refer to Diagram 10.
 - II. Awnings, balconies, blade walls, bay windows and other articulation elements up to a maximum of 500mm.
 - III. Setback variation may be required or permitted on merit to preserve existing trees.

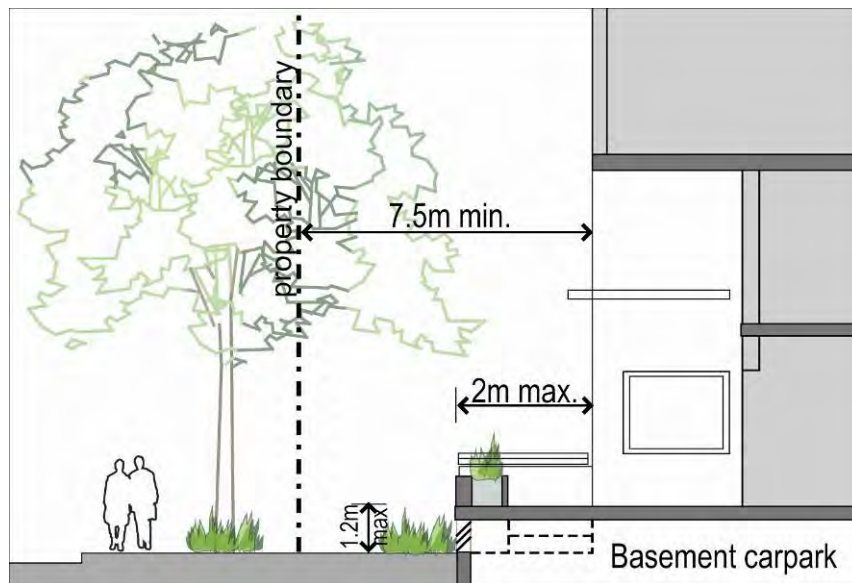


Diagram No. 10 – Terrace to a ground floor dwelling and protrusion of basement carpark

3.6 Building Separation (within developments)

Objectives

The objectives for building separation are:

- 1 To provide visual and acoustic privacy for existing and new residents.
- 2 To allow for the provision of appropriately sized open space for recreational activities.
- 3 To provide deep soil zones for stormwater management and tree planting, where contextual and site conditions allow.

Provisions

- a) Unless indicated elsewhere through block controls within the DCP, separation distances within a development are:

Up to four storeys/12 m height:

- I. 12m between habitable rooms/balconies

- II. 9m between habitable rooms/balconies and non-habitable rooms
- III. 6m between non-habitable rooms and blank wall to any other window, light well or balcony.

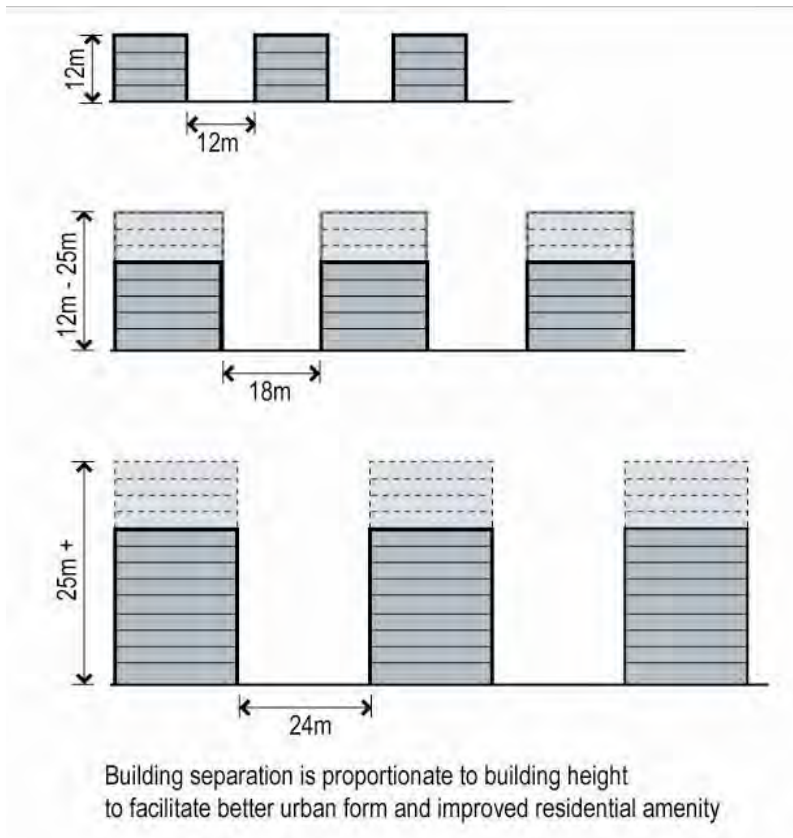


Diagram No. 11 – Building separation for habitable rooms/balconies by height

Five to eight storeys/up to 25 m height:

- I. 18 m between habitable rooms/balconies
- II. 13 m between habitable rooms/balconies and non-habitable rooms
- III. 9 m between non-habitable rooms and blank wall to any other window, well or balcony.

Nine storeys and above/ over 25 m height:

- I. 24 m between habitable rooms/balconies
 - II. 18 m between habitable rooms/balconies and non-habitable rooms
 - III. 12 m between non-habitable rooms and blank wall to any other window, well or balcony.
- b) For mixed use buildings in commercial centres, Council may consider a 10% reduction in separation distances for habitable to non habitable rooms only where it can be demonstrated that achievement of these distances would unreasonably reduce the development potential as indicated in the LEP. Such proposals must show that a high level of privacy, amenity and solar access are achieved.
- c) Lightwells are permitted where the following provisions are met:
- I. Living rooms are not to have light wells/internal courtyards as the only source of outlook and light,

- II. For lightwells with a height up to 18m, the minimum plan dimension is to be 6m,
- III. For lightwells with a height between 18 m and 45 m, the minimum plan dimension is to be 9m,
- IV. Lightwells are to be directly connected at ground level to streets or lanes to allow air movement in the lightwell,
- V. Lightwell spaces may be shared with other uses such as indoor atria, communal space, voids over entry lobbies or indoor planted areas which are visible to dwelling, subject to consideration of noise and other privacy effects.

3.7 Fences

The provisions for fences in the Dwelling Houses and Dual Occupancies section shall apply.

3.8 Excavation

Objectives

The objectives of excavation are:

- 1 To minimise the impact of excavation on surrounding properties.
- 2 To achieve reasonable landscaping within developments.
- 3 To ensure development relates to the street level and the topography.

Provisions

- a) All development is to relate to the existing topography of the land at the time of the adoption of this DCP.
- b) Excavation for major development is to be contained as close as practicable to the footprint of the development.
- c) For development within Centres, Council may consider full site coverage for underground excavation and podium footprints where it is demonstrated that mature landscaping, landscaped area and rainwater retention is able to be provided as roof terraces on podium structures.
- d) Uses at ground level are to respond to the slope of the street by stepping frontages and entries to follow the slope.
- e) The extent of excavation proposed for underground uses should not compromise the provision of deep soil areas or landscaped areas for residential flat buildings.

3.9 Design of Roof Top Areas

Provisions

- a) Roof top areas including podium area are to be designed for use as recreation facilities where practicable and should be of high standard of finish and design. A detailed landscape design and plan of roof top design is to be submitted with the DA.
- b) The design of exterior private open space such as roof top gardens is to address visual and acoustic privacy, safety, security, and wind effects.

3.10 Size and mix of dwellings

- a) In residential flat buildings and the residential component of mixed use buildings, studio dwellings are to have a minimum size of 40 m². This dwelling size is a net area and is to be exclusive of balconies, common corridors and lobbies, car spaces, storage areas outside the dwelling, private and communal open spaces and lift and other services shafts.
- b) In residential flat buildings and the residential component of mixed use buildings, development should include a mix of 1, 2 and 3 bedroom units. At least 10% of each unit type should be provided.

3.11 Private Open Space (balconies and terraces)

Objectives

The objectives for private open space are:

- 1 To provide all dwellings with functional private open space.
- 2 To ensure that balconies and terraces are integrated into the overall architectural form and detail of residential flat buildings.
- 3 To contribute to the safety and liveliness of the street by allowing for casual overlooking of the street.

Provisions

- a) Provide primary balconies for all above ground dwellings with a minimum depth of 2m and minimum area of 10m².
- b) Provide a primary terrace for all ground floor dwellings with a minimum depth of 4m and minimum area of 16m². All ground floor dwellings are to have direct access to a terrace or front garden area.
- c) Balconies and terraces shall not be enclosed under any circumstances.

3.12 Ceiling Heights

Provisions

- a) In residential flat buildings, including residential apartments in mixed use buildings, the floor to ceiling height shall be:
 - I. for non-habitable rooms, a preferred minimum of 2.4m, however a minimum of 2.25m will be permitted
 - II. for the upper level of a 2 storey apartment, a minimum of 2.4m provided at least 50% of the apartment has a minimum of 2.7m height and
 - III. for all single level apartments, a minimum of 2.7m.

3.13 Storage

Objectives

The objective for storage is:

- 1 To provide adequate storage for everyday household items, sporting, leisure, fitness and hobby equipment within the dwelling.

Provisions

- b) In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:
 - I. studio dwellings 6m³
 - II. one-bedroom dwellings 6m³
 - III. two-bedroom dwellings 8m³
 - IV. three plus bedroom dwellings 10m³

A minimum of 50% of this storage volume is to be provided within the dwelling accessible from the hall or living area as hall cupboards.

3.14 Solar Access

Objectives

The objective for solar access is:

- 1 To provide reasonable solar access to habitable rooms and recreational areas of new and existing developments.

Provisions

These provisions apply to proposed developments and any residential development beyond the site.

- a) Habitable rooms in at least 70 percent of dwellings in high density residential developments, should receive a minimum of three hours direct sunlight between 9 am and 3 pm on 21st June, in total between any portions of those rooms. A reasonable proportion of both the common and private open space in those sites is also to receive sunlight during that period, according to the circumstances of the sites.
- b) The number of single-aspect dwellings with a southerly aspect (SW-SE) should be limited to a maximum of 10 percent of the total dwellings within a high density residential development. Developments varying from the minimum standard due to site constraints and orientation must demonstrate how energy efficiency is addressed.
- c) Where adjacent dwellings and their open space already receive less than the standard hours of sun, new development should seek to maintain this solar access where practicable.
- d) Council may accept a reduction in solar access for the subject site and adjacent development if the topography and lot orientation (as distinct from a preferred design) are such that the standard is considered unreasonable.

Shadow diagrams are required with the development application to show solar access and the extent of overshadowing.

3.15 Natural Ventilation

Objectives

The objectives for natural ventilation are:

- 1 To ensure that dwellings are designed to provide all habitable rooms with direct access to fresh air and to assist in promoting thermal comfort for occupants.
- 2 To provide natural ventilation in non-habitable rooms, where possible.
- 3 To reduce energy consumption by minimising the use of mechanical ventilation, particularly air conditioning.

Provisions

- a) Sixty percent (60%) of dwellings should be naturally cross ventilated.
- b) Ventilation provided to one end of a dwelling via windows onto an open access corridor does not satisfy this requirement due to privacy and acoustics' impacts.
- c) Twenty five percent (25%) of kitchens within a development should have access to natural ventilation.

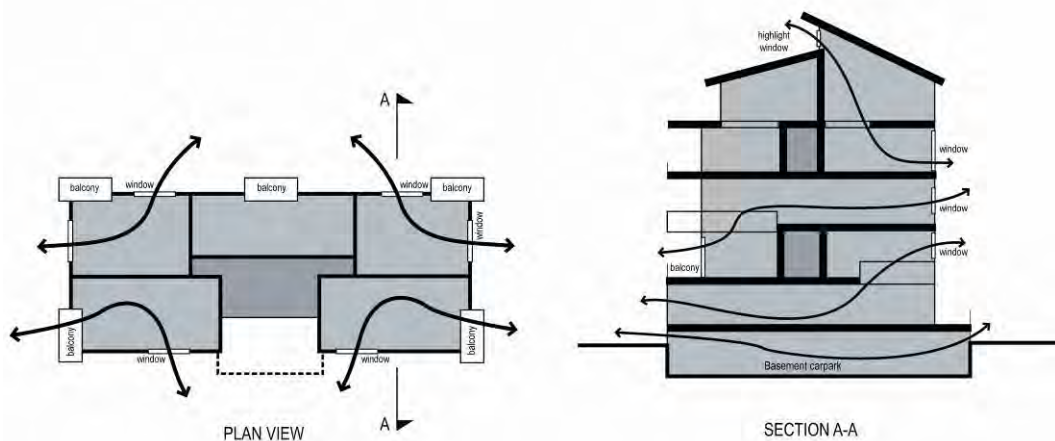


Diagram No. 12 – Natural ventilation in residential flat buildings

3.16 Visual privacy

Objectives

The objectives for visual privacy are:

- 1 To provide reasonable levels of visual privacy externally and internally, during the day and at night.
- 2 To provide an outlook and views from principal rooms and private open space without compromising visual privacy.

Provisions

- a) Locate and orient new development to encourage visual privacy between buildings on site and adjacent buildings.

- b) Use detailed site and building design elements to increase privacy without compromising access to light and air. Detailing may include:
- I. Offset windows of dwellings in new developments in relation to adjacent development windows
 - II. Recessed balconies and/or vertical fins between adjacent balconies
 - III. Solid or semi-solid balustrades to balconies
 - IV. Louvres or screen panels to windows and/or balconies
 - V. Incorporating planter boxes into walls or balustrades to increase the visual separation between areas
 - VI. Utilise pergolas or shading devices to limit overlooking of lower dwellings or private open space.

3.17 Communal Open Space

Objectives

The objectives for communal open space are:

- 1 To provide residents with passive and active recreational opportunities.
- 2 To provide an area on site with soft landscaping and deep soil planting.
- 3 To ensure that communal open space is useable and attractive.

Provisions

- a) A minimum of 25% of the site area is to be provided as communal open space.
- b) For mixed use sites, communal open space can be provided on podiums and roof terraces subject to achieving privacy for adjoining users.

3.18 Landscaped Area

Objectives

The objectives for landscaping and deep soil zones are:

- 1 To provide privacy and amenity.
- 2 To retain and provide for significant vegetation, particularly large and medium sized trees and to provide continuous vegetation corridors.
- 3 To conserve significant natural features of the site.
- 4 To assist with management of the water quality and water table.
- 5 To conserve and create buildings in a landscaped setting.

Provisions

- a) A minimum of 40% of the site area is to be planted, comprising 25% landscaped area and a further minimum of 15% planting on structures or landscaped area.
- b) Exceptions may be made in centres for mixed use developments only. In these instances, stormwater treatment measures must be integrated with the design of the residential flat building and sufficient soil depth and volumes to be provided to ensure that mature trees are achievable.
- c) Landscaping to front boundaries shared with bicycle routes should be less than 900mm in height and should not impede pedestrian and bicycle routes or reduce visibility to these pathways.

3.19 Planting on structures

Objectives

The objectives for planting on structures are:

- 1 To contribute to the quality and amenity of communal open space on podiums and in internal courtyards.
- 2 To encourage the establishment and healthy growth of trees in urban areas.

Provisions

The following are recommended as minimum standards for a range of plant sizes:

- a) Large trees (canopy diameter of up to 16m at maturity)
 - I. minimum soil volume 150m³
 - II. minimum soil depth 1.3m
 - III. minimum soil area 10m x 10m area or equivalent
- b) Medium trees (8m canopy diameter at maturity)
 - I. minimum soil volume 35m³
 - II. minimum soil depth 1m
 - III. approximate soil area 6m x 6m or equivalent
- c) Small trees (4m canopy diameter at maturity)
 - I. minimum soil volume 9m³
 - II. minimum soil depth 800mm
 - III. approximate soil area 3.5m x 3.5m or equivalent
- d) Shrubs
 - I. minimum soil depths 500-600mm
- e) Ground cover
 - I. minimum soil depths 300-450mm
- f) Turf
 - I. minimum soil depths 100-300mm

Any subsurface drainage requirements are in addition to the minimum soil depths mentioned above.

C.4 Residential Subdivision – Dwelling Houses

Objective

The objective for residential subdivision is to:

- 1 Protect amenity while permitting the subdivision of lots in environmentally sensitive areas or where significant impacts on neighbours are likely and careful design is required to minimize those impacts.
- 2 Allow residential Torrens Title subdivision which retains, and where appropriate, improves existing amenity and streetscape within residential zones.

Provisions

- a) Where a development application is proposed for residential subdivision of an existing lot into two or more lots, creates a battle-axe lot, is on environmentally sensitive land or where significant impacts on neighbours are likely and careful design is required to minimize those impacts, Council may impose conditions providing constraints on future buildings that include, but are not limited to, a prescription of maximum building heights, a requirement for the building to be contained within a particular building envelope or building location, or the prescription of a particular design for future development on the land, such constraints may include the placement of an appropriate covenant at the applicant's cost.
- b) Applications for approval to construct a new dwelling on an existing battleaxe lot must include information on the following site analysis elements additional to those set out in s.2.4 of this DCP:-
 - the precise location, disposition and architectural treatment of those elevations of adjoining dwellings which face the proposed new dwelling, together with plan dimensions showing separation distances between existing and proposed dwellings;
 - existing shadow patterns cast by adjoining dwellings and ancillary structures;
 - Significant views /view corridors from adjoining dwellings;
 - RLs of each floor and of rooftops for each adjoining dwelling together with schematic cross-sections showing the relationships between existing and proposed dwellings.
- c) Minimum frontage (allotment width at street) – The minimum frontage permissible is 15 metres (after subdivision). That is, for a regular allotment where a subdivision creates a battleaxe allotment, the minimum frontage is 18m (15m frontage for the front lot plus 3m access handle width). For irregularly shaped blocks, frontages may be less, but a minimum width of 15m is required, where the dwelling is to be constructed, usually not less than 7.5m from the street frontage (see Diagram 13 below).
- d) Driveways for battle axe allotments should be designed to ensure that vehicles can enter and leave the lot/s in a forward direction. The minimum width of a battle axe carriageway is to be 3m. Where a driveway provides access for a multiple lot subdivision, a passing bay may be required by Council's Traffic Manager.

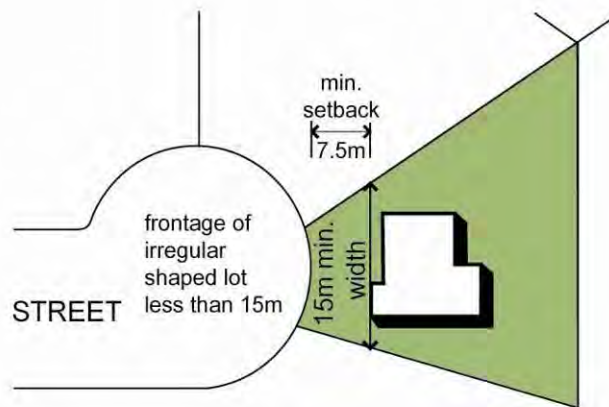


Diagram 13 – Calculation of minimum frontage for subdivision of irregular allotments

- e) Each battle axe lot must have direct access to a dedicated public road through the provision of an access handle attached to that lot, or via an access corridor shared by such lots.
- f) Applications for a battleaxe subdivision (one new lot) must be accompanied by a site plan and/or Statement of Environmental Effects, plus pre-DA report, that demonstrate that the following matters have been covered in the design:-
 - i) An example building footprint that provides adequate private open space;
 - ii) The likelihood that future development for a dwelling would involve the removal of existing mature trees or damage to a threatened species or to an endangered ecological community (see Part J);
 - iii) The possible existence of heritage items and relics, including those associated with early Aboriginal occupation of the site;
 - iv) Potential bushfire risks; and
 - v) In the case of blocks on the foreshores of Sydney Harbour, evidence that a dwelling house can be constructed without infringing the LEP Foreshore Building Line or the DCP Foreshore Setback.
 - vi) the orientation of any building footprint shall give reasonable access to sunlight to the potential dwelling and recreational areas of the subject site and adjoining premises between 9.00am and 3.00pm on 21st June. See part C section 1.8 for further provisions.
 - vii) Council may accept reduction in solar access for the subject allotment and adjacent development if the topography and lot orientation is such that the 3 hour standard is considered unachievable.

C.5 Boarding Houses

5.1 General Objectives

Objectives

The objectives for boarding houses are:

- 1 To achieve a reasonable level of substantive, objective evidence to support statements about the socio-economic character of boarding houses.
- 2 To discourage the conversion of new generation boarding house rooms to separate dwellings.

5.2 Social Impact

Provision

- a) Social Impact Assessments must be provided for proposed boarding houses.

5.3 Internal Amenity

Provision

- a) The maximum kitchen area within a boarding house room is 2m².

Part C

Residential Localities



SPECIAL RESIDENTIAL AREAS:

- | | |
|------------|---|
| Locality 1 | Burns Bay Rd |
| Locality 2 | Finlayson St |
| Locality 3 | Longueville Precinct |
| Locality 4 | Mafeking Precinct |
| Locality 5 | Greenwich Heritage
Conservation Area |
| Locality 6 | Mowbray Precinct |
| Locality 7 | 266 Longueville Road |

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Locality 1 – Burns Bay Road

Objectives

- 1 To provide new development that achieves design excellence, including for streetscape.
- 2 To provide amenity for the sites' residential development.
- 3 To minimise visual impact on nearby residences, reserve, bay and other public domain areas.
- 4 To provide for public and private views to Burns Bay and Riverview College.
- 5 To improve amenity and surveillance along Burns Bay Road.
- 6 To mitigate the impact of Burns Bay Road traffic and noise.
- 7 To preserve and enhance the existing vegetation and landscape character.
- 8 To provide vehicular, bicycle and pedestrian access through the site.
- 9 To improve pedestrian connectivity to the foreshore.
- 10 Carisbrook House's significance as an item of State and local heritage is to be supported by development adjacent being sympathetic and appropriate to Carisbrook's curtilage and facilitating access to and enjoyment of Carisbrook by the public.
- 11 To establish a central vista along the proposed access road, to Carisbrook House and its curtilage, which is not impeded by buildings or inappropriate landscaping.
- 12 To provide access and improved parking to Carisbrook House.

Block 1: 296-314 Burns Bay Road

BLOCK 1: 296 – 314 BURNS BAY ROAD			
	CONTROL	PROVISION	NOTES/LOCATION
1	Height	LEP control	LEP control
2	Building Separation	SEPP 65 Between buildings on site	Residential Flat Design Code
3	Setbacks	6m minimum 5 m minimum 3m minimum	To Burns Bay Road To Waterview Drive up to Burns Bay Road Clear of Northern Ocean Outfall Sewer <i>Car park setbacks may extend to the boundary below</i>
4	Northern Ocean Outfall Sewer (NOOS)	Foundations to be a minimum of 5m from calculated position of the sewer and to meet Sydney Water requirements.	To protect the NOOS from superimposed loads from any building

5	Building Orientation / Length	Maximum 40m façade to Burns Bay Road without significant angular rotation to the facade	To Burns Bay Road. Building length permitted to increase beyond 40m if façade articulation etc is satisfactory in streetscape and length of individual facades are 40m or less.
6	Pedestrian Entry/ Address	From Burns Bay Road and Waterview Drive	
7	Vehicle Entry	From Waterview Drive only.	
8	Road Dedication	As required	To create Waterview Drive and extension to Burns Bay Road as public road
9	Car parking	Underground to meet relevant DCP provisions with dedicated spaces, turning area and lift access to any non residential uses incorporated in the development Provision for 3 car space layover on the western side of Waterview Drive.	May be sleeved with residential uses to the new access road due to topography.
10	Ceiling Heights	In addition to the normal provisions for ceiling heights in the DCP, the minimum floor to ceiling height for the ground floor is to be 3.1m.	To allow for potential non residential uses on the ground floor
11	Landscaping / Open Space/ Public Domain/ Communal Open Space	Setbacks to be treated as a landscaped buffer. Communal Open Space may include roof top spaces and any internal communal spaces, subject to achieving privacy for adjoining users. Open space required for any non-residential uses incorporated into the development may be included in the communal open space calculation with a minimum of 25% of the site area used for communal open space. Fencing/ retaining / acoustic walls along Burns Bay Road not to exceed 1800mm above footpath level; along any other boundary not to exceed 1800mm above finished surface level. Fencing / retaining / acoustic walls are to have regard to maintaining view corridors from the public domain.	
12	Outdoor Lighting	Energy Efficient Outdoor lighting is encouraged and is required to complement any lighting design of the adjacent public park. The lighting design prepared by an appropriately qualified person is to be submitted with any development application.	
13	Other	SEPP 65 and DCP 2010 to apply.	

Block 2: 316-332 Burns Bay Road



NOTE: BLOCK PLAN INDICATIVE ONLY AND TABLE CONTROLS WILL BE APPLIED WITH FLEXIBILITY BASED ON ACHIEVEMENT OF LOCALITY 1 OBJECTIVES (ABOVE), GENERAL NOTES (BELOW) AND PART B: GENERAL.

General Notes

If required by the RTA, the future development of 316-322 Burns Bay Road shall allow for a deceleration lane along Burns Bay Road to comply with RTA guidelines and requirements.

The service road must be designed to be wide enough for two-way movements plus accommodate kerbside parking. The service road connection with Burns Bay Road must not connect back as an acceleration lane.

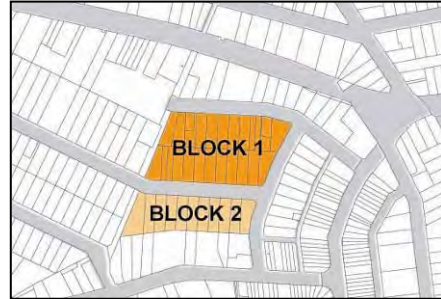
All internal roads and connections to Burns Bay Road must be appropriately designed to accommodate the turn paths of garbage trucks and furniture removalist trucks where appropriate.

BLOCK 2: 316 – 322 BURNS BAY ROAD			
	CONTROL	PROVISION	NOTES/LOCATION
1	Height	LEP control	LEP control
2	Uses	High density residential	
3	Building Separation	Minimum 12m	Otherwise refer to diagram
4	Building Footprint	Maximum 18m depth	
5	Setbacks	10m 10m 4 m minimum Break up building bulk above 4th level.	To Burns Bay Road To shared boundary with Carisbrook House To proposed access road To eastern boundary (see diagram) All buildings to break up bulk above the fourth level by setting back an additional 3m or utilising other treatments to reduce bulk. Other treatments can include change in building materials, colour or change in vertical building plane.
6	Building Orientation / Length	Maximum 50m building frontage	To Burns Bay Road and new access road. Building length permitted to increase beyond 50m if façade articulation etc is satisfactory in streetscape.
7	Pedestrian Entry/ Address	From Burns Bay Road and proposed access road	To foreshore, reserve and Carisbrook House
8	Vehicle Entry	From proposed access road	To connect at the northern end to the access road through park to lights on Burns Bay Road (right and left turn in & out) and at the middle of site (left in/ left out) . Access to Carisbrook House is to be provided through this site.
9	Road Dedication	3m to either side of proposed access road	For provision of 1.5m footpath, verge and street trees to each side of the road
10	Carparking	Underground	May be sleeved with residential uses to the new access road due to topography
11	Mid Block Pedestrian Connection	Provide pedestrian links from Burns Bay Road to the foreshore	In location indicated approximately on diagram Orient buildings to overlook and address the pedestrian connection
12	Heritage	Provide at least 10 car parking spaces for Carisbrook House and 1 bus parking space as approved by Traffic Manager. Provide setback as above to respect the setting and scale of the heritage item and in particular to minimise overshadowing of the courtyard to the north of Carisbrook House A development application is to be accompanied by a heritage impact statement relating to Carisbrook House. Signage and landscaping to be developed from car & bus parking areas to Carisbrook entrance in agreement with Council policies.	
13	Landscaping / Open Space/ Public Domain	Setbacks to be treated as a landscape buffer Existing vegetation to be retained (see diagram) and enhanced with additional vegetation 20 percent minimum communal open space to be provided generally between the built form to the west and south west Public domain improvements required to Burns Bay Road and new vehicle access road	To provide privacy and noise reduction Trees species to be agreed by Council Paving design and specifications to be agreed with Council

Locality 2 - Finlayson Street

Block 1

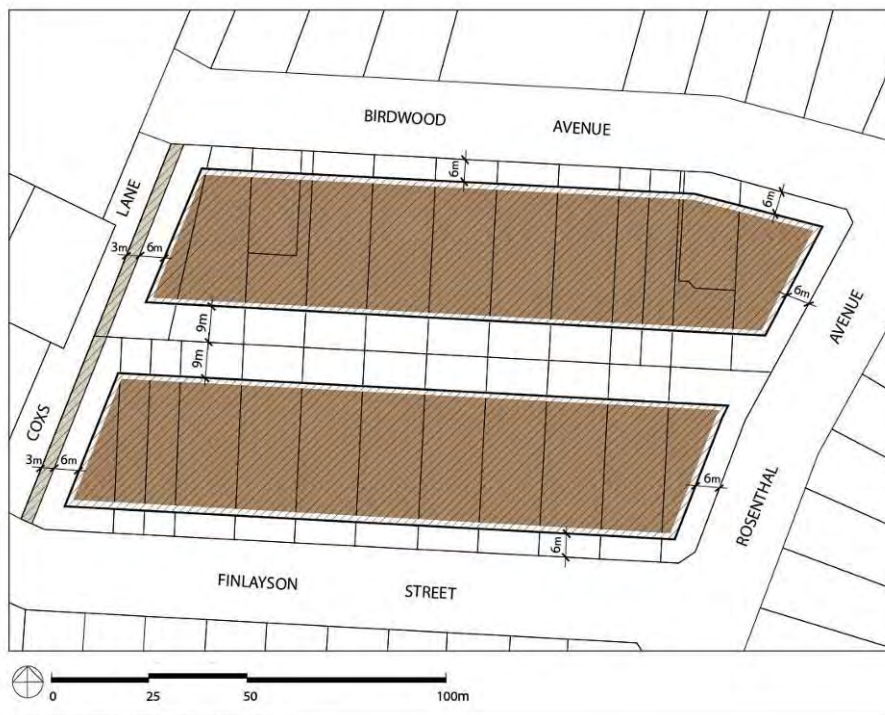
Block 1 is located in the precinct area bound by Birdwood Avenue to the north, Finlayson Street to the south, and Coxs Lane to the west and Rosenthal Avenue to the east.



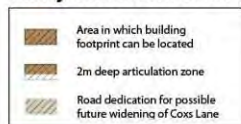
Block key

Objectives

- 1 To provide new development that achieves design excellence.
- 2 To provide increased density of development close to the amenities of Lane Cove Village Centre and achieve transition from the Village Centre on the east to the lower scale residential development to the west and north.
- 3 To provide improved and flexible amalgamation opportunities for development.
- 4 To preserve existing vegetation and landscape character to the rear of the existing lots and along the streets.
- 5 To safeguard the potential for widening Coxs Lane in the future if required.



Finlayson Street Block 1 Plan

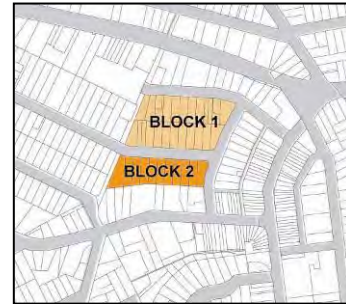


NOTE: BLOCK PLAN CONTROLS WILL BE APPLIED WITH FLEXIBILITY BASED ON ACHIEVEMENT OF OBJECTIVES (& SEE PART B: GENERAL)

FINLAYSON STREET		Block 1	
	CONTROL	PROVISION	NOTES/LOCATION
1	Height	18m 5 storeys maximum	(LEP control) Council resolution 4 8 08
2	Uses	High density residential	
3	Building Separation	12m	Unless otherwise specified (see diagram)
4	Building Footprint	Maximum 18m depth	
5	Building Setback	6m	To Rosenthal Avenue, Birdwood Avenue and Finlayson Street
		9m	To Coxs Lane (3m road dedication for possible future widening of Coxs Lane)
		9m	To rear of lots
		Plus 3m above 4th floor	To Rosenthal Avenue, Birdwood Avenue and Finlayson Street
		Plus 6m above 4th floor	To Coxs Lane
6	Pedestrian Entry/ Address	From Finlayson Street, Rosenthal Avenue and Birdwood Avenue	
7	Vehicle Entry	From Birdwood Avenue, Finlayson Street and Rosenthal Avenue	Access to 2, 4 and 4A Birdwood Ave is to be from the western end of the development site.
8	Carparking	Underground	
9	Building Orientation/ Length	Minimum 18m frontage Maximum 34m frontage	To Birdwood Avenue and Finlayson Street. Building length permitted to increase beyond 34m if façade articulation etc is satisfactory in streetscape.
10	Landscaping / Public Domain	Street trees, footpath and lighting improvements to Birdwood Avenue, Rosenthal Avenue and Finlayson Street.	Tree species to be agreed with Council Paving design, upgrades and specifications to be arranged with Council
<p>Note: The additional 3.0m setback to Coxs Lane should be taken into consideration for any future development on the sites along the western end of the Finlayson Street Block. Developers should note this setback when preparing potential development solutions to avoid creation of isolated sites or demonstrating that no site shall be undermined of its development potential.</p>			

Block 2

Block 2 is located in the precinct area bound by Finlayson Street to the north, Burns Bay Road to the south, Coxs Lane to the west and Rosenthal Avenue to the east.



Block key

Objectives

- 1 To provide increased density close to facilities through new development and to provide transition from the Village Centre to the south and west to the lower scale residential development.
- 2 To provide new development that achieves design excellence.
- 3 To provide improved and flexible amalgamation opportunities for development.
- 4 To preserve existing vegetation and landscape character to the rear of residential lots and along streets.
- 5 To provide a landscape buffer from commercial to residential uses to the south of the lots.
- 6 To provide good quality communal open spaces for the residents.
- 7 To encourage provision for a pedestrian link through to Burns Bay Road.



NOTE: BLOCK PLAN CONTROLS WILL BE APPLIED WITH FLEXIBILITY BASED ON ACHIEVEMENT OF OBJECTIVES (SEE PART B: GENERAL)

FINLAYSON STREET Block 2			
	CONTROL	PROVISION	NOTES/LOCATION
1	Height	18m 5 storeys maximum	(LEP control) Council resolution 4 8 08
2	Uses	High density residential	
3	Building Separation	12m	
4	Building Footprint	Maximum depth 18m	
5	Building Setback	6m 9m 9m Plus 3m above 4 floor Plus 6m above 4 th floor	To Rosenthal Avenue, Finlayson Street and heritage item To Coxs Lane (3m road dedication for possible future widening of Coxs Lane) To rear of residential lots To Rosenthal Avenue, Finlayson Street and heritage item To Coxs Lane to achieve transition
6	Pedestrian Entry/ Address	From Finlayson Street, Coxs Lane and Rosenthal Avenue	
7	Vehicle Entry	Finlayson Street, Rosenthal Avenue and Coxs Lane	
8	Carparking	Underground	
9	Building Orientation/ Length	Minimum 18m frontage Maximum 34m frontage	To Finlayson Street. Building length permitted to increase beyond 34m if façade articulation etc is satisfactory in streetscape.
10	Landscaping / Public Domain	Street trees, footpath and lighting upgrades to Finlayson Street, Rosenthal Avenue and Coxs Lane	Tree species to be agreed with Council Paving design, upgrades and specifications to be agreed with Council
<p>Note: The additional 3.0m setback to Coxs Lane should be taken into consideration for any future development on the sites along the western end of the Finlayson Street Block. Developers should note this setback when preparing potential development solutions to avoid creation of isolated sites or demonstrating that no site shall be undermined of its development potential.</p>			

Locality 3 - Longueville Precinct

DEFERRED – BLOCK PLANS (MAP AND TABLE) NO LONGER APPLY – SEE GENERAL PROVISIONS FOR RESIDENTIAL FLAT BUILDINGS – HOWEVER, OBJECTIVES STILL RELEVANT UNLESS OTHERWISE SPECIFIED.

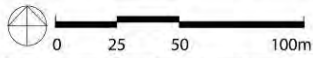


Block key









The Longueville Precinct is bound by Longueville Road to the south, Taylors Lane to the north and Burley Street and Pacific Highway to the east.

Objectives

- 1 To provide new gateway development that achieves design excellence to mark the northern gateway into Longueville Road from Pacific Highway. **DEFERRED**
- 2 To provide significant landscaping features to mark the entrance to Lane Cove.
- 3 To provide high quality mid rise residential development along Longueville Road.
- 4 To improve vehicular access safety and amenity along Longueville Road and Taylors Lane.
- 5 To provide improved and flexible amalgamation opportunities for development.
- 6 To improve the connectivity for pedestrians within the northern residential areas and to other uses across Longueville Road and Lane Cove Village.
- 7 To improve the amenity of pedestrian links to the bus station.
- 8 To provide high quality communal open spaces to the northern boundaries and to Taylors Lane.
- 9 To provide adequate transition to the rear of residential uses facing Kara Street.
- 10 To provide a landscape buffer to improve amenity to Longueville Road.



Longueville Precinct

	Podium footprint		Activation
	Area in which building footprint can be located		Proposed road dedication
	2m deep articulation zone		Existing pedestrian connection
	Vegetation buffer		Overhead pedestrian bridge

Longueville Precinct			
	CONTROL	PROVISION	NOTES/LOCATION
1	Height	18m 25 m	(LEP Control)To Longueville Road and Taylors Lane (LEP Control)To intersection of Burley Street, Pacific Highway and Longueville Road
2	Street Frontage Height	9.5 m	Applicable only to block at the intersection of Burley Street, Pacific Highway and Longueville Road
3	Building Footprint	18m maximum depth	
4	Setbacks	6m 8m 6m 6m 9m Plus 3m above 4 storeys Plus 6m above 2 storeys Plus 4m above 2 storeys	To Longueville Road for landscape buffer To Burley Street To adjacent properties To Taylors Lane To rear boundaries of dwellings facing Kara Street To Longueville Road, Taylors Lane and pedestrian connection To Burley Street To intersection of Longueville Road and Pacific Highway
5	Building Length/ Orientation	40m maximum building frontage 18m minimum building frontage	To Longueville Road and Taylors Lane To Longueville Road and Taylors Lane
6	Pedestrian Entry/ Address	From Longueville Road, Taylors Lane and both new and existing pedestrian link	Address is to be provided to both highway and Taylors Lane
7	Vehicle Entry	Via Taylors Lane Via Longueville Road	Allowed only for dwellings without access to Taylors Lane – subject to RTA requirements
8	Road Dedication	3.8m 5.5m carriageway 12m min. diameter	For provision of 1.5m footpath and parallel parking bays separated by verge to the southern side of Taylors Lane Cul-de-sac provision to the west end of Taylors Lane
9	Carparking	Underground On street parking	To Taylors Lane
10	Mid Block Pedestrian Connection/s	2.5m minimum width extending from Longueville Road to Taylors Lane	<ul style="list-style-type: none"> To be incorporated within required building separation Final location to be decided after negotiations with Council and its requirements subject to the amalgamation and development proposal To link with footpath connecting to Kara Street

11	Landscaping / Open Space/ Public Domain	<ul style="list-style-type: none"> • Front setback to be treated as a landscape buffer • Preserve existing mature trees • New street trees to Longueville Road, Taylors Lane and Pacific Highway • 25 percent minimum communal open space to Taylors Lane frontage and between residential buildings • Street trees, footpath and lighting upgrades 	<p>Along landscape buffer</p> <p>Trees species to be agreed with Council</p> <p>To Taylors Lane and Longueville Road</p>
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Locality 4 – Mafeking Precinct

DEFERRED – BLOCK PLANS (MAP AND TABLE) NO LONGER APPLY – SEE GENERAL PROVISIONS FOR RESIDENTIAL FLAT BUILDINGS – HOWEVER, OBJECTIVES STILL RELEVANT UNLESS OTHERWISE SPECIFIED.



Locality 2 is located in the precinct area bound to the north by Longueville Road, by Pacific Highway to the east, Gatacre Avenue to the south and Mafeking Avenue to the west.

Objectives

- 1 To provide new gateway development to mark the southern gateway into Longueville Road from Pacific Highway.
- 2 To provide improved safety and amenity for pedestrians and cyclists along Pacific Hwy and Longueville Rd.
- 3 To provide activation to Pacific Highway and Gatacre Avenue and improved amenity to Mafeking Avenue.
- 4 To provide improved and flexible amalgamation opportunities for development.
- 5 To provide high quality communal open spaces to the western boundary to Mafeking Ave
- 6 To provide a noise buffer, while maintaining reasonable solar access, for the residents to the south-west.
- 7 To provide appropriate transition to the adjoining residential uses.



PART C: RESIDENTIAL LOCALITIES

Mafeking Precinct			
	CONTROL	PROVISION	NOTES/LOCATION
1	Height	LEP control	LEP control
2	Street Frontage Height	2 storeys to Pacific Highway 2 storeys to Gatacre Avenue 2 storeys to Mafeking Avenue	
3	Uses	Active uses – street level retail / showroom SOHO/Residential Uses	To Pacific Highway and Gatacre Avenue To Mafeking Avenue
4	Building Separation above podium	12m	Building form preferred is towers allowing sunlight to residences to south, above a continuous low podium as noise buffer.
5	Footprint	Maximum 1200m ²	For commercial use only
6	Setback	0m (commercial generally) 6m 6m above podium 6m above podium	To Pacific Highway and Gatacre Avenue. Setback to Pac Hwy 4m to allow shared off-road pedestrian / cycling facility. To Mafeking Avenue and adjoining properties To all streets To all streets and adjoining properties
7	Colonnade	N/A	
8	Pedestrian Entry / Address		From Pacific Highway, Gatacre Avenue and Mafeking Avenue
9	Vehicle Entry		Mafeking Avenue – while minimising impact on existing residents.
10	Car parking	Underground	To be sleeved by development on Mafeking Avenue
11	Mid block connection	N/A	
12	Building length above podium	40m maximum	To Pacific Highway and Mafeking Avenue
13	Landscaping / Open Space/ Public Domain	Street trees to Pacific Hwy, Gatacre Avenue and Mafeking Avenue	Tree species to be agreed with Council. Paving design, upgrades and specifications to be arranged with Council.

Locality 5 - Greenwich Heritage Conservation Area

The Greenwich Heritage Conservation Area's (HCA) character and heritage values are derived from a combination of elements, ranging from its topography, historical development, subdivision and development pattern, building form, materials and details to landscaping.

A proposal for any development in the HCA or in the vicinity of any heritage item should be supported by a Heritage Impact Statement (HIS). For minor works, the HIS may comprise a simple statement describing how the work will impact on heritage items and for more complex developments, a comprehensive report prepared by accredited heritage consultant will be required

1 Overall Objectives

The overall objectives are:

- 1 Retain and conserve the heritage significance and significant characteristics of the HCA.
- 2 Allow removal/alteration of uncharacteristic features that detract from the significance of the HCA.
- 3 Retain and conserve heritage items.
- 4 Retain the significant landscaped characteristics of the HCA, including the garden setting of residences, enhanced by street planting, grass verges, stone walls and fences, natural features such as the 'live rock' sandstone outcrops, and the exotic and indigenous vegetation that permeates the area.
- 5 Encourage the restoration of heritage items that have been unsympathetically altered.
- 6 Ensure that development is compatible with the heritage significance and significant characteristics of the HCA. Development should respect the principles contained in The Burra Charter.
- 7 The diversity of architectural forms and differentiation of layers of historical development should be recognised in the built fabric of the Conservation Area.
- 8 Modern architectural design of high standard is encouraged, provided it is compatible with the traditional forms of the Conservation Area, and it can be demonstrated by HIS that positive impact will arise in relation to significant elements.

2 Streetscape Conservation

Explanation

In order to retain the heritage significance of the HCA it is important that development—including alterations, additions and new buildings—generally does not adversely affect the heritage significance of streetscape settings or adjoining significant items, and does not obscure the view of items from the public domain.

The HCA has a complex and varied subdivision pattern, which demonstrates the different historical stages of its development and contributes to the area's aesthetically significant visual complexity.

Objectives

The objectives for streetscape conservation are to:

- 1 Conserve evidence of the HCA's subdivision pattern, which demonstrates the different historical stages of its development from the mid-to-late nineteenth-century suburb of marine villas to the closer more intense subdivision of the twentieth-century more modest houses that contribute to the area's aesthetically distinctive character.
- 2 Retain the low density residential character established by the subdivision and mix of dwelling styles and sizes found in the HCA, ranging from substantial mid-to-late Victorian and Federation homes to more modest mid-twentieth and grander late-twentieth-century houses.
- 3 Conserve significant built evidence of the development of the HCA during the Victorian, Federation, interwar, postwar and modern periods.
- 4 Conserve significant natural and cultural landscape features.

Provisions

- a) All buildings and landscape features should contribute to the significance of the HCA.
- b) The existing street pattern and configuration is to be retained.
- c) The existing subdivision and allotment pattern within the area should be maintained.
- d) The subdivision of large allotments into narrower allotments, resulting in houses sited in gardens that are too small in proportion to the size of the houses, or require an additional driveway crossing, will not be permitted.
- e) Remnants of historic estates (such as Greenwich House) will not be permitted to be further subdivided to avoid detrimental impact on their character, identity and significance.
- f) New lots will not be permitted which create the potential for new dwellings unless it is demonstrated that there will be no adverse impact upon existing heritage items or the HCA.
- g) New buildings and alterations should maintain the predominant front and side setbacks in the street or in the vicinity.
- h) Side setbacks should allow views between buildings, often water views.
- i) Amalgamation of allotments may be permitted if the resulting development is compatible with the established character of detached dwellings on separate allotments.
- j) Extensive cut and fill, retaining walls or other construction that would visually disrupt the natural landform, important natural features such as live rock outcrops, or streetscape character should not be permitted.

3 Alterations and Additions

Explanation

Building setbacks, the degree of site coverage, building height, building form and the level at which a building is located on its site vary according to subdivision pattern, lot size, building type, historic context and topography. This diversity is an important aesthetic quality of the HCA.

Objectives

The objectives for alterations and additions are:

- 1 Alterations and additions to existing buildings should retain the intactness and consistency of the streetscape and retain elements that contribute to the significance of the HCA.
- 2 Ensure that alterations and additions to existing buildings do not adversely affect significant characteristics of the streetscape.
- 3 Ensure that alterations and additions to buildings that contribute to the significance of the HCA respect the streetscape value of these buildings and are compatible with the original architectural style, form, massing, details, materials and finishes of the item.
- 4 Encourage the removal of unsympathetic alterations to existing buildings.

Provisions

- a) The established street setback should be maintained.
- b) The scale (height and size) of additions are to be sympathetic to that of neighbouring buildings.
- c) The form (massing and building arrangement) of additions should complement and not detract from the existing building. Additions shall generally match the roof pitch, form and proportions of the existing building. Outward-falling skillion or 'lean-to' additions may be permitted at the rear of significant buildings, as this is a traditional form of building extension. Alternative architectural treatment will be considered only if it can be demonstrated that there will be no resulting impact on heritage items.
- d) Altering a heritage item to change its style or appearance will not be permitted.
- e) The character or 'style' of additions to significant buildings is to be complementary to their original design and not detract from the streetscape value of the building. It should be possible to differentiate the new from the old on close inspection (but this does not imply unnecessary exaggeration or false historicism).
- f) Where the addition is not visible from the street or the water (harbour or river), its style and/or character may be less important and there may be greater flexibility allowed in design. For example, in such cases a sympathetic contemporary design may be appropriate for a new addition at the rear of an existing house provided the proposal will achieve a cohesive relationship between new and existing fabric, and meets other objectives in the conservation of the HCA.
- g) Building alignments at the rear should be compatible with the alignment of the adjacent buildings and the prevailing development pattern.
- h) Additions to the front or side of an existing building will not be permitted, unless it can be demonstrated by HIS that the proposal will contribute positively to the streetscape, or the

work includes reconstruction of missing components which completes the integrity of the heritage item.

4 New Building or Replacement Development

Explanation

The siting and alignment of infill or replacement development will be important in the streetscapes of Greenwich. There is a prevailing pattern of consistent setbacks from the street and from side boundaries. Appropriate development will result in new structures that complement and enhance the existing character of the area.

Compared with heritage items, there is greater scope for design flexibility with new buildings,, provided the proposed work would not detract from the significance or character of the streetscape, individual heritage items, or the HCA generally.

Objectives

The objectives for new building or replacement development are to:

- 1 Ensure that a new building or replacement development, including development in the vicinity of individual heritage items, respects and conserves the significance and characteristics of the HCA.
- 2 Ensure that new development satisfies 'infill' principles, ie is appropriate to its context in terms of scale, massing, character, orientation, siting, setback, materials and detailing.
- 3 Ensure that new development retains an appropriate visual setting for heritage items in the conservation area (consistent with Article 8 of The Burra Charter).

Provisions

- a) Proportions of built area to garden space is to be similar to the typical pattern.
- b) New buildings should respect the prevailing development pattern and reflect the footprint of heritage items on adjacent or nearby properties.
- c) Buildings should not stand forward of adjacent buildings in the streetscape or project into rear yards beyond the established rear alignment of existing buildings.
- d) New buildings are to relate to the predominant scale of those surrounding.
- e) Building form and character of new and infill development should complement the form and character of neighbouring heritage items.. The form and elevational treatment of new buildings should be well articulated or broken up with roof forms sympathetic to those characteristically found in the streetscape. Roofs should generally be of a form, complexity and pitch that relate to buildings nearby.
- f) Contemporary design for infill development and for additions to significant items is to respect its context and achieve a cohesive relationship with historically significant existing fabric (nearby heritage items, and/or the fabric of items being worked upon).
- g) Development of properties with frontages on two streets should respect the predominant pattern of front yards facing one street and rear yards facing the other. High fencing may be permitted on the rear or side yard frontage (behind the front building line), provided that it is of a traditional type, eg 1.8m timber paling or joinery fence.

- h) Buildings should not mimic existing Victorian, Federation or Inter-War buildings in character and details. Contemporary interpretation of traditional characteristics and details is more appropriate.

5 Garages, Carports and Outbuildings

Explanation

Garages built to street alignments can form inappropriate intrusions to streetscapes, and the provision of new driveway crossovers often results in the removal of street trees, a reduction in the number of on-street parking spaces and the loss of sections of early stone kerbing (see photo 7). However, in Greenwich, surviving older garages are not always set behind the house they serve, due to the irregular topography of many of the sites.

Parking areas, garages and driveways must be designed carefully so that they do not detract from the appearance of the development and the surrounding streetscape.

Objectives

The objectives for garages, carports and outbuildings are to:

- 1 Ensure that new garages, carports and other structures are sited and designed to respect the established development pattern of the area.
- 2 Retain an appropriate setting for heritage items..
- 3 Ensure that residential buildings, rather than vehicle access and parking structures, remain the dominant elements in the streetscape.

Provisions

- a) Garages are to be separately articulated from the rest of the building.
- b) Driveways and driveway crossings are to be a single car width with minimum hard-surface area.
- c) It is encouraged that carports be sited behind the main building line. Where this is not possible / practical, they should be designed sympathetically with the existing pattern of vehicle accommodation and development. Garages must be provided behind the front building line (same policy as for whole LGA).
- d) Double garages (side-by-side or tandem) will not be permitted, other than at the rear of the block or otherwise screened from view.
- e) Garages are to be of a scale, form and character compatible with traditional garage forms especially where they are visible from the street.
- f) Garages/carports or garage doors are not to be built into the street facade of houses, so that they appear to replace a normal room with a garage and its associated door.
- g) Sheds and other outbuildings/structures are to be located in rear yards.



Photo 7 Large garage doors and wide driveways can be dominant in the streetscape.

6 Details and Materials

Explanation

Buildings in the HCA have been constructed in a variety of external materials, finishes and colours characteristic of particular architectural styles, building types or periods of construction.

The use of modern materials and finishes may be appropriate for new development and alterations and additions, provided it does not compromise a cohesive relationship between new and existing urban fabric.

Objectives

The objectives for details and materials are to:

- 1 Retain details and materials that contribute to the significance of the HCA.
- 2 Ensure that new details, materials and colours are compatible with significant buildings and landscape elements.
- 3 Encourage the restoration and reconstruction of missing detailed elements on heritage items.

Provisions

- a) Roofs are to be of traditional materials, such as slate, terracotta Marseilles pattern tiles or corrugated steel,.
- b) Changing the form and material of existing roofs of heritage items, especially the main roof will not be permitted, unless it has previously been unsympathetically altered and the work reverses such inappropriate changes.
- c) New dormer windows, if required for attic rooms, should be located at the rear of buildings.
- d) Traditional colour schemes should be used for heritage items.
- e) Alterations to, heritage items, where visible from the street, are to use materials and detailing that generally match and respect the original as closely as possible, but are discernible on close inspection.
- f) Additions should be compatible with the streetscape and the character of the existing house.
- g) New buildings materials and details should respect the scale and proportions of door and window openings in the HCA. For example, Victorian, Federation and Inter-War buildings are predominantly brick with relatively small openings. Windows are generally vertically proportioned or broken up into vertically proportioned components. Large or horizontally proportioned openings are generally appropriate only in the case of Late C20th items or in a location where they will have no impact on traditional buildings
- h) New buildings should use materials, details and colours that acknowledge neighbouring significant buildings, without directly copying them. Exposed brickwork to be used in preference to rendered and painted walls, as most significant buildings have exposed brick walls.
- i) For new buildings, contemporary materials may be used where their proportions, detailing and quantities are consistent with the existing and desired future character of the HCA.
- j) New openings to the facades of heritage items are to be avoided, except where minimal impact can be demonstrated.
- k) Original details should not be removed from the front or visible elevations of heritage items.
- l) Unsympathetic ornamentation to heritage items or buildings in the HCA, such as cast-iron lace to Federation or Inter-War-period buildings, will not be permitted.
- m) Mottled, speckled, or light-coloured brickwork of obtrusive colour or texture will not be permitted.
- n) Highly-patterned or brightly-coloured paving, such as that employed in some 'faux finish' systems will not be permitted.

7 Fences, Garden Walls and Gates

Explanation

Carefully designed fences and walls help to integrate developments into the existing streetscape. When poorly designed, however, they have the potential to unduly dominate the streetscape. In Greenwich, many fences and walls respond to the site topography in distinctive ways.

Objectives

The objectives for fences, garden walls and gates are to:

- 1 Ensure that fences, garden walls and gates contribute positively to the significance of the HCA.
- 2 Encourage the replacement of non-original, intrusive high masonry fences on street alignments and prevent the construction of new high masonry fences on street alignments.

Provisions

- a) Original boundary fences and treatments should be restored or reconstructed where necessary.
- b) New front fences or walls to be of traditional low height (generally 900mm to 1,200mm) and be compatible with characteristic existing forms and materials.
- c) Side fences are to be of traditional wooden paling or lapped-and-capped timber, lower in height at the front garden to match the height of the front fence. High fencing may be permitted on the rear or side yard frontage, provided that it is of a traditional type, for example 1.8m timber paling or lapped, capped and stained fence in accordance with the fencing section of the Lane Cove DCP.
- d) New or replacement boundary treatments for properties containing significant buildings are to be sympathetic to the period to which the building relates.
- e) New or replacement fences are to incorporate root barriers at the street front boundary where street trees occur.
- f) New or replacement boundary treatments that are not compatible with the established significant characteristics of the HCA will not be permitted, such as some imitation metal palisade railings and brick pillars.
- g) New solid privacy walls or high front fences will not be permitted.

8 Gardens, Open Space and Landscaping

Explanation

Integrated landscape design can enhance the appearance, amenity and energy efficiency of housing. Landscaping appropriate to building type and period of construction will contribute to the character of the HCA.

Objectives

The objectives for gardens, open space and landscaping are to:

- 1 Safeguard gardens as a significant characteristic of the HCA, with the retention of garden space at the front, side and rear of properties.
- 2 Retain traditional gardens or planting layouts where they exist.
- 3 Ensure that swimming pools, spas pools and tennis courts be located where they are not visible from the public domain, and where they would not have a negative impact upon the significance of the HCA.
- 4 Ensure that private open space areas, plantings, swimming pools, spa pools and tennis courts are designed to minimise adverse impacts on the heritage significance of the area and the fabric of significant buildings, and achieve consolidation of the HCA's values.
- 5 Retain garden elements and structures, paved surfaces and other structures that date from the original or early design and construction period of the house they serve i.e. garden layout, pathways and driveway surfaces.

Provisions

- a) Existing mature trees are to be retained, subject to Council's Tree Preservation Order and Significant Tree Policy.
- b) Garden layouts and plantings should be retained if they relate to the period to which the house belongs.
- c) Gardens should be large enough to include medium-sized to large-sized trees in front and rear yards.
- d) New development (including swimming pools and tennis courts) is to be located an appropriate distance from the root zone, canopy and the trunk of a indigenous tree or other significant mature tree unless an arborist specifically advises that the development would not affect the viability of the tree and is retained throughout construction to monitor its protection.
- e) Demolishing existing buildings or removing significant landscape features for the purpose of introducing car parking, tennis courts or swimming pools will not be permitted, particularly where this would affect the established development pattern.

9 Public Domain

Explanation

The public domain describes those areas of land owned and/or managed by Council or other public authorities. The public domain includes roadways, gutters, kerbs, footpaths, cycle paths, street name inlays, retaining walls, landscaped verges and reserves, waterways, natural landforms and other elements located beyond private property boundaries.

The public domain plays a particularly significant role in creating the overall character of the Greenwich HCA. It is therefore important that a consistent approach is taken to managing public domain elements.

Objectives

The objectives for public domain are:

- 1 Retain and enhance significant features of the public domain such as views to, from and within the HCA.
- 2 Ensure that new elements are appropriately designed and managed to retain and enhance the character of the HCA.
- 3 Ensure that new work within the public domain (such as that undertaken by Council) respects and reflects the significance of the HCA.
- 4 Informal pathways (unmade roads) to be retained.

Provisions

- a) All existing streetscape or building elements that contribute to the character of the HCA are to be retained, such as stone kerbs, stone steps, retaining walls, grass verges and 'live rock' stone outcrops.
- b) Existing tree planting and canopy shall be retained and gaps should be filled where street trees are missing or have been lost.
- c) The extensive foreshore parks, reserves, footpaths, and the formal layout of existing park areas shall be retained.
- d) Introducing streetscape or building elements that are unsympathetic to the character of the HCA should be avoided.
- e) Obtrusive traffic-calming devices, such as roundabouts, which would disrupt the streetscape pattern and change its visual and aesthetic character should be avoided.
- f) Residents are prohibited from planting on verges, in parks or within the foreshore reserves.

Locality 6 – Mowbray Precinct



Objectives

The objectives for public domain are:

- 1 To preserve and enhance the landscape character of the area and provide for future significant vegetation, such as large and medium sized trees.
- 2 To minimise development impacts, such as stormwater runoff and bushfire measures, on Batten Reserve & Stringybark Creek.
- 3 To protect the natural environment including the Batten Reserve Bushland.
- 4 To enhance the amenity of the existing and future residents in the precinct.
- 5 To provide an appropriate transition to the adjoining residential uses.
- 6 To retain the treed outlook onto the Precinct from the dwellings to the south,
- 7 To provide good quality communal open spaces for the residents.

Provisions

- a) A maximum number of residential storeys applies, relating to the LEP height limits, as follows:
 - I. LEP maximum height 11.5m – 3 residential storeys
 - II. LEP maximum height 14.5m – 4 residential storeys
 - III. LEP maximum height 17.5m – 5 storeys, subject to b) below.

- b) Any 5th storey is to have a maximum of 50% floor area of the storey below, and be set back 3m from that lower storey's building façade line.
- c) A minimum deep soil area of 40% of the site is to be provided for residential flat buildings.
- d) Tree retention, and the planting of new trees, is to be encouraged. Driveway design should avoid tree loss on Council land.
- e) Development applications at the interface between the high and low density residential zones are to demonstrate that the amenity of adjacent houses has been a design consideration by stepping the building in at least 3m after the second level.
- f) Development proposals are to be in character with the palette of materials, finishes and design elements that are in harmony with the natural landscape and complementary with the bushland setting of the precinct. In addition, roof form articulation is encouraged.
- g) As the precinct is in a bushfire prone area, buildings are to be constructed to meet Australian Standard 3959-2009 - Construction of buildings in bushfire-prone areas.
- h) The asset protection zone (APZ) is to be measured from the top of the kerb on the side of the road adjacent to the reserve (where there is a perimeter road) or measured inwards from the residential lot boundary adjacent to the reserve (where there is no perimeter road).

Locality 7 – 266 Longueville Road

Objectives

The objectives for public domain are:

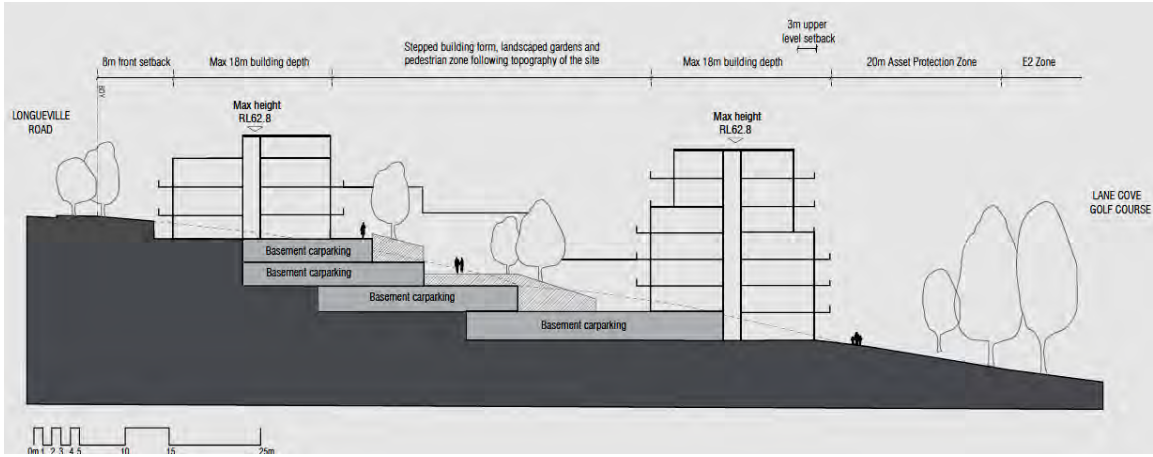
- 1 To provide for urban renewal and increased residential density close to the Northwood Neighbourhood Centre and Precinct, public transport and community amenities such as the Lane Cove Golf Course and Country Club.
- 2 To create a development which sets a benchmark in design excellence particularly for Senior's Living, provides housing choice (including Senior's Living accommodation) and promotes environmental sustainability principles.
- 3 To ensure new development is compatible in scale with surrounding residential buildings and is considerate of the amenity of neighbouring properties. In particular, to provide for transitional bulk and scale at the interfaces of the site sensitive to adjoining housing types and land uses.
- 4 To enhance future connections and access to natural and recreational amenity, in particular, pedestrian connections between Longueville Road and the Lane Cove Golf Course and Country Club.
- 5 To ensure future redevelopment preserves and enhances the native bushland and ecosystems present at the eastern boundary of the site.
- 6 To encourage building types that respond to the topography and bush interface of the site, including designs which incorporate upper level setbacks and articulation responsive to the sloping site and adjoining land uses.
- 7 To minimise interruptions to visual connections from Longueville Road through to North Sydney.
- 8 To ensure buildings are aligned to and address the street, provide articulation and establish a positive streetscape character which enhances the public domain and reinforces the hierarchy of local streets.



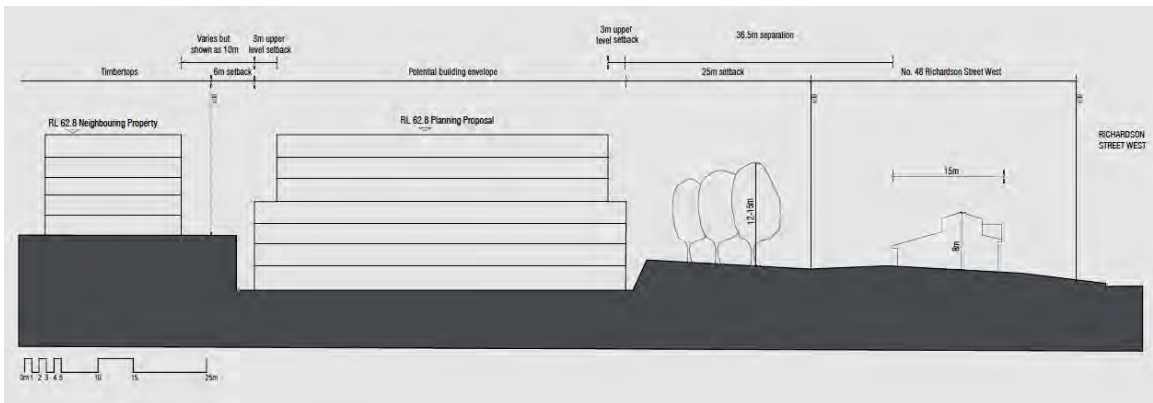
This illustration shows key building controls and indicative building footprints for 266 Longueville Road

KEY	
	Area available for development
	Setbacks
	Parkland
	Open/green space
	Fire Asset Protection Zone (APZ) - 20m
	E2 Environmental Protection Zone
	RE1 Public Recreation
	Indicative Pedestrian through-site link (subject to detailed design)
	Existing view catchment

Indicative east-west cross-section through the site demonstrates the key building controls for 266 Longueville Road.



Indicative north-south cross-section through the site demonstrates the key building controls for 266 Longueville Road including setbacks between neighbouring properties.



266 Longueville Road			
	CONTROL	PROVISION	NOTES/LOCATION
1	Height	LEP Control	LEP Control
2	Land Use	LEP Control	LEP Control
3	Floor Space Ratio	LEP Control	LEP Control
4	Building Separation	12m 18m	up to 4 storeys 5 storeys and up (address SEPP 65 objectives and controls)
5	Building Depth	Maximum 18m depth excluding balconies	Maximum 18m depth excluding balconies
6	Building Setback	8m 6m* (up to 4 storeys) *Plus 3m above 4th floor 12m 20m (from rear boundary of R4 zone)	Front (Longueville Road) Side (southern) (refer to SEPP 65 controls for increased side setbacks and at the bush interface above 4 storeys) Adjacent R2 Residential zone (northern) Rear (Asset Protection Zone - bushfire protection)
7	Vehicle Entry	Longueville Road	Limited to one access point and utilising existing egress/easement.
8	Carparking	Underground	Should not be visible above ground and the structure should be stepped down the site. Soft landscaping is to be utilized above car parking structures to disguise in the landscape.
9	Building Orientation/Length	Max 40m	Orientated to Longueville Road.
10	Views and Vistas	Views from Longueville Road through to North Sydney and native bushland should be maintained where possible.	Buildings and land uses should be configured to minimise interruptions to views across to North Sydney. This may be by way of through-site links and proposed open space areas that facilitate views from the Longueville Road Ridge across the valley to North Sydney.
11	Pedestrian Connection/ Through-site link	Longueville Road	A through-site pedestrian connection is to be provided (at a suitable grade and in accordance with AS1428.1) through the site from Longueville Road for future extension by Council to the Lane Cove Golf Course and Country Club. The exact location of the pathway will be determined as part of a holistic site design concept, but should be set back a minimum of 2m from the northern boundary. The minimum width of the path is to be 2m.
12	Landscaping/Public Park	Native bushland to be retained and provide landscape buffer to Golf Course.	LEP

266 Longueville Road			
	CONTROL	PROVISION	NOTES/LOCATION
		<p>Provision of green link and lineal park from the Longueville Road frontage.</p> <p>Integration of pedestrian through-site link from Longueville Road to Golf Course.</p>	<p>To be determined following site design concepts. Should be easily accessible to the public and form part of the pedestrian through-site connection linking the broader green space network. Any public furniture or equipment should be setback a minimum of 3m from adjoining residential development.</p> <p>Consideration of broader context and pedestrian network. Integration of lighting to improve natural surveillance, visibility and security.</p>
13	Landscaping buffer to southern boundary	Provide landscape buffers between buildings on 268 Longueville Road and between dominant building forms on the site.	To be determined following detailed site design concepts.

Provisions

- a) Buildings having frontage to Longueville Road are to read as a maximum of 3 storeys.
- b) Buildings at the rear of the site are not to be higher than buildings having frontage to Longueville Road.
- c) Development should step down the site and respond to the topography and slope and be well articulated and modulated to avoid bulky and excessive forms.
- d) Buildings at the interface of the bushland are to have upper-level setbacks of 3 metres above 4 storeys.
- e) Where the building meets the interface of the bushland and golf course, blank walls should be avoided and activity encouraged by locating private and public open space along this edge.
- f) The use of varying external materials and architectural embellishments on the facades of buildings is encouraged to articulate, modulate and emphasise different components of the building's form.
- g) The orientation of buildings and integration of elements to improve privacy and limit opportunities for overlooking should be considered as part of an overall design concept. Features such as privacy screens, high window-sills, landscaping and opaque materials, should be applied and in a manner that complements the overall design of the building.
- h) Accessible pathways between buildings on the site should include covered elements. These are to be well designed and include landscaping and green elements so that they integrate well with the landscape setting and public domain.
- i) Lighting should be integrated into the design of the public domain and pedestrian pathways to improve natural surveillance, visibility, and security.

- j) Landscaping should be used to reduce the visual presence of underground car parking structures with community open space and pedestrian connections integrated into systems of open space.
- k) Landscaping and structural design considerations should allow for possible roof gardens to parts of the development.
- l) The Seniors' Living accommodation should ensure good solar access to apartments and well configured common open space to the public domain, that is easily accessible.
- m) The internal configurations of dwellings should meet the minimum requirements of *State Environmental Planning Policy (Senior's Living) 2004*, including the *Senior's Living Policy: Urban Design Guidelines for Infill Development 2004 (Urban Design Advisory Service, Department of Infrastructure, Planning and Natural Resources)*.
- n) Private balconies for apartments not on the ground floor should be a minimum of 10sqm with a minimum dimension of 3m, except private balconies to one bedroom apartments not on the ground floor which should be a minimum of 6sqm with a minimum dimension of 2m.

NB: *Lane Cove Council's DCP provisions for Residential Flat Buildings and NSW's SEPP 65 provisions apply also to the Senior's Living component of this site, unless prevailed over by this site specific DCP.*

Part D

Commercial Development and Mixed Use



D

- D.1 General Provisions
- D.2 Development within (B1) Neighbourhood Centre
- D.3 Development within Lane Cove Village Centre - (B2) Local Centre and Surrounds
- D.4 Development within (B3) Commercial Zone
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D.1 General Provisions

1.1 Building Form

1.1.1 Building to street frontages

Objectives

The objectives of building to street frontages are:

1. To reinforce strong definition of streets and public spaces in the commercial and mixed use zones.
2. To improve pedestrian amenity and the quality of the public domain.

Provisions

- a) For developments within zones B1, B2 and B4 (and see Section 1.1.6 below)-
 - I. New buildings are to have street frontages built predominantly to the street alignment
 - II. Street setback of maximum 2.0m is permitted for suitable use such as outdoor seating for a cafe
- b) Circumstances where building predominantly to the street alignment may be inappropriate include development where:
 - I. The site is adjacent to a freestanding or setback heritage building. In this case, the new building should match the setback of the heritage building.
 - II. It contributes an appropriate public space at the street frontage

1.1.2 Street Frontage Heights

Street frontage heights refer to the height of the building that is built to the street alignment and therefore directly addresses the public street.

Objectives

The objectives of street frontage heights are:

1. To achieve comfortable street environments for pedestrians in terms of daylight, scale, sense of enclosure and wind mitigation as well as a healthy environment for street trees.
2. To strengthen the urban form through consistent street wall heights.

Provisions

Refer to controls for specific zones and localities.

1.1.3 Street Frontage Activities

Objectives

The objective of street frontage activities is

1. To provide active frontages and pedestrian-oriented activities that add life, particularly at ground level in the retail streets and major pedestrian streets.

Provisions

- a) Street and lane frontage uses should incorporate one, or a combination of, the following at street level:
 - I. Entrances to residential and commercial occupying less than 50% of the street frontage
 - II. Retail shop front, cafés or restaurants, if accompanied by an entry from the street
 - III. Active office uses, such as reception, if visible from the street
 - IV. Civic or community building if accompanied by an entry
 - V. Allow for visual interest on the external face of fire escapes, service doors and equipment hatches.
- b) Limit opaque or blank walls for ground floor uses to 20% of the street frontage.
- c) Minimise the extent and visual impact of vehicle entrances and other entries not associated with active uses or building entries.
- d) Provide enclosure on corner sites to define the corner.
- e) All street frontage windows at ground floor level are to have clear glazing.
- f) Security grilles are to be fitted only within the shop itself. Such grilles are to be transparent.
- g) Provide multiple entrances for large developments including an entrance on each street frontage.

1.1.4 Building Depth and Bulk

- a) For Commercial Developments in all the business zones:
 - I. The maximum floor plate area of any commercial building is to be 2,000 m² subject to other requirements in this DCP.
 - II. Buildings with large floor plates must be expressed as separate building elements of not more than 1,000 m².
 - III. The horizontal dimensions of any single building facade must not exceed 50 metres.
 - IV. All points on an office floor should be no more than 10m from a source of daylight (eg. window, atria, or light wells). The depth for office floors with openings on one

side should be a maximum of 10m. The depth for office floors with openings on two opposite sides should be a maximum of 20m.

- V. Use atria, light wells and courtyards to improve internal building amenity and achieve cross ventilation and/or stack effect ventilation.

b) For Mixed Use Developments:

- I. The maximum horizontal dimension of the residential component parallel to the street frontage is to be 40m.

1.1.5 Building Separation

The separation distance between buildings on the same site is not to be less than the setback to buildings in adjoining sites in the same business zonings. Refer to ‘Setbacks’ for different business zonings.

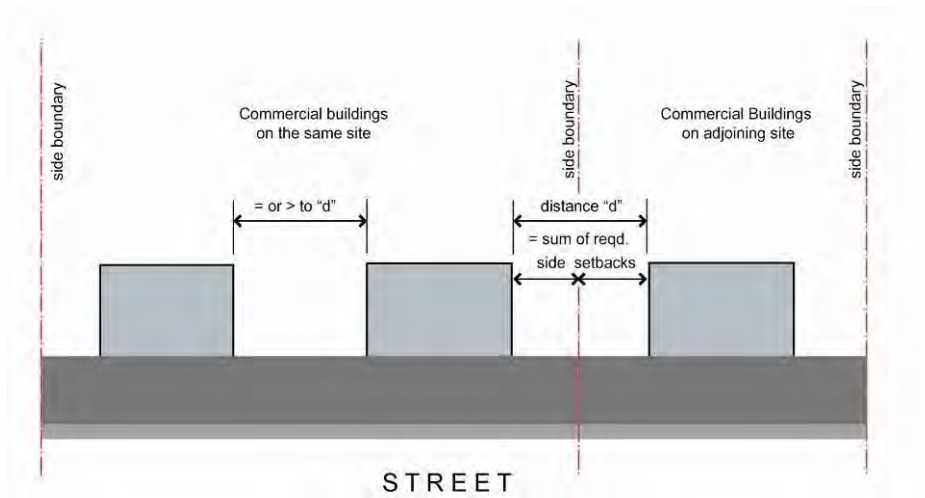


Diagram No. 1 – Building Separation

1.1.6 Setbacks

Objectives

The objective of setbacks is:

1. To reduce the impact of scale as well as assist with cross-ventilation, solar access, privacy, views sharing and to reduce adverse wind effects.

Provisions

- a) Setbacks are to comply with the following tables.

Front/Street

Zone	Height in storeys		
	1-2	3	4 or greater
B1	0m	3m	6m
B2	0m or 3m maximum on ground floor for suitable use such as outdoor cafe seating	0m	-
B3	Minimum of 5m		
B4	0m or 3m maximum on ground floor for suitable use such as outdoor cafe seating	3m	

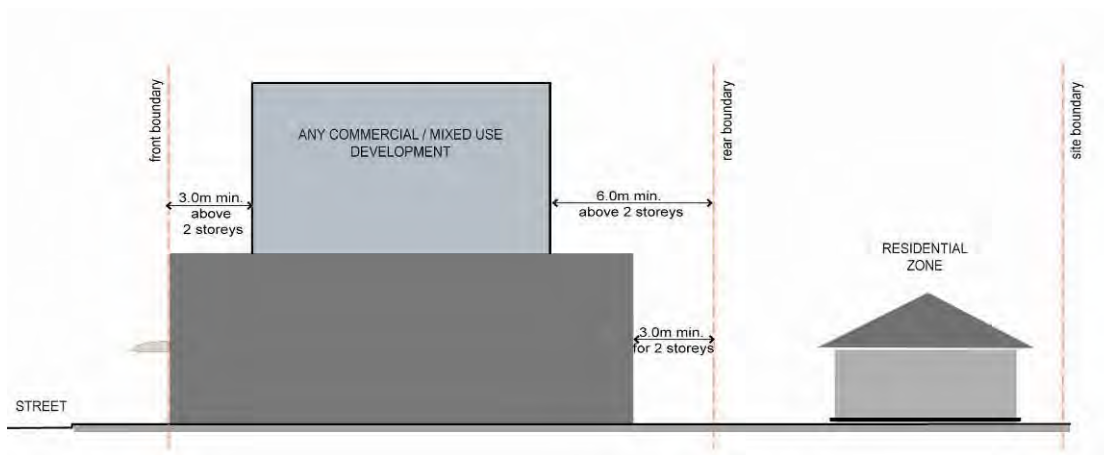


Diagram No. 2 – Setbacks

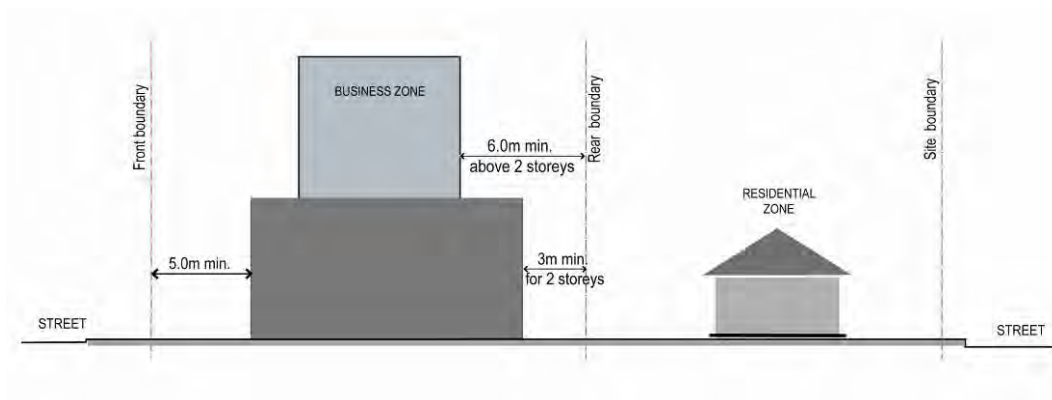


Diagram No. 3 – Front and rear setbacks in B3 Zone

Setbacks for Secondary Street Frontages for Corner Sites

Zone	Height in storeys	
	1-2	3 or greater
All business zones	0m	3m

Side Setbacks

In all the business zones except special areas;

Zone	Height in storeys		
	1	2	3 or greater
Shares a boundary with any residential zone	3m		6m
Within and among the business zones	0m	0m (commercial use) 3m (residential use/shop top housing)	6m

Rear Setbacks

In all the business zones except special areas;

Zone	Height in storeys	
	1-2	3 or greater
All business zones	3m	6m

Laneway Setbacks

Zone	Height in storeys		
	1	2	3 or greater
All business zones	3m (to allow colonnades & landscaping)	0m (commercial use) 3m (residential use/shop top housing)	6m

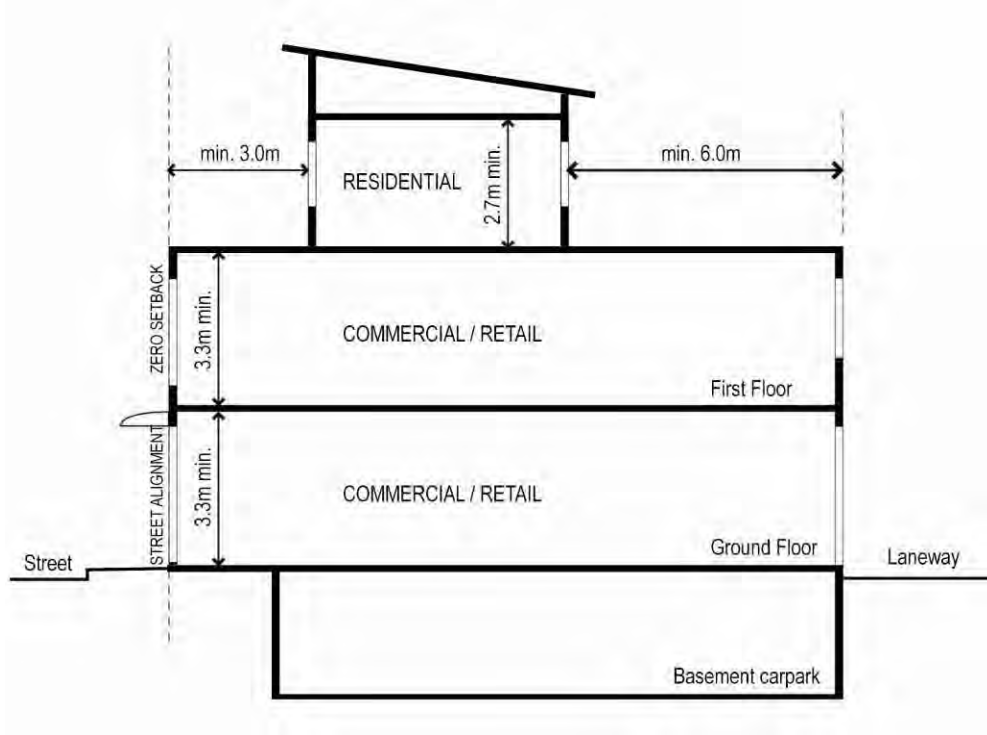


Diagram No. 4 – Setbacks to laneway with commercial on first floor

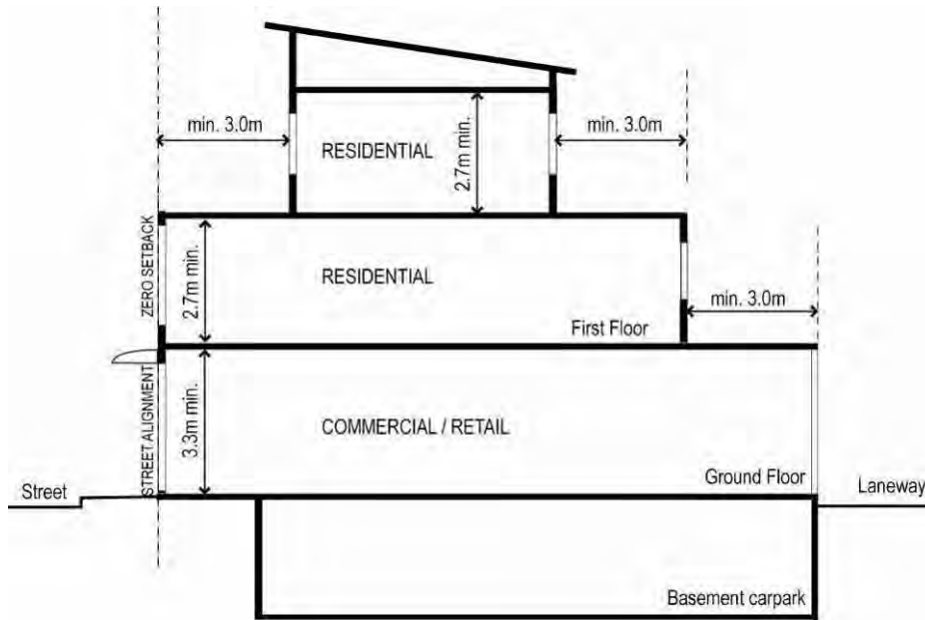


Diagram No. 5 – Setbacks to laneway with residential on first floor

1.1.7 Building Design and Exteriors

Objectives

The objectives for building design and exteriors are to achieve:

1. Attractive, cohesive and high quality streetscapes.
2. An appropriate grain and articulation to the building massing and facades.
3. An appropriate human scale, sense of enclosure and visual interest to the lower levels of all buildings.
4. Architectural excellence with iconic buildings to corners and for towers that terminate street vistas in major centres.

Provisions

- a) Floor to ceiling heights – see Diagram Nos. 4 & 5 and for mixed use development, see Part C 3.13.
- b) Materials, colours, finishes, proportion and scale of new development should add interest to façades and the streetscape.
- c) Avoid large unbroken expanses of blank wall on any facade adjacent to the public domain.
- d) Provide flexible building layouts and floor to ceiling heights which allow variable tenancies or uses on the first floor of a building above the ground floor.
- e) The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building.
- f) Balconies and terraces should be provided, particularly where buildings overlook public open spaces. They should be avoided where they overlook the private open spaces and severely impact the privacy of the adjoining residential properties
- g) Gardens on the top of setback areas of buildings are encouraged.

1.2 Excavation

Objectives

The objectives of excavation are:

1. To minimise the impact of excavation on surrounding properties.
2. To achieve reasonable landscaping within developments.
3. To ensure development relates to the street level and the topography.

Provisions

- a) All development is to relate to the existing topography of the land at the time of the adoption of this DCP.
- b) Excavation for major development is to be contained within the footprint of the

development.

- c) For development within Centres, Council may consider full site coverage for underground excavation and podium footprints where it is demonstrated that mature landscaping, landscaped area and rainwater retention is able to be provided as roof terraces on podium structures.
- d) Uses at ground level are to respond to the slope of the street by stepping frontages and entries to follow the slope.

1.3 Design and Location of On-Site parking

Objectives

The objectives for on-site parking are to:

1. Minimise the impact of vehicle access points and driveway crossovers on streetscape amenity, pedestrian & cyclist safety and the quality of the public domain by;
 - a) Designing vehicle access to required safety and traffic management standards,
 - b) Integrating vehicle access with site planning, streetscape requirements, traffic patterns, cycle routes and
 - c) Minimising potential conflict with pedestrians & cyclists.
2. Minimise the size and quantity of vehicle and service crossings to retain streetscape continuity and reinforce a high quality public domain.

Provisions

- a) Parking of vehicles is prohibited in setback areas
- b) All developments must incorporate the required car parking on-site.
- c) All on-site parking, loading facilities and vehicle access points must be:
 - I. accessed from a rear lane wherever available
 - II. fully concealed from view from any public street or arcade
 - III. accessible from only one opening in the rear lane facade for both on-site parking and loading. Access openings are to be fitted with a garage door or roller shutter.
- d) For developments with a rear lane façade width less than 12.0m this opening must not be wider than 3.0m.
- e) For developments with a rear lane façade width equal to or greater than 12.0m this opening must not be wider than 6.0m.
- f) Vehicle entry should be:
 - I. easily accessible and recognisable to motorists
 - II. located to minimise traffic hazards and queuing of vehicles on public roads
 - III. located to minimise the loss of on street car parking, and to minimise the number

of access points.

- IV. Located away from main pedestrian entries and on secondary frontages.
- V. Located having regard to any approved cycling routes.
- g) Avoid black holes in the facade for major development by providing security doors to car park entries
- h) Return the facade material into the car park entry recess up to the extent visible from the street.
- i) Parking and service/delivery areas are to be located underground within building footprint or screened from adjacent residential uses or the public domain by sleeving with active uses.
- j) Parking and service/delivery areas are to be located to minimise conflict between pedestrians/cyclists and vehicles and to minimise impact on residential amenity.
- k) Extensive areas of blank walls are to be avoided
- l) Vehicular access is not permitted along the boundary adjacent to residential zone unless there is no other practical solution.
- m) Residential and non-residential car parking spaces are to be physically separated.
- n) For residential flat buildings, generally limit the width of driveways to a maximum of 6.0m.
- o) Integrate ventilation grills or screening devices of carpark openings into the facade design and landscape design.
- p) Provide safe and secure access for building users, including direct access to residential apartments, where possible.
- q) Basement car parking is to be:
 - I. adequately ventilated
 - II. predominantly located within the building footprint
 - III. located fully below natural ground level. Where slope conditions mean that this is unachievable, the maximum basement projection above natural ground level is to be 1.2m but not to the street front.
- r) Where it is impossible to achieve the required car-parking on sites in small neighbourhood areas, an assessment of available on-street parking will be undertaken and considered in relation to any proposals. If there is adequate existing parking available, then the parking requirement may be waived or reduced.

1.4 Car Parking

Objectives

The objective of this section is to:

1. Reduce on-site car parking in proximity to public transport to facilitate use of public and alternative transport modes including walking and cycling.

1.4.1 Commercial in all areas other than St. Leonards Centre

- a) Except in the case of Shop Top Housing car parking, a cash contribution may be made to Council in lieu of required parking not provided on-site. The car parking contribution rate is listed in the Section 94 Contributions Plan (1999).
- b) For Lane Cove Village Centre see Section D3 – 3.8

1.5 Awnings

Objectives

The objectives of awnings are:

- 1 To increase pedestrian amenity by the provision of weather protection.
- 2 To create a protected transition area between internal and external spaces for public and commercial buildings.

Provisions

- a) Continuous street frontage awnings are to be provided for all new developments on main streets or major retail streets in centres except where colonnades are required.
- b) Awning design must be coordinated with building facades and be complementary in alignment and depth to the adjoining buildings and its awnings.
- c) Where a building is sited on a street corner, wrap awnings are to be provided around corners for a minimum 6.0 metres unless there is continuity in active uses and in such case they should be continued.
- d) Awnings should generally be:
 - I. Minimum soffit height of 3.3 metres.
 - II. Low profile, with slim vertical fascia or eaves (generally not to exceed 300 mm height)
 - III. Setback a minimum of 600mm from the kerb.
 - IV. Located and designed to ensure no conflict with street trees
- e) Awnings are to allow for street trees or poles via innovative solutions, which may include cut outs.

- f) To control sun access/protection, canvas blinds along the street edge may be permitted, subject to design merit and assessment.
- g) Under awning recessed lighting is to be provided to facilitate night use and public safety.

1.6 Reflectivity

Objectives

The objective of reflectivity is:

- 1 To restrict the reflection of sunlight from buildings to surrounding areas and buildings that may threaten the comfort or safety of pedestrians, cyclists or drivers.

Provisions

- a) Visible light reflectivity from building materials used on the facades of new buildings should not exceed 20%.
- b) Subject to the extent and nature of glazing and reflective materials used, a Reflectivity Report that analyses potential solar glare from the proposed development on pedestrians, cyclists or motorists may be required.

1.7 External lighting of buildings

Objectives

The objective of external lighting is:

- 1 To encourage external lighting of buildings that adds to the architectural character of the building whilst having regard to efficient use of energy and the amenity of nearby residents.

Provisions

- a) Any external lighting of buildings is to be considered with regard to:
 - I. the integration of external light fixtures with the architecture of the building (for example, highlighting external features of the building)
 - II. the contribution of the visual effects of external lighting to the character of the building, surrounds and skyline
 - III. the energy efficiency of the external lighting system
 - IV. the amenity of residents in the locality.
- b) Floodlights for buildings are prohibited.

1.8 Landscaping

Objectives

The objectives of landscaping are to:

- 1 Assist with on-site stormwater and groundwater management.
- 2 Improve the amenity of developments through the retention and/or planting of large and medium size trees.

Provisions

- a) Locate basement car parking predominately under the building footprint to maximize opportunities for landscaped area.
- b) Deep soil zones in atria, courtyards and boundary setbacks are encouraged.

1.9 Planting on Structures

Provisions

The following controls apply for planting on roof tops or over car park structures.

- a) Areas with planting on structures should be irrigated with recycled water and appropriate drainage provided.
- b) Provide sufficient soil depth and area to allow for plant establishment and growth. The recommendations are:
 - I. Large trees (canopy diameter of up to 16m at maturity)
 - i. minimum soil volume 150m³
 - ii. minimum soil depth 1.3m
 - iii. minimum soil area 10m x 10m area or equivalent
 - II. Medium trees (8m canopy diameter at maturity)
 - i. minimum soil volume 35 m³
 - ii. minimum soil depth 1m
 - iii. approximate soil area 6m x 6m or equivalent
 - III. Small trees (4m canopy diameter at maturity)
 - i. minimum soil volume 9m³
 - ii. minimum soil depth 800mm
 - iii. approximate soil area 3.5m x 3.5m or equivalent
 - IV. Shrubs
 - i. minimum soil depths 500-600mm
 - V. Ground cover
 - i. minimum soil depths 300-450mm
 - VI. Turf
 - i. minimum soil depths 100-300mm.

1.10 Solar Access

The objective for solar access is:

1. To provide reasonable solar access to habitable rooms and recreational areas of new and existing developments.

Provisions

These provisions apply to proposed developments and any residential development beyond the site.

- a) Commercial and mixed use developments are not to reduce sunlight to dwellings in the adjacent or same zone below a minimum of 3 hours of sunlight on a portion of the windows of the habitable rooms between 9am and 3pm on 21 June.
- b) Where adjacent dwellings and their open space already receive less than the standard hours of sun, new development should seek to maintain this solar access where practicable.
- c) Habitable rooms in at least 70 percent of dwellings in high density residential developments, should receive a minimum of three hours direct sunlight between 9 am and 3 pm on 21st June, in total between any portions of those rooms. In dense urban areas a minimum of two hours may be acceptable. A reasonable proportion of both the common and private open space in those sites is also to receive sunlight during that period, according to the circumstances of the sites.
- d) The number of single-aspect dwellings with a southerly aspect (SW-SE) should be limited to a maximum of 10 percent of the total dwellings within a high density residential development. Developments varying from the minimum standard due to site constraints and orientation must demonstrate how energy efficiency is addressed.
- e) Council may accept a reduction in solar access for the subject site and adjacent development if the topography and lot orientation (as distinct from a preferred design) are such that the standard is considered unreasonable.

Shadow diagrams are required with the development application to show solar access and the extent of overshadowing.

1.11 Access and Mobility

Provisions

- a) Any new development must comply with Australian Standards AS 1428 Design for Access and Mobility, AS 4299 Adaptable Housing, AS 2890 Parking Facilities and AS 1735 Lifts, Escalators and Moving Walks and with the Part F of this DCP – Access and Mobility.

1.12 Toilet Facilities

Provisions

- a) Accessible and well sign-posted toilet facilities complying with AS 1428 shall be provided in all developments containing 10 or more shops or more than 500m² of retail floor space. These facilities shall have the same minimum opening and closing hours specified for arcades.

1.13 Signage

Provisions

- a) All signage shall comply with the Part N of this DCP – Signage and Advertising.

D.2 Development within (B1) Neighbourhood Centre Zone

Objectives

The objectives for development in neighbourhood and local centres are to:

- 1 Provide small scale retailing to cater for local resident needs only, and to provide for the establishment of certain community facilities.
- 2 Retain the existing retail and architectural character including the grain and scale of the neighbourhood centre.
- 3 Encourage walking and cycling and minimise car use.

Provisions

- a) New development is to respond to the grain and lot widths in the design of the facade particularly at the street level
- b) Buildings are to directly abut each other at the side boundary.
- c) Front setbacks are to respond to the neighbourhood and proposed use.
- d) Above ground floor, buildings are to be predominantly masonry with a higher solid to void ratio and the materials and colours are to be sympathetic to the existing character of the centre
- e) Buildings are to have clearly defined base (retail street level), middle (shop top housing or commercial uses) and top (parapet or roof form)
- f) No plant or lift overruns or screening to plant is to be visible above the roof to the public domain.

D.3 Development within Lane Cove Village Centre - (B2) Local Centre and Surrounds

3.1 Introduction

Council has prepared the Draft Lane Cove Village Structure Plan dated July 2008. This Structure Plan sets out a long term vision for the evolution of Lane Cove Village. The Structure Plan was developed following a process of community consultation, background research and analysis. It is a comprehensive and holistic study of the area, which examines in detail aspects of its urban form and social activity.

The Structure Plan identifies the values of the town centre and provides recommendations on how these elements are to be retained and further strengthened. At the same time the Structure Plan examines opportunities for growth and change of Lane Cove Village as a vital people friendly urban area into the 21st century.

The Lane Cove Village is a strip shopping centre located along Burns Bay Road and Longueville Road (linked by a plaza) serving the residential area. Its central location accessible from Longueville Road and in close proximity to the M2 and Pacific Highway make it a key location in the homeward journey of residents. This centre provides the majority of shopping facilities, a variety of restaurants, specialty and service shops for the Lane Cove LGA.

There are also a number of existing public places and facilities within the centre including a plaza, Lane Cove Library and Community Centre and the Lane Cove Aquatic Centre.

Lane Cove Village was the first community in NSW to develop a pedestrian mall (the plaza) by closing a vehicular road creating a new space for community activities. The plaza is used for public performances, busking and as a meeting place. It forms a focal point for community interaction and contributes to the Village atmosphere.

Existing Character

The existing character of Lane Cove Village is defined by its landscaped streetscapes and by a fine grain of retail development of two storeys; this pattern only breaks down at the west of the precinct where larger amalgamated blocks accommodate uses such as Coles and Market Square. The precinct has a pleasant human scale (buildings and spaces) and is an active and busy local centre. The existing building footprints produce a strongly identifiable shopping strip street typology along Longueville and Burns Bay Roads. The fine grain and continuous pattern of subdivisions and buildings here reinforces the street boundaries.

The pattern of land use in the centre shows a continuous retail and commercial focus in the plaza, along Longueville Road and Burns Bay Rd.

Community and cultural land uses are organised loosely into three nodes: around the Central Ave intersection; on Little Street near Pottery Green and on Burns Bay Road opposite the Coles supermarket.

Despite the strong main street structure, traffic impacts and fragmented connectivity combined with the extensive areas of on grade public car parking have resulted in pockets of low amenity, empty shopfronts and poorly maintained properties.

A very small amount of medium density residential is located opposite the Pottery Green Park. Education and religious uses are dotted around the edge of the town centre, primarily to the west

of Longueville Road where they interface with low density housing. The remainder of the centre is characterised by a mix of single dwelling houses and medium density residential units.

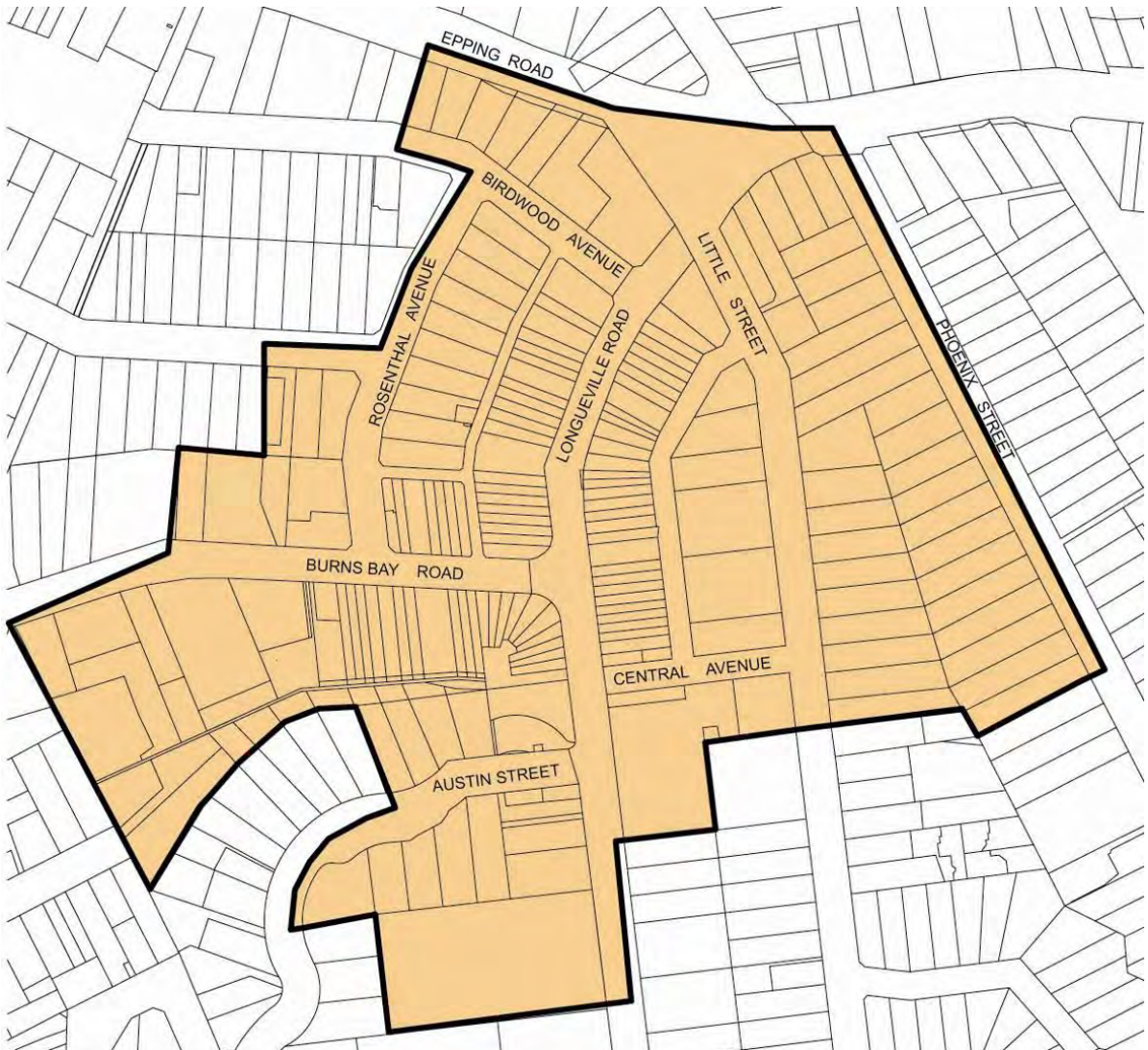


Diagram No. 6 - Area to which these controls apply

Desired future character

Lane Cove Village provides a vibrant, active and exciting centre for the residential areas of the LGA. Its built form and landscaped public domain reflect the distinctive character of the area and the identity of the local community. The centre retains its strong heritage qualities with sensitively designed contemporary additions to the urban fabric.

Through its extensive public domain upgrades and new development its village atmosphere is enhanced creating a pleasant walking environment through the centre connecting at regular intervals to the surrounding neighbourhoods. The “fine grain” urban fabric, of narrow shopfronts is maintained and enhanced. Longueville Rd maintains its role as the main street of the centre with a slow speed traffic environment that prioritises pedestrians over vehicles. The edges of the

centre are greatly improved offering mixed use development that activate the surrounding streets and sleeves public car parking. A new public square enjoys northerly sun and helps connect the centre from Longueville Road to Rosenthal Avenue relating to and transitioning between the two.

Objectives

The objectives for the Lane Cove Village Centre are to:

- 1 Reinforce and celebrate the gateways into the village centre.
- 2 Promote an appropriate scale to retail, civic and commercial development.
- 3 Promote opportunities for landmark development at the gateway to Lane Cove from Epping Road.
- 4 Improve the overall image and marketability of the village centre to attract new businesses and customers.
- 5 Reinforce the economic viability of Lane Cove Village Centre in its role of “local centre” in the hierarchy of Lower North Shore retailing.
- 6 Widen and increase the variety of housing choices in Lane Cove.
- 7 Promote the vitality of the Centre and provide for a diversity of uses, by encouraging mixed retail/commercial/residential development.
- 8 Preserve and enhance the “village” character and landscaping of the Centre, by encouraging a moderate scale of development compatible with its heritage buildings and landscaping and the amenity of its public places.
- 9 Maintain the typical two storey built form with a vertical emphasis to facades and parapet to the principal retail streets.
- 10 Minimise traffic generation resulting from increased residential density in the centre.
- 11 Maximise public access through a pedestrian network which includes arcades.
- 12 Facilitate access throughout the Centre for people with limited mobility.
- 13 Facilitate access to the Centre by bicycle.
- 14 Improve the public amenity and appearance of the Centre’s “rear lanes” whilst maintaining their functionality as service lanes for the Centre’s shops.
- 15 Ensure adequate sunlight is available for all buildings, streets and public open space.
- 16 Ensure the ground floor levels are adaptable over time to suit a wide range of uses.
- 17 Ensure all ground floor uses contribute to the activation of the public domain.

3.2 Lanes

Provisions

Lanes are to:

- a) Include where possible active frontages and high pedestrian amenity (unless dedicated to servicing uses and vehicle access only).
- b) Be a minimum width of 6.0m.
- c) Provide safe and secure lighting.
- d) Be designed to avoid inset areas that allow opportunities for concealment.

3.3 Arcades, Thru Links/Midblock connections

Provisions

- a) Arcades and pedestrian through-site connections must be:
 - I. Direct, without concealment opportunities and designed to provide clear sightlines from one end to the other.
 - II. A minimum width of 4.0m with active frontages along both sides.
 - III. Either open air or as an arcade
 - IV. Naturally lit and ventilated, with high level lighting outside business hours
 - V. Publicly accessible 24 hours per day, at Council's discretion.
 - VI. Designed to provide barrier free access
- b) Retention of existing arcades is required. New arcades have the potential to enhance the functionality of the public realm; they are only permitted on larger sites, to ensure that the extent of active uses on principal retail streets is not excessively diminished.
- c) Where a development site contains an existing connection or arcade, the new development must maintain that link, irrespective of the width of the site's street frontages.
- d) An arcade is otherwise permitted in a new development only where the site has a frontage width to a principal retail street of at least 20m.

3.4 Principal Retail Street

Provisions

- a) The only permissible uses facing a principal retail street at street level shall be:
 - I. shopfront retailing of goods and services;
 - II. arcades and
 - III. entrances to uses located elsewhere in the building and fire exits. The aggregate width of such entrances and exits shall not exceed 1m for lots with a principal retail

street frontage of 10m or less; or 2m for lots with a principal retail street frontage greater than 10m (see BCA for further details).

- b) Longueville Road and Lane Cove Plaza:
 - I. A new building façade to a principal retail street in the vicinity of heritage shopfronts should be broken up by vertical elements into units of 4m to 6m width, reflecting the Centre's traditional small shop street frontages and providing interest to the streetscape at pedestrian level.
 - II. A minimum of 80 percent of that portion of the principal retail street facade of a new development up to a height of 2.7m which is allocated to retail use shall be transparent.
- c) Ground floor shop fronts may incorporate security grills provided these ensure light falls onto the footpath and that the interior of the shop is visible. Blank roller-shutter doors are not permitted.
- d) Vehicle access points will only be permitted on retail streets where there are no alternatives for access.

3.5 Facades

Provisions

- a) Facades are to be articulated at the ground floor and above.
- b) The selection of materials for and the design of building facades to principal retail streets shall be sympathetic to the style of structures listed in Council's Heritage Register. Glass curtain-wall facades are not permitted.
- c) At the parapet level any architectural detailing to the façade should be sympathetic to the heritage character of the street.
- d) Not less than 30 percent of the ground level facade of a new development facing a rear lane (Birdwood Lane, Rosenthal Lane and Little Lane) shall be allocated to retail or commercial uses. These requirements are in addition to the limitations on the width of access openings for parking and loading facilities.
- e) Facades where all solid elements are coplanar are not permitted. For the facade of a development facing Longueville Road:
 - I. The average setback for facade articulation is to be a maximum of 0.5m either side of the front boundary alignment
 - II. Elements forward of the street alignment are to be restricted to balconies
 - III. Where the façade abuts an existing building on an adjoining site, it must be coplanar with the existing façade, unless the existing façade is set back more than 300mm from the street boundary

3.6 Heritage

Provisions

- a) All Development Applications for sites listed in Council's Heritage Register are to be accompanied by a report by a Heritage Consultant, addressing potential impacts on the subject site and heritage items in the vicinity, in accordance with Clause 5.10 Lane Cove LEP 2009. In certain circumstances, Council may deem this unnecessary.
- b) Heritage buildings in the Centre include shops with art nouveau, neo-classical or various other styles. While new developments are not required to attempt to duplicate these styles, they should respect the homogenous scale and character of the Centre referred to in the Register. Individual items, such as the Longueville Hotel and Lane Cove Library may not be taken to be indicative of scale for other developments, which should, nevertheless, be harmonious with these items.

3.7 Shop Top Housing within Lane Cove Village Centre

The intent of this Part is to encourage the inclusion of dwellings in new developments, whilst ensuring that only retail uses continue to be provided at ground floor area on principal retail streets. Acknowledging that residential uses are not appropriate at grade on rear streets or lanes because satisfactory internal amenity cannot be assured for them, the Plan also seeks to obtain retail or commercial uses on these streets or lanes.

Provisions

- a) Entrances to residential uses must be provided from both the principal retail street and rear lane onto which the development fronts. For a development incorporating an arcade, residential access may be provided from that arcade.
- b) Each dwelling must be provided with private open space directly accessible from its living area, in the form of either a balcony at least 2m deep or a terrace or private courtyard at least 10m² in area.
- c) The provision of rooftop communal open space for the use of all residents is encouraged. Furniture, equipment, structures and the like associated with the provision or use of this space must not extend beyond the height limits nominated in the LEP.
- d) If an elevator is provided for residential use, it must not be used for retail loading or waste removal.
- e) For any dwelling which fronts onto an internal courtyard or void space within a development, the separation distance between any window to a habitable room or the outer edge of any balcony must not be less than:
 - I. 5m to the opposite wall if it is solid or contains only openings which are non-openable and translucent
 - II. 12m to any openable and/or transparent opening in the opposite wall or the outer edge of any balcony attached thereto.

3.8 Car Parking - within Lane Cove Village Centre

- a) Except in the case of Shop Top Housing car parking, a cash contribution may be made to Council in lieu of required parking not provided on-site. The car parking contribution rate is listed in the Section 94 Contributions Plan (1999).
- b) Most land within Lane Cove Village Centre is subject to a special parking levy in addition to the normal rates charged by Council. The additional moneys generated in this manner are used to offset the costs of providing and maintaining Council car parks in the Centre area. Therefore, the provision of on-site parking or a contribution for car parking not provided on-site within the area subject to the special parking levy is only required for floor area in excess of that equivalent to a floor space ratio of 1:1.

D.4 St Leonards (B3) Commercial Core Zone and Mixed Use



Diagram No. 7 – Area to which these controls apply

4.1 Introduction

The commercial centre of St Leonards straddles the Pacific Highway and is contained within the Local Government Areas of North Sydney Council, Willoughby Council and Lane Cove Council. Historically this has led to both sides of the centre developing separately with different scales of development and character. The aim of this part is to create a sense of place and holistic vision for St. Leonards so that the southern side of the Pacific Highway is complimentary to the northern side with a high level of amenity and safety.

A Strategy for St Leonards has been developed jointly with the three Councils. This strategy has resulted in a shared vision and desired future character for St Leonards. The objectives and controls within this section have been informed by the St Leonards Strategy and apply to the land within the St Leonards Centre that is within the Lane Cove LGA as shown in the Diagram 7. Further, site specific controls also apply to the blocks of the St. Leonards precinct to the south of Pacific Highway across St. Leonards Station as listed under special areas.

4.2 Desired Future Character of St. Leonards

The desired future character for St Leonards is to present itself as a specialised unified centre with an identifiable 'sense of place' through its revitalisation, new high quality public domain improvements and development creating balanced built form on both sides of Pacific Highway.

The improved streetscapes along the southern side of Pacific Highway with colonnades and new plantings shall help to mediate the impact of traffic and create a pleasant pedestrian environment for the Centre. New tower development on strategic locations along the southern side of Pacific Highway will give St. Leonards attractive gateway markers that enhance the most prominent views and vistas along the Highway and Albany Street into the centre.

A new public plaza across the road from the St. Leonards Station will be a well used public amenity by office workers, commuters and residents alike; many will congregate there to enjoy the various retail and restaurant facilities and public transport link.

Excellent pedestrian and cyclist amenity and a greater range of services throughout the precinct will add vitality to the streets with improved mid block connections, especially Friedlander Place and the relocated laneway to Lithgow Street. With improved landscape, better pedestrian amenity, linkages for cyclists and significant retail and residential developments, the St. Leonards Centre precinct is a vibrant and vital urban centre.

Objectives

The objectives relating to St Leonards are:

- 1 To achieve a sense of place for the entire centre irrespective of Council boundaries and major road barriers.
- 2 To acknowledge the economic realities of redevelopment while striving for high quality revitalisation including large developments.
- 3 To create a sense of arrival and entry to St Leonards from the east and west through new development that is designed to create built form emphasis at such points.
- 4 To balance the built form character and massing across both sides of the Highway and improve the amenity of southern St. Leonards adjacent to the rail line.
- 5 To create a linked centre that mitigates and reduces the dividing impact of the Pacific Highway between north and south St Leonards.
- 6 To create a vibrant and exciting live and work major centre on the southern side of St Leonards.
- 7 To improve the connectivity within southern St Leonards to public transport and facilities.
- 8 To improve cyclist connections to the centre, railway station and existing bike routes.
- 9 To maintain and enhance the leafy character of the southern side of St Leonards as part of its unique character.
- 10 To prioritise the pedestrian over vehicle movement wherever possible and improve the pedestrian safety and amenity across the highway.
- 11 To achieve design excellence in new development for the southern side of St Leonards.
- 12 To create a major public open space as the heart of southern St Leonards that is linked

to the public transport nodes of the rail and bus services and benefits from good solar access and amenity.

- 13 To activate the streets and public open spaces of the St Leonards centre and achieve an appropriate human scale to the streetscapes.
- 14 To mitigate the acoustic and visual impacts of the rail line and traffic movement on the highway.
- 15 To achieve 'slimline towers in the round' and avoid continuous secondary street walls above podium levels.
- 16 To facilitate view sharing and reasonable solar access to streets and buildings on the southern slope of St Leonards
- 17 To relocate laneways and through block links to the most appropriate locations to achieve a high level of connectivity and safety to public transport and key uses.
- 18 To redevelop Friedlander Place.

4.3 Built Form

Provisions

- a) New development along the southern side of Pacific Hwy across the St. Leonards Station is to comply with the block diagrams provided.
- b) The development for major blocks is to be a tower and podium form to mitigate against wind impacts and achieve a human scale at the street.
- c) Blocks located at 'gateway' corners as indicated in the block plans are not required to provide podium bases but should respect the alignment of the adjoining podiums in the design of the architecture. These towers are to create an entry statement into the centre.
- d) Tower forms are to be generally oriented with their long axis running north south. This is to minimise the visual impact of the towers to Pacific Highway and ensure separation between the towers to allow view sharing, solar access and wind movement to the south.

4.4 Separation

Provisions

- a) Separation is to be provided between all towers. Minimum distances are provided within the block plan tables. These separation distances are an average separation but no tower should be located closer than 12m from an adjacent tower or potential tower. Separation of towers is imperative to avoid a continuous secondary street wall extending the length of the block along the highway.

4.5 Public Open Space

Provisions

- a) Two new public open spaces are to be provided adjacent to the rail corridor to the east and west of the rail line. The space to the west is to be landscaped as a softer green space with connection back to Canberra Avenue. The closure of Canberra Ave will form part of this public open space.
- b) The eastern public open space is to be created partially by making part of Lithgow Street as shared way and partly on private land as part of a major redevelopment of that block. This open space is to be the major public urban space and heart for the southern side of St Leonards.

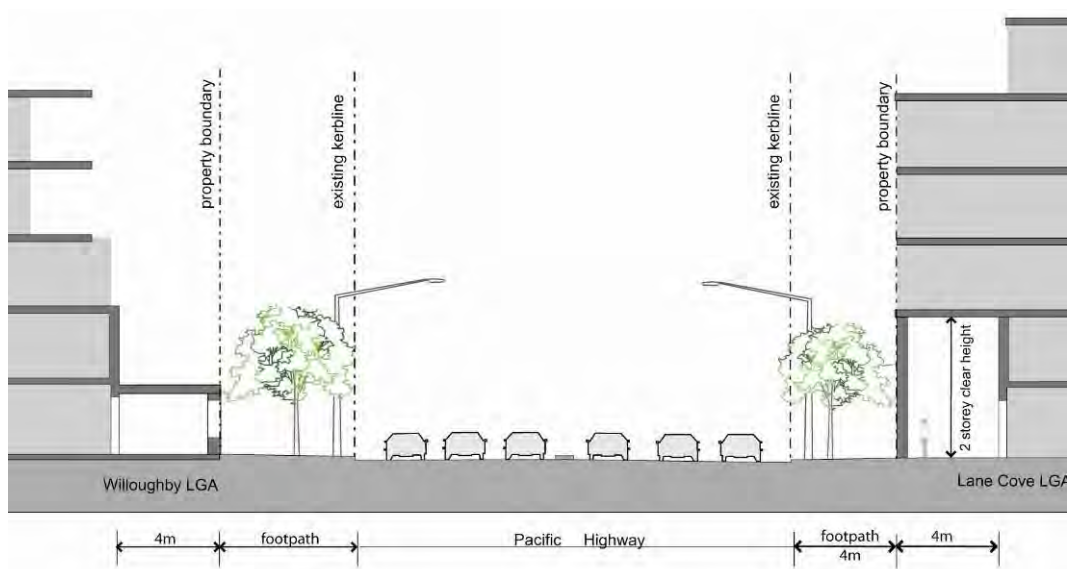


Diagram 8 - Colonnades

4.6 Colonnades

Provisions

- a) Colonnades are to be provided to development along the Pacific Highway as shown in the block plans.
- b) The depth and height of colonnades is to be sufficient to allow for footpath seating whilst still allowing clear pedestrian access adjacent to the shopfronts and to achieve high quality amenity and spaciousness for the colonnade with reasonable visual exposure to the highway (see Diagram 9).
- c) All development is to provide footpath and public domain upgrades, including landscaping, to Council's specifications as part of the development. A minimum of 4m wide footpath is to be provided from the property boundary for the southern side of Pacific Highway.

D.5 Development in (B4) Mixed Use Zone

Objectives

The objectives of development in mixed use zones are:

- 1 To create lively streets and public spaces.
- 2 To increase the diversity and range of shopping and recreational activities for workers, residents and visitors.
- 3 To enhance public safety by increasing activity in the public domain on week nights and on weekends.
- 4 To minimise potential conflicts and achieve compatibility between different uses.
- 5 To ensure that the design of mixed-use buildings addresses residential amenity.
- 6 To create legible and safe access and circulation in mixed use buildings.
- 7 To provide an area of consolidated, accessible and useable private open space for each dwelling and additional communal open space for flats / apartments.
- 8 To provide an area on site or within developments that enables soft landscaping and deep soil planting.
- 9 To provide a reasonable level of privacy for the building occupants and neighbours.

5.1 Floor to Ceiling Heights

Provisions

- a) For the residential component of mixed use development, see Part C 3.13.

5.2 Building Separation

Provisions

- a) The building separation controls from Residential Flat Design Code for SEPP 65 shall apply for the residential component in mixed use developments which are set out below:

Type/Height	Building Separation
Residential up to 4 storeys	12m between habitable rooms and balconies 9m between habitable rooms and balconies and non-habitable rooms 6m between non-habitable rooms
Residential 5-8 Storeys	18m between habitable rooms and balconies 13m between habitable rooms and balconies and non-habitable rooms 9m between non-habitable rooms
Residential 9 storeys and above/ over 25m	24m between habitable rooms/balconies 18m between habitable rooms/balconies and non-habitable rooms 12m between non-habitable rooms

- b) Separation distances are to be provided based on 50% to each site measured from the boundary.

5.3 Hours of Operation for Lighting

Provisions

- a) External lighting operates, as a minimum requirement, from dusk until dawn on Thursday, Friday and Saturday nights, and from dusk until midnight on other nights.
- b) Control to turn on at dusk is initiated by a suitably adjusted/calibrated photo-electric switch such that the lights will be at full output when the daylight luminance in the subject areas falls to the required illuminances stipulated.

5.4 Noise

Provisions

- a) Noise generated by residents, visitors, retail or commercial part and mechanical plant and equipment should not exceed the following repeatable maximum L Aeq (1 hour) level, on weekdays:

Day 7am-6pm: 55dB(A)

Evening 6pm- 10pm: 45dB(A)

Night 10pm-7am: 40dB(A)

and on weekends:

Day 8am-7pm:	50dB(A)
Evening 7pm-10pm:	45dB(A)
Night 10pm-8am:	40dB(A)

or in any case not more than 5 dB(A) above the background level during the day and evening and not exceeding the background level at night when measured at the boundary of the property.

- b) Incorporate noise reduction measures on plant and machinery.
- c) Use design features or planning that will reduce noise.
- d) Incorporate adequate measures for tonal, low frequency, impulsive, or intermittent noise.

5.5 Non residential facilities

Objectives

The objective of non residential facilities is:

- 1 To provide a diversity of activities, facilities, opportunities and services; including business, community services, employment, entertainment, government agencies, health and welfare, recreation and retail.

Provisions

- a) Provide a variety of different sized non-residential spaces (eg. showrooms, boutique shops and cafes, suites for medical/legal centres).
- b) Provide a variety of outdoor and indoor communal spaces (such as gymnasium, pool and meeting rooms for residents; gardens, seating or outdoor café space for the public).
- c) Consider incorporating community and entertainment facilities (such as a child care centre) depending upon the size of the development and its location.
- d) Common areas for residents should have natural light, should not be located in basement and should have at least 75% of area of the communal space in form of internal room, remainder appropriately located in the external recreation area
- e) All common areas (including the principal entrance to the building) should be accessible by all people.

5.5.1 Communal and Private Open Space

- a) Communal open space is permissible but not mandatory in a mixed use development.
- b) Useable open space may be provided in the form of roof decks, podiums, balconies or terraces where it can be demonstrated that there will be no detrimental impact on the amenity of adjoining properties.
- c) The communal and/or private open space should not occupy the full frontage to the main street.
- d) Where it is not possible to provide open space on ground floor, it can be provided on podium level.

- e) Open space should follow the design principles and standards set by the Residential Flat Design Code under SEPP 65.

5.6 Access, entries and servicing

Provisions

- a) Separate commercial service requirements, such as loading docks, from residential access, servicing needs and primary outlook
- b) Locate clearly demarcated residential entries directly from the public street.
- c) Clearly separate and distinguish commercial and residential entries and vertical circulation.
- d) Provide security access controls to all entrances into private areas, including car parks and internal courtyards.
- e) Provide safe pedestrian routes through the site.

5.7 Residential Component within Mixed Use

Provisions

The provisions for Residential Flat Buildings in the Part C Residential Development section of this DCP and the Residential Flat Design Code associated with State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development (SEPP 65), and the additional following provisions shall apply to the residential component within mixed use developments.

- a) Studio apartments are to have a minimum size of 40 sq.m. This area is exclusive of common circulation areas such as lift lobbies, corridors, etc and balconies and terraces.
- b) Provide a minimum 10% of dwellings as adaptable housing if the total number of dwellings exceeds 9, integrate the affordable and adaptable housing components, do not isolate them or use a different standard of materials and finishes.
- c) Design common corridors with a minimum width of 2m to be accessible and facilitate movement.
- d) Minimise the amount of glazed area on the eastern and western elevations and incorporate shading devices.

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Part D

Commercial Development and Mixed Use Localities



D

SPECIAL COMMERCIAL AREAS:

- | | |
|------------|---|
| Locality 1 | St. Leonards Key Precincts:

B1: Marshall Precinct

B2: Christie Precinct

B3: Friedlander Precinct

B4: Nicholson Precinct |
| Locality 2 | Northwood Neighbourhood Centre |
| Locality 3 | Little Lane Mixed Use |
| Locality 4 | 1-5 Birdwood Avenue |
| Locality 5 | 472-504 Pacific Highway, St Leonards |

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Locality 1 – St. Leonards Key Precincts

Block plans have been developed for 4 key precincts in St Leonards as shown below. To achieve Council's preferred development outcomes these blocks are to comply with the podium heights, setbacks, activation and mid block links required as shown in these plans and tables.

The area to which the controls apply comprises the area to the south-west of Pacific Highway between Berry Road to the west and Oxley Street and Marshall Avenue to the south. The block plans are numbered based on the following block key diagram:

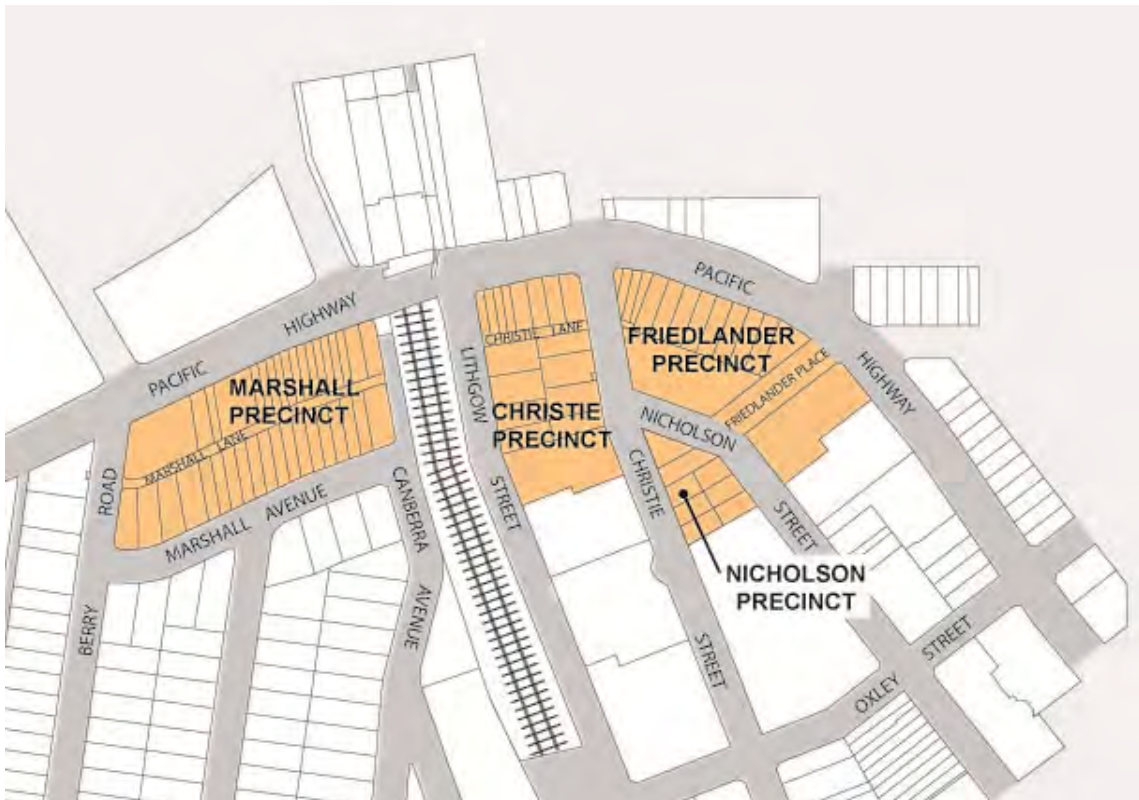
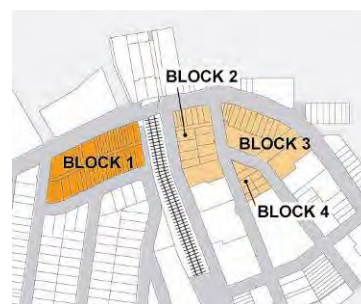


Diagram 9 - Area to which Block Plans apply

NOTE: BLOCK PLAN CONTROLS WILL BE APPLIED WITH FLEXIBILITY BASED ON ACHIEVEMENT OF OBJECTIVES (SEE PART B: GENERAL AND SPECIFIC OBJECTIVES FOR EACH BLOCK).

Block 1: Marshall Precinct

Block 1 is located in the precinct area bound by Pacific Highway on the north, Marshall Avenue on the south, the railway line to the east and Berry Road to the west.

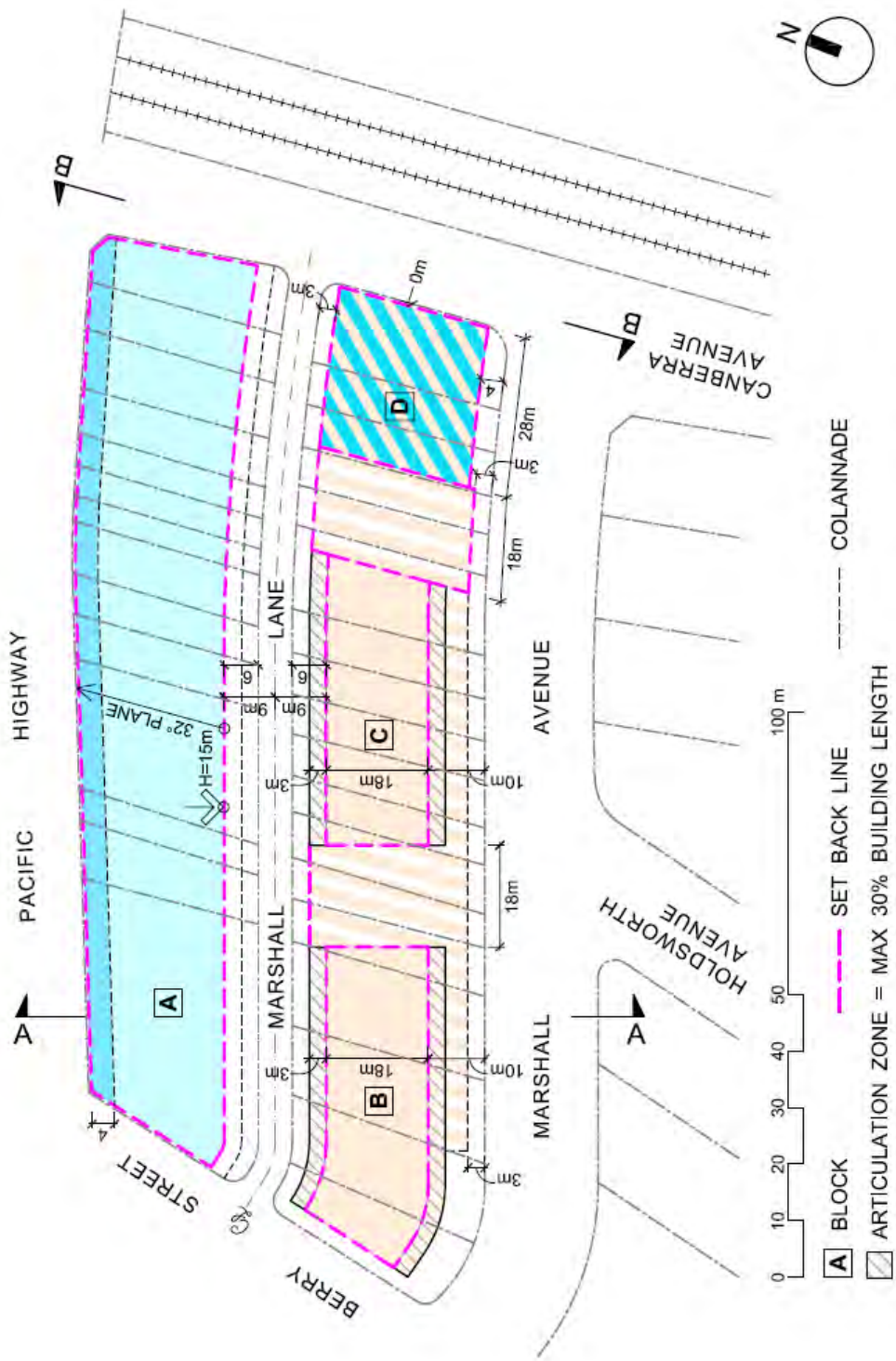


Block key

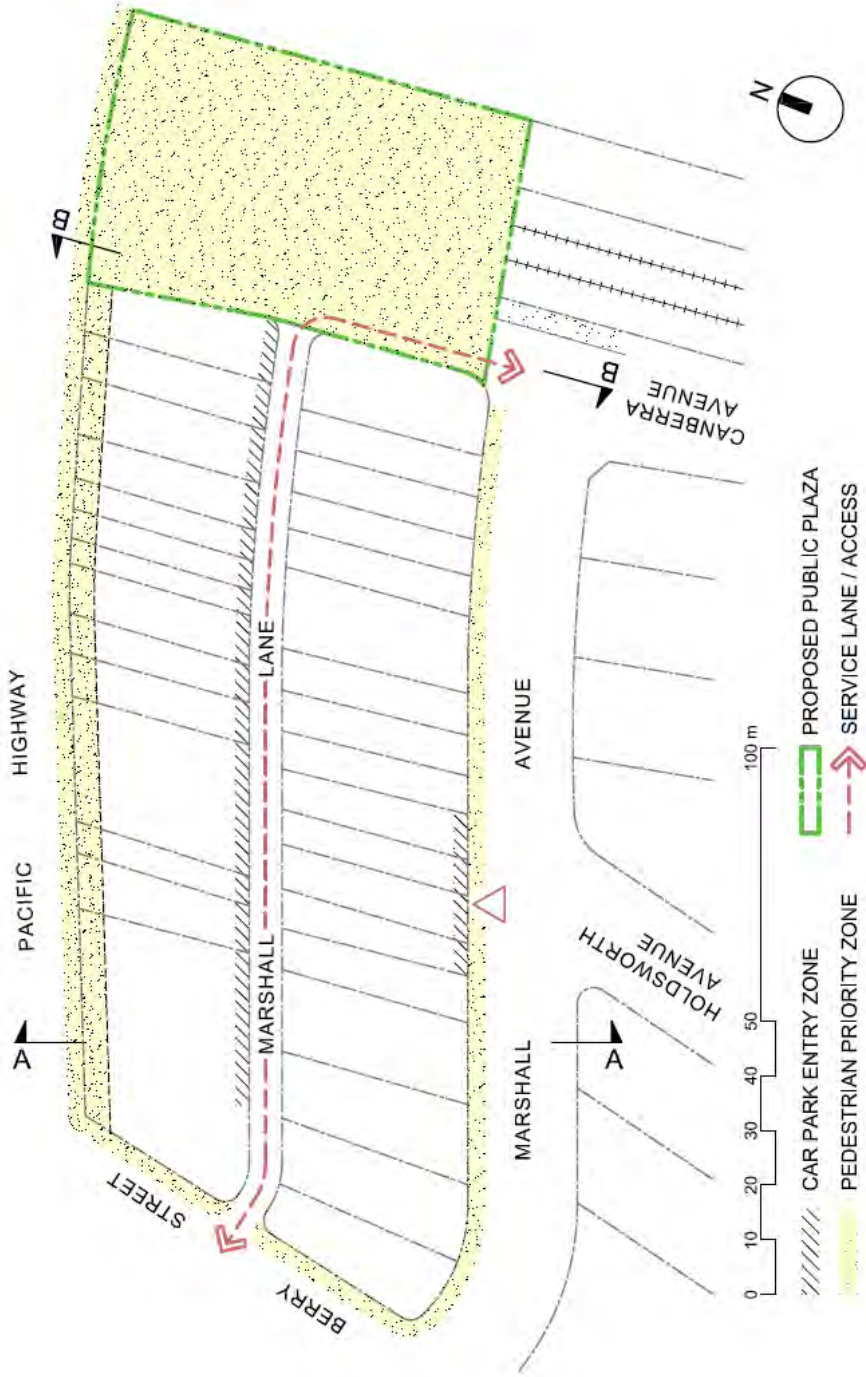
Objectives

- 1 To create high quality development with a distinctive character and sense of place.
- 2 To balance the high-density built form on the northern side of the Pacific Highway at St Leonards with similar sized built form on the southern side.
- 3 To allow for future connection with potential accessible and active public open space over the railway line east of the Marshall Precinct.
- 4 To allow for a transition in scale from the high-density buildings at the eastern end of the precinct to the lower density residential areas to the south-west.
- 5 To improve accessibility and connectivity for pedestrians from the residential areas to the south and west of the precinct to the station and the Pacific Highway.
- 6 To promote high levels of amenity for all existing and new residential buildings in and adjacent to the Precinct.
- 7 To minimise the impact of additional vehicle movements in the Precinct and areas adjacent to the Precinct.
- 8 To provide a built buffer between the Pacific Highway and the residential areas to the south.
- 9 To protect and enhance the tree-lined character of Marshall Avenue.
- 10 To prioritise a high-quality pedestrian friendly public domain.
- 11 To facilitate development which avoids the creation of isolated sites.

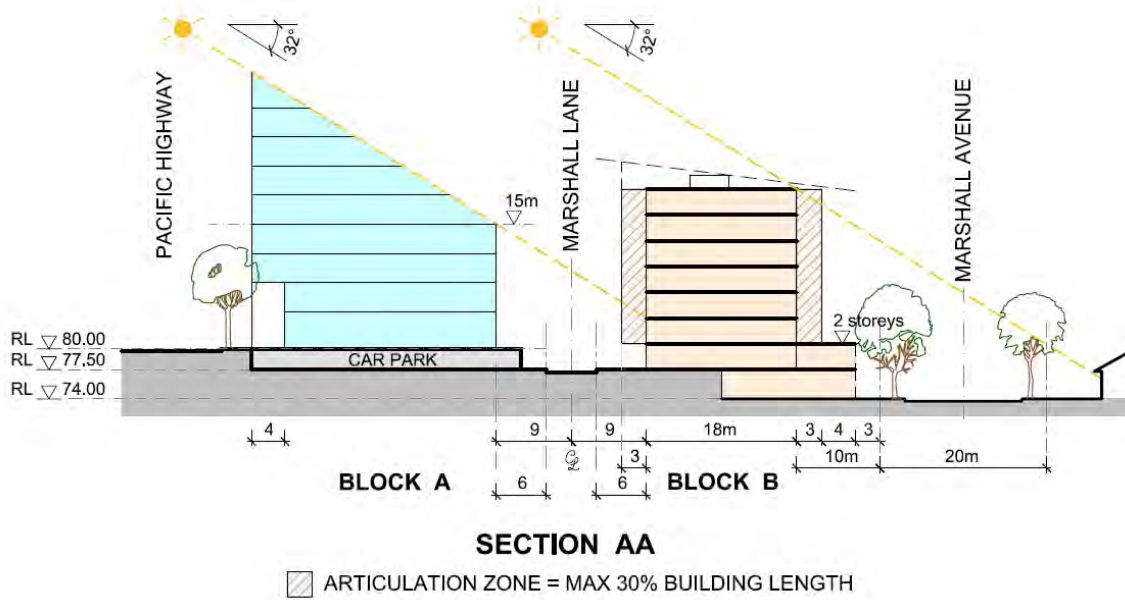
Block Plan



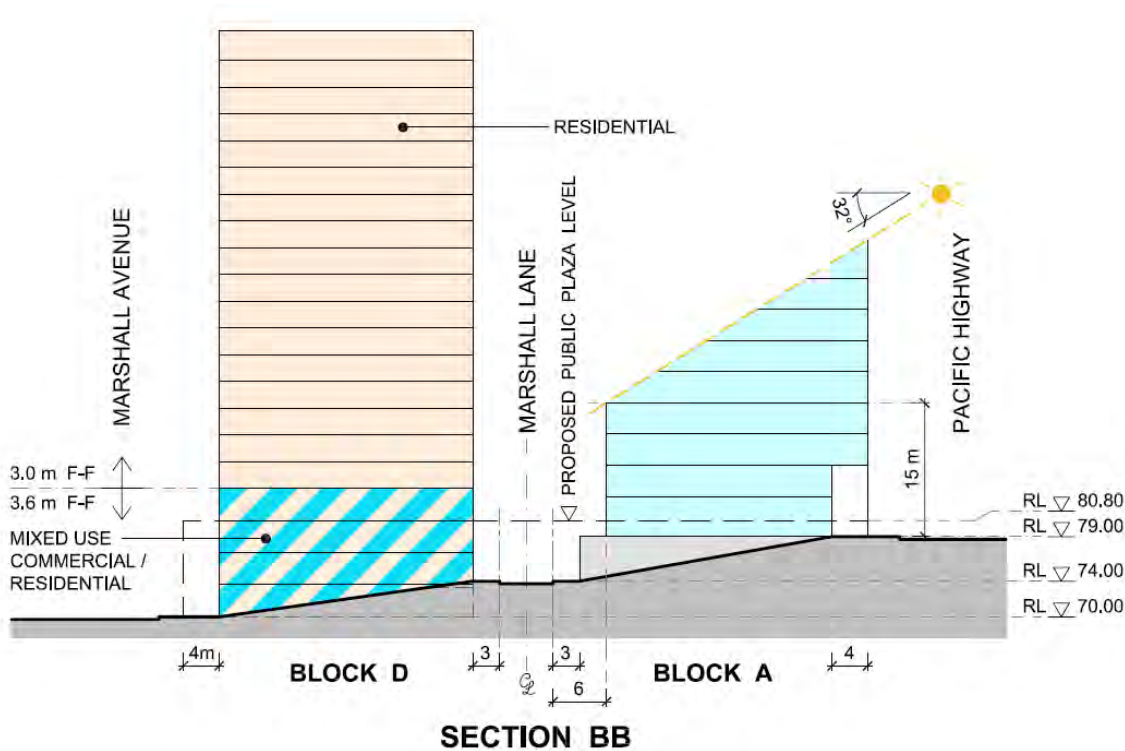
Access Plan



Section AA



Section BB



Block A

Bound by the Pacific Highway to the North, Canberra Avenue to the east, Berry Road to the west and Marshall Lane to the south.

	Control	Provision	Notes
1	Height	Overall building height - refer LEP 15 m podium+ sloping height plane	see section AA all heights relative to Pacific Highway levels
2	Street frontage height, Pacific Hwy	variable, dependent on sloping height plane	see section AA
3	Uses	active uses at ground or street level to Pacific Highway and Canberra Avenue, desirable to Berry Road, commercial above	floor to floor dimensions must allow for retail and commercial uses
4.1	Street setback, Pacific Highway	no setback to property boundary but Colonnade setback applies	
4.2	Street setback, Canberra Avenue	no setback to property boundary,	
4.3	Street setback, Marshall Lane	6m setbacks to 15m high podium, 3m setback to car park entries	32° sloping plain from 15m podium towards the Pacific Highway
4.4	Street setback, Berry Road	no setback to property boundary,	
5	Colonnade	4 m depth from building edge <u>and</u> 2 storeys clear height	building entries may be deeper
6	vehicle entry and service vehicles	via Marshall Lane	all servicing via Marshall Lane
7	car parking	underground or below Pacific Highway level, access from Marshall Lane	
8	Landscaping/ public domain	colonnade to be paved in high-quality material to accommodate continuous pedestrian pathway along the Pacific Highway. Continuous accessible pathway to be provided along Marshall Lane setback zone	future landscaping to Canberra Avenue and future square over the railway line. All paving design and specifications to be arranged with Council.
9	Privacy	Where necessary, building design to include devices/screens to prevent overlooking to residential dwellings	
10	Isolated sites	Proposed development is to avoid the creation of isolated sites	

Block B and Block C

Block B - Eastern portion of block bound by Marshall Lane to the North, Berry Road to the west, Marshall Avenue to the south and Canberra Avenue to the east.

Block C - Bounded by Marshall Lane to the North, Marshall Avenue to the south, block B to the west and block D to the east.

	Control	Provision	Notes
1	Height	Overall building height - refer LEP	see section AA - height includes plant, lift overruns
2	Height - podium	Maximum 2 level podium is permissible along Marshall Ave, setback 3m from Marshall Ave.	See section AA
3	Uses	mixed use permissible along Berry Road ground floor frontage, otherwise all residential	Where levels are predominantly residential, residential flat building controls will apply.
4.1	Street setback, Marshall Lane	6m set back from Marshall Lane boundary. 3m articulation zone (Maximum 30% of building length permitted for balcony extensions).	Articulation zones subject to SEPP 65. Continuous accessible footpath to be provided in setback zone.
4.2	Street setback, Berry Road	no setback to property boundary,	see section AA
4.3	Street setback, Marshall Ave	10m setback including 3m articulation as per 4.1. 3m setback to podium level.	
4.4	setback, eastern end of block B	18m separation to be provided between Block B and Block C Between Blocks B & C and Blocks C & D: <ul style="list-style-type: none"> - Dwellings are not permissible - No building, including car parking, to be higher than ground level at Marshall Lane at that point. 	
5	service vehicles		all servicing - Marshall Lane
6	car parking	access from Marshall Avenue in the area indicated in the circulation plan opposite end of Holdsworth Avenue sleeved and predominantly underground	one common car park entry for the whole block
7	Landscaping	maximum possible retention of all street trees along Marshall Avenue. Landscaping to be provided between Blocks B and C and C and D. 3m setback to Marshall Ave to be landscaped for maximum screening of buildings.	extreme care to be taken with the protection of the Marshall Avenue Street trees.
8	Privacy	Where necessary, building design to include devices/screens to prevent overlooking to residential dwellings	

- Residential uses only (note- where levels are predominantly residential, residential flat building controls will apply).

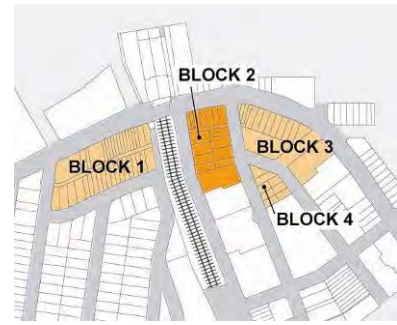
Block D

Bounded by Marshall Lane to the north, Canberra Avenue to the east, Marshall Avenue to the south and block C to the west.

	Control	Provision	notes
1	Height	Overall building height - refer LEP	see section BB
2	Uses	mixed use retail commercial and residential. Building must be designed to be able to accommodate an entry from the future square level, RL 80	floor to floor heights capable of accommodating commercial and retail uses to be provided up to future square level RL 80. Where levels are predominantly residential, residential flat building controls will apply.
3.1	Street setback, Marshall Lane	3m set back from Marshall Lane boundary.	A continuous accessible footpath path to be provided within 3m set back
3.2	Street setback, Canberra Ave	no setback to property boundary,	Building to be able to address future square at RL80m level
3.3	Street setback, Marshall Ave	4m setback to Marshall Avenue	
3.4	setback, to Block C	18m separation to be provided between Block C and Block D Between Blocks B & C and Blocks C & D: <ul style="list-style-type: none"> : Dwellings are not permissible : No building, including car parking, to be higher than ground level at Marshall Lane at that point. 	
4	service vehicles		all servicing via Marshall Lane
5	car parking	access from Marshall Avenue in the area indicated in the circulation plan opposite end of Holdsworth Avenue sleeved and predominantly underground	one common car park entry for the whole block
6	landscaping	maximum possible retention of all street trees along Marshall Avenue. Landscaping to be provided between Blocks C and D. Landscaping to be provided podium level above Marshall Ave. Paving and landscaping details to Canberra Avenue to be arranged with Council	extreme care to be taken with the protection of the Marshall Avenue Street trees.
7	Privacy	Where necessary, building design to include devices/screens to prevent overlooking to residential dwellings	

Block 2: Christie Precinct

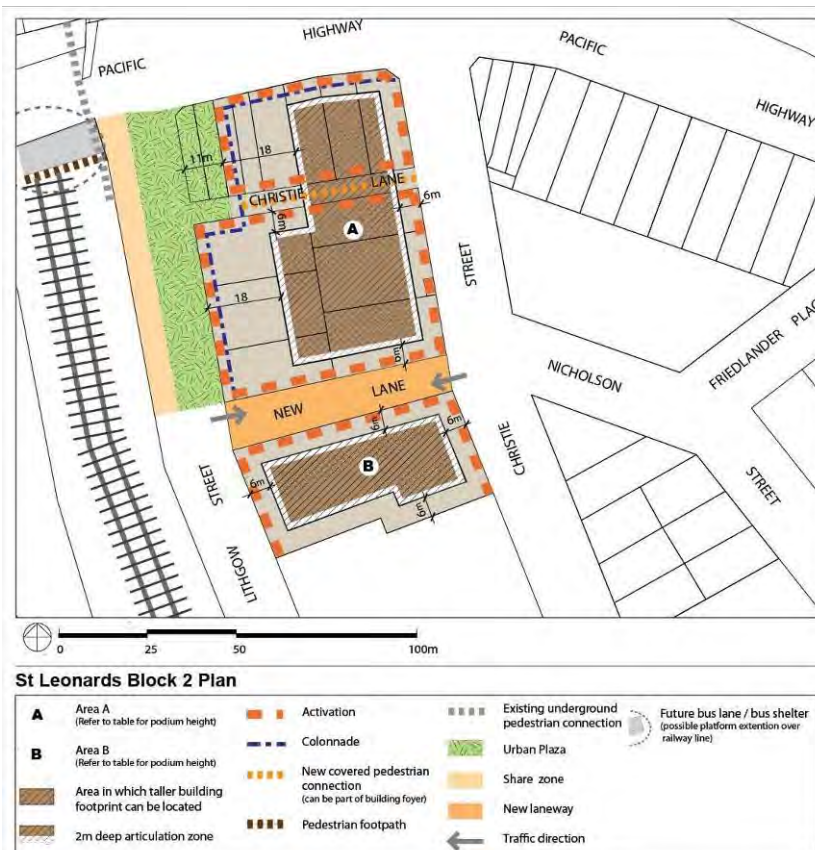
Block 2 is located in the precinct area bound by Pacific Highway to the north, Lithgow Street to the west and Christie Street to the east.



Block key

Objectives

- 1 To create a distinctive character onto the Pacific Highway and the 'heart' of the southern side of St Leonards.
- 2 To provide a major high quality public plaza or town square to the west of podium A. This public open space is to include the upgrade of the existing pedestrian link to the station. Ideally the link should be provided as part of a 1-2 storey kiosk building development adjacent to the rail line.
- 3 To provide high quality tower forms.
- 4 To provide a new laneway connector to provide an improved vehicular and pedestrian connection to the rail underpass.
- 5 To provide safety and amenity.
- 6 To maintain public amenity including solar access to the park on southern end of Christie St.

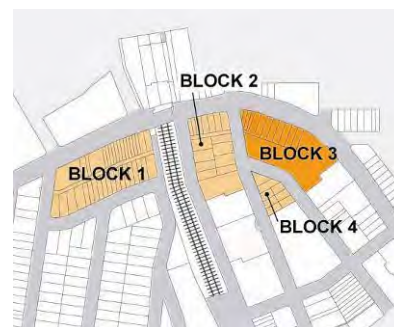


ST LEONARDS		Block 2 – Christie Precinct	
	CONTROL	PROVISION	NOTES
1	Height	LEP control	LEP control
2	Street Frontage Height	A = 18m B = 12-18m	To all streets and spaces 18m to New Lane 12m to southern end of Lithgow and Christie St.
3	Uses	GFL Active uses – street level retail	Pacific Highway, Christie St, New Lane, Public Open space
4	Tower Separation	12m	
5	Tower footprint	A = Maximum 1600m ²	
		B = Maximum 1400 m ²	
6	Street Setback	A = 10m to create public open space = 5m to allow a minimum footpath verge to highway or street kerb B = Nil	To be provided west of block A To Pacific Highway and Lithgow Street To Lithgow Street, New Lane and Christie Street
	Tower	A = Minimum 18m above podium = 6m above podium = 6m above podium B = 6m above podium	To public open space and share zone on Lithgow Street To Christie Street To Pacific Highway To Lithgow Street, New Lane, Christie Street and adjacent structures
7	Colonnade	A = 4m depth from building edge = 2 storey clear height	To Pacific Highway, public open space, Lithgow Street
8	Pedestrian Entry/ Address	A	Pacific Highway, public open space and Christie Street
		B	Lithgow Street and Christie Street

ST LEONARDS		Block 2 – Christie Precinct	
9	Vehicle Entry	A	Christie Street
		B	Lithgow Street or Christie Street
10	Carparking		Underground or sleeved
11	New Laneway and Mid Block Connection	Relocate Christie Lane to south - adjacent to No. 80	For provision of 6m carriageway and 2m footpath on each side Minimum 2 storeys height
		Provide new pedestrian mid-block link generally in the existing location of Christie Lane	Minimum 6m width Lined with active uses, retail Business hours only To be direct connection linking Christie Street and public open space
		B = N/A	
12	Tower Orientation	A = North to South long axis	To Pacific Highway (Block A only)
		A = Maximum building length 40m	To Christie Street If 40m length is exceeded, then 12m tower separation or 12m setback applies to remainder building length to Christie Street
13	Landscaping / Public Domain	Street trees to Pacific Highway, Lithgow Street, Christie Street and public open space	Trees to be agreed with Council Paving design, upgrades and specifications to be arranged with Council.
14	Public Open Space/Share zone	1500m ² minimum area for public open space to the west of block A Two way vehicle traffic share zone proposed to the northern end of Lithgow Street Provide improved underground crossing to St Leonards Station Kiosks, newsagents, food stand uses to be encouraged around the underground pedestrian crossing	Final location to be subject to detailed design, council and RTA requirements. Public open space improvements to shareway To activate entrance and provide natural surveillance.

Block 3: Friedlander Precinct

Block 3 is located in the precinct area bound by Pacific Highway on the north, Nicholson Street to the south, 470 Pacific Hwy to the east and Christie Street to the west.



Block key

For the precinct area zoned B3 Commercial Core, refer to the controls below.

For the precinct area zoned B4 Mixed Use refer to Locality 5 – 472-504 Pacific Highway, St Leonards for relevant controls.

Objectives

- 1 To create the eastern gateway into St Leonards generally on axis with Albany Street and balance the existing northern towers.
- 2 To provide design excellence and iconic new development to mark the entry to St Leonards.
- 3 To enhance the public domain regarding view lines, pedestrian links and streetscape.
- 4 To create a distinctive character to the Pacific Highway.
- 5 To revitalise Friedlander Place.
- 6 To provide activation to Nicholson Street and Christie Street.

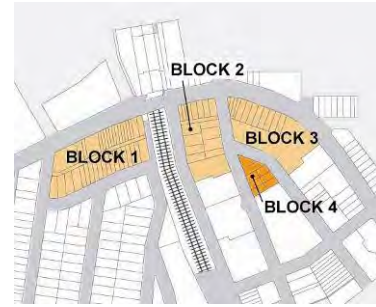
ST LEONARDS		Block 3 – Friedlander Precinct	
	CONTROL	PROVISION	NOTES
1	Height	LEP control	LEP control
2	Street Frontage Height	18m	Podium Height
3	Uses	Active uses street level - Retail	Pacific Highway Friedlander Place to arcade Christie Street
		Active uses - Commercial	Nicholson Street
4	Tower Separation	Minimum 12m	Block plan shows location of iconic tower. Although it is envisaged the precinct will contain only 1 iconic tower, other towers will also be built in the block.
5	Tower Footprint	Maximum 1500m ²	
6	Street Setback	Nil	Refer to diagram
	Tower setback	0-18m (flexible) 6m 6m and 18m (flexible) 6m	Pacific Highway Christie Street Nicholson Street To Friedlander Place as noted on diagram
7	Colonnade	4m depth from building edge 2 storeys minimum clear height	To Pacific Highway (see diagram)
8	Pedestrian Access		Pacific Highway, Christie Street and Nicholson Street

9	Vehicle Entry		Nicholson Street only
10	Carparking		Underground or sleeved by other uses
11	Mid Block Connection	<p>Within Friedlander Place reserve</p> <p>Min. Width 6m</p> <p>Min. Height 2 storeys</p>	<p>To be a direct pedestrian connection only</p> <p>Arcade to link Pacific Highway & Nicholson Street.</p> <p>To be lined with active retail uses and open 24 hour / 7 day week.</p> <p>To be located within the area currently occupied by Friedlander Place</p>
12	Tower Orientation	<p>North South long axis</p> <p>Maximum tower frontage width:</p> <p>36m</p>	To Pacific Highway
13	Landscaping / Open space/ Public Domain	Street trees paving and verge upgrade to Pacific Highway, Nicholson and Christie Streets	<p>Trees species to be agreed with Council</p> <p>Paving design upgrades and specifications to be arranged with Council</p>

Block 4: Nicholson Precinct

Block 4 is located in the precinct area bound by Nicholson Street to the north and Christie Street to the south.

NOTE: BLOCK PLANS TO BE TREATED FLEXIBLY.



Objectives

- 1 To provide improved amalgamation opportunities for development.
- 2 To provide activation to Nicholson and Christie Streets.
- 3 To provide high quality development on axis with the Friedlander Place connection and to Christie Street.
- 4 To maintain the solar access to residential properties in Lithgow Street and Canberra Avenue.



St Leonards Block 4 Plan

	Podium footprint		Activation
	Area in which taller building footprint can be located		Pedestrian connection
	2m deep articulation zone		

ST LEONARDS Block 4 – Nicholson Precinct			
	CONTROL	PROVISION	NOTES
1	Height	LEP control	LEP control
2	Street Frontage Height DEFERRED	18 -12m (to south as transition)	To Nicholson Street and Christie Street
3	Uses	Active uses- street level retail or commercial	To Nicholson Street and Christie Street
4	Building Separation	N/A	
5	Tower Footprint	Max 1200m ²	
6	Street setback		
	Podium	Nil	
	Tower	6m	To streets and adjacent buildings
7	Colonnade	N/A	
8	Pedestrian Entry/ Address		Christie Street and Nicholson Street
9	Vehicle Entry		Nicholson Street
10	Carparking		Underground or sleeved
11	Mid Block Connection	Provide a through pedestrian link at ground level	Link to be open during the operating hours of the Nature Care College

12	Tower Orientation	N/A	
13	Landscaping / Open Space/ Public Domain	Street trees to Nicholson Street and Christie Street and public upgrade	<p>Trees species to be agreed with council</p> <p>Paving design upgrades and specifications to be arranged with Council</p>

Locality 2 - Northwood Neighbourhood Centre

1. Area covered

The Northwood Centre precinct comprises the area south of River Road and east of Kenneth Street and to the east and west of Northwood Road.

Study Area



2. Existing Character

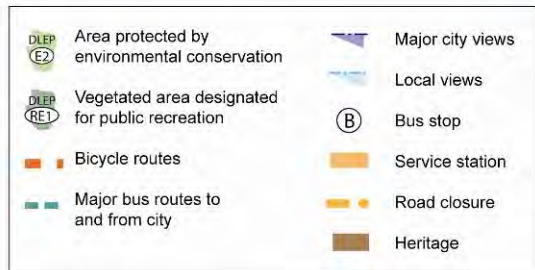
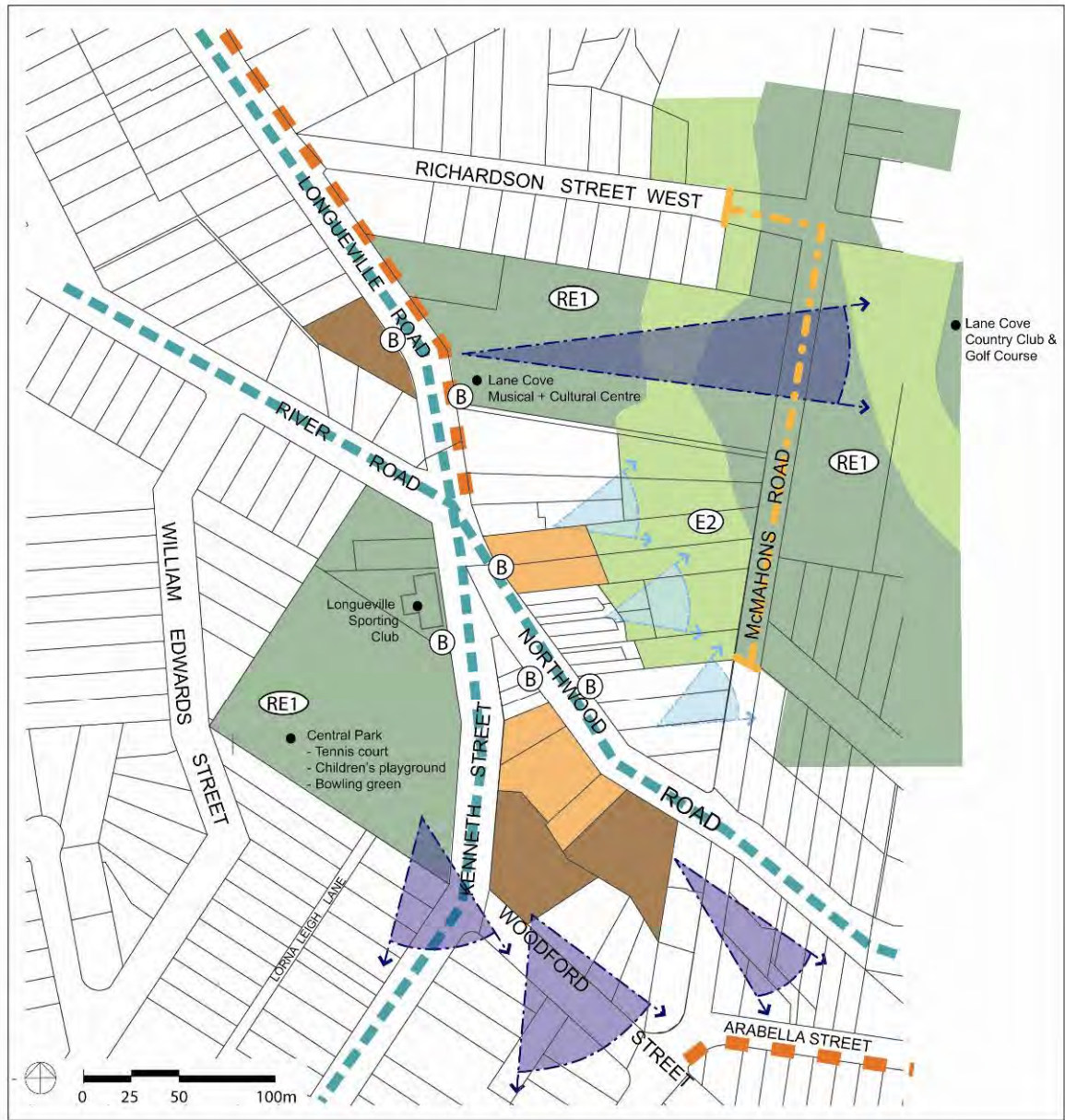
Currently the existing Northwood Centre is fragmented. The centre straddles River Road with commercial and retail development on both sides of the road grouped around the traffic light intersection with Kenneth Street. Whilst the western side of the intersection benefits from Central Park, its sports and play areas, the south eastern and northern sides are compromised by the poor amenity of River/Northwood Road.

Current uses include service stations on the northeast side and southern side of Northwood Road which can be also be accessed from Kenneth Street. At the moment, these service stations provide the only local convenience good shops. River/Northwood Road at the intersection with Longueville Road is a very busy connector route that carries high traffic volumes with consequent issues of safety, noise and amenity.

The centre includes bike routes along Longueville Rd and along Kenneth St passing through the centre. Off road routes are also planned along River Rd West and part of Northwood Rd.

Pedestrian connectivity between the two sides of the centre due to River/Northwood Road is heavily compromised by these roadways and affects the use, vitality and viability of the area. Due to its fragmented nature, the retail uses that are located here do not create a strong sense of place or act as a true neighbourhood centre for the local community. The built form is generally low scale at around 2 storeys and does not offer sufficient activation to the street edges.

3. Analysis

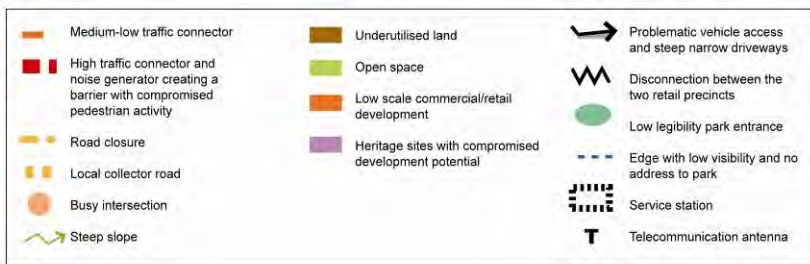
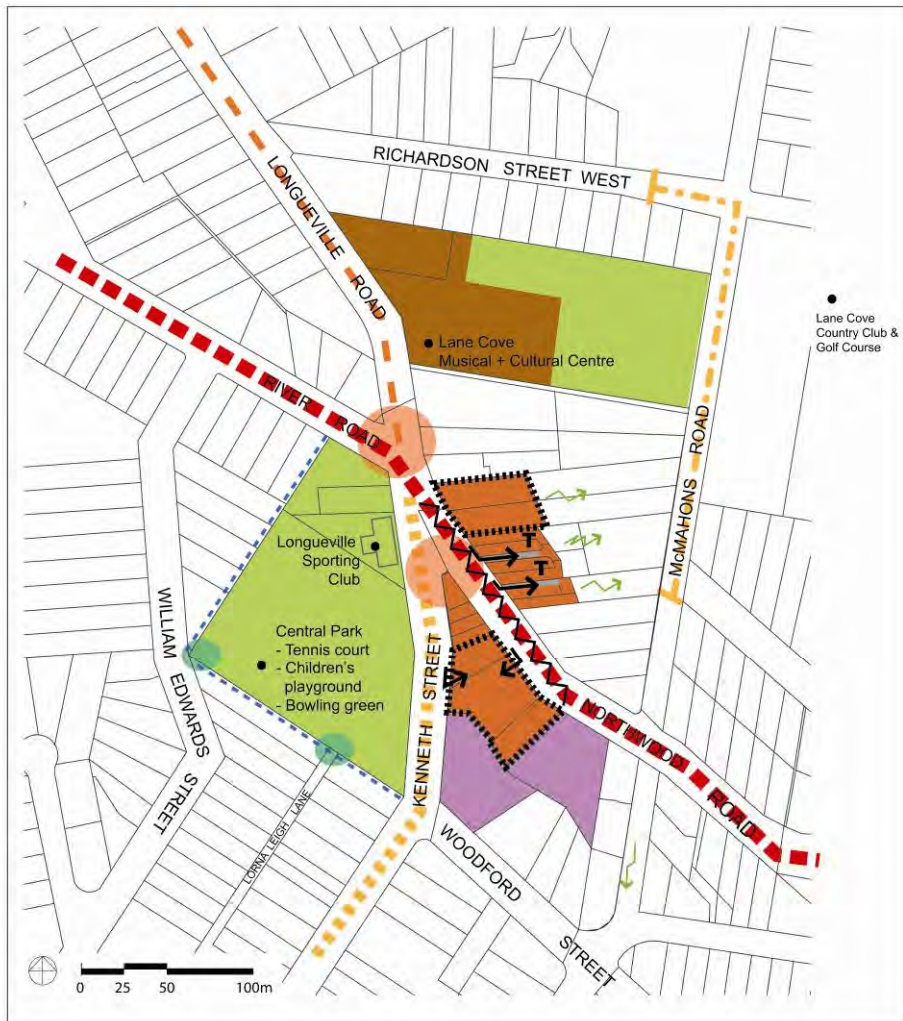


PART D: COMMERCIAL DEVELOPMENT AND MIXED USE LOCALITIES

4. Characteristics - Summary

- a) Central Park is a well kept open space with mature trees and venues for public use.
- b) The area is well served by bus routes from and to the city.
- c) Parts of the precinct enjoy magnificent city views, especially Central Park and Woodford Street.
- d) Cultural and community activities take place in the locality primarily held at the Lane Cove Musical and Cultural Centre and the Longueville Sporting Club.
- e) Exposure to busy Northwood Road offers opportunities for showroom type retail with residential use above.
- f) Bicycle routes are available on Longueville Road, Kenneth Sreet, Arabella Street, Northwood Road and River Road West (see Lane Cove Bicycle Plan for details).
- g) Heavily vegetated areas east of McMahons Road and within Central Park are designated for public recreation offering amenity and enhancing local views.
- h) Vegetated area immediately north and east of Northwood Road is protected by environmental conservation (LEP Zone E2) offering amenity and enhancing privacy and local views.
- i) The grounds of the Lane Cove Country Club and Golf Course to the west of Northwood Road also offer amenity and local views.

5. Analysis - Constraints



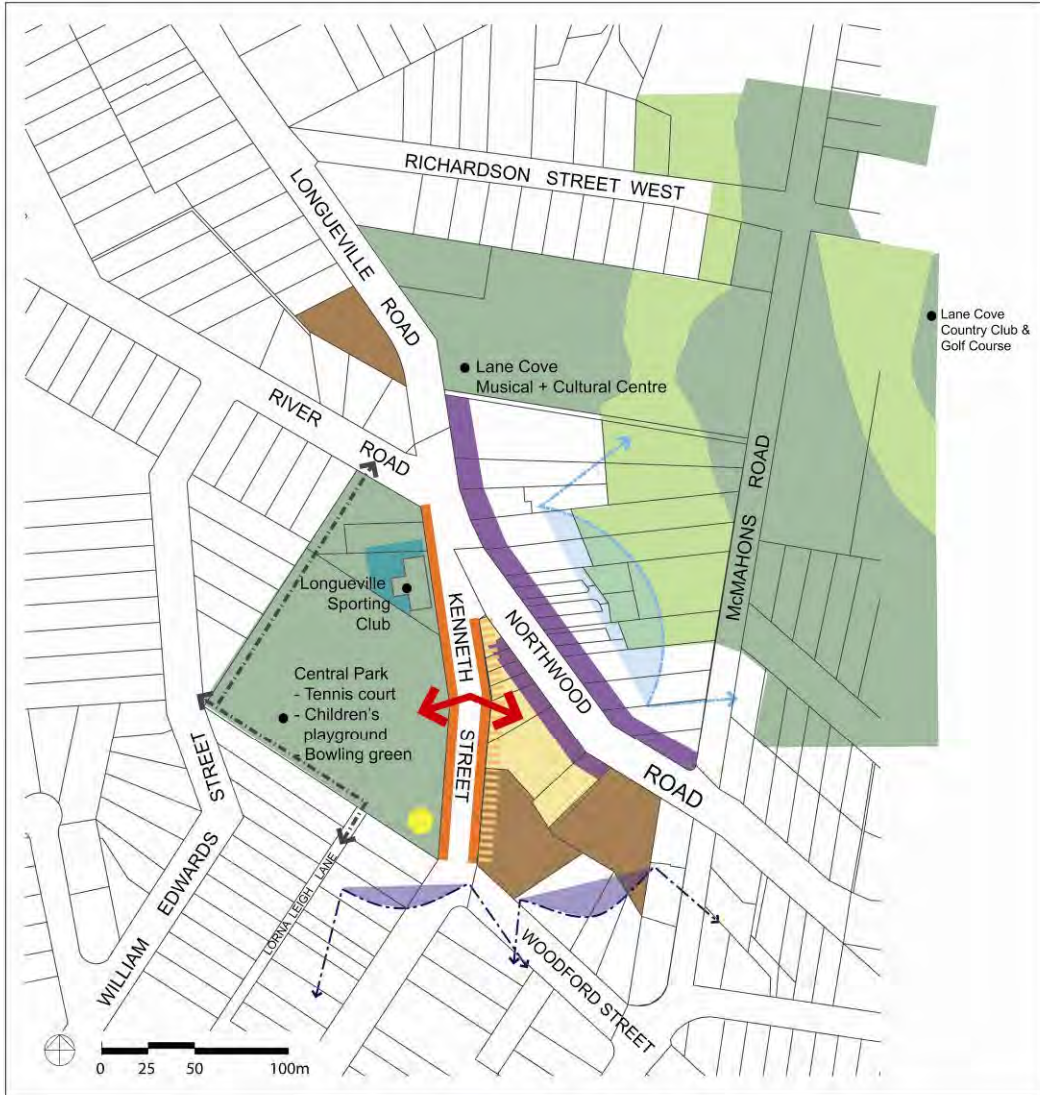
6. Issues - Summary

The primary issues facing the neighbourhood centre are:

- a) The centre is fragmented with no true sense of place.
- b) Existing uses do not provide sufficient vitality to the area and do not service the local community as a node of centre.
- c) Provision of local convenience goods is currently dependent on service stations
- d) The retail precincts are disconnected due to the traffic movements and noise of River/Northwood Road.
- e) The existing low scale built form (2 storeys) does not activate street or park edges.
- f) The existing built form does not take advantage of the distant views.
- g) Busy traffic intersections at the corner of River Road and Longueville Road and at the corner of Kenneth Street and Northwood Road discourage pedestrian movement and safety and are challenging for cyclists..
- h) Central Park's well – used recreational facilities are separated from the centre by busy roads.
- i) Central Park has no passive surveillance from surrounding development.
- j) Entrances to the Central Park from William Edwards Street and Lorna Leigh Lane have very little visibility and are underutilized.
- k) Poor connectivity to the open space to the north.
- l) Vehicle entrances to retail/commercial uses from Northwood Road are narrow and steep creating access issues.
- m) Heritage properties located on the block bound by Northwood and Woodford Street may be difficult to incorporate into town centre due to their heritage listed status; however, the heritage item located at the corner of Kenneth Street and Woodford Street in particular could contribute to the connection of the centre to the rest of the neighbourhood.

The above constraints and analysis have informed the development of the design strategy, desired future character and objectives presented in the following sections.

7. Strategy



Public open space	Retail / active frontage
Area protected by environmental conservation	Retail / commercial uses subject to slope and carparking
Vegetated area designated for public recreation	Local retail addressing Kenneth Street/ shop top over
Distant city views	Main street upgrades & small public plaza/footpath widening
Local views offer higher amenity	Enhanced pedestrian access
Strengthen connection as part of local centre	Heritage designated sites
Possible newsagent pavillion	
Possible retail / cafe /kiosk for park activation	

PART D: COMMERCIAL DEVELOPMENT AND MIXED USE LOCALITIES

8. Design Strategies

The design strategies for the Northwood Centre are:

- a) Create a local neighbourhood retail centre along Kenneth Street rather than along Northwood Road.
- b) Strengthen the connection across Kenneth Street integrating the park into the local centre.
- c) Improve pedestrian connectivity through the park by upgrading entrances from William Edwards Street and Lorna Leigh Lane.
- d) Activate Central Park and activate its southern end by introducing a low scale, small retail use i.e. newsagent kiosk.
- e) Provide a retail use or outdoor seating and cafe to the Sporting Club overlooking the park to serve local requirements as an alternative.
- f) Upgrade park with picnic and seating areas, a new all-age playground, a children's loop-cycle pathway and providing a protection barrier around playground to offer increased safety and security to small children.
- g) Undertake street public domain upgrades to Kenneth Street to slow traffic and improve pedestrian connectivity and amenity.
- h) Provide street trees along the Central Park edge and the eastern edge of Kenneth Street.
- i) Provide on street parking between street trees to Kenneth Street.
- j) Consider an increased setback to eastern side of Kenneth Street to widen footpaths for better amenity and street trees.
- k) Promote active retail shop fronts to Kenneth Street.
- l) Encourage retail uses to the northern and southern sides of Northwood Road to activate the street edge subject to Roads and Traffic Authority's (RTA) constraints for parking and locality.
- m) Allow residential uses above the ground floor to Kenneth Street potentially up to 3 - 4 storeys high.
- n) Setback the upper floor by 3 metres to reduce appearance of mass from the footpath.

9. Desired Future Character

The desired future character for the Northwood Neighbourhood centre is to create a pedestrian friendly, cyclist friendly, vibrant and active, small neighbourhood centre for local residents. To achieve this outcome retail uses are to be concentrated around the east and western sides of Kenneth Street beginning at the intersection with Northwood Road extending to Woodford Street. A small retail kiosk can be introduced to the southern end of Central Park to increase activity and to encourage a greater neighbourhood focus to this end of the park.

The existing commercial/retail uses on the other side of Northwood Road could continue but should be encouraged to become commercial/retail uses rather than uses with high pedestrian visitation.

Mixed use development to all blocks within the area is encouraged with residential uses located further away from Northwood Road to the rear of the blocks. Active street edges to Kenneth Street will provide opportunities for a cafe, restaurants, newsagent, take-away and other low scale retail tenancies appropriate for a small local centre such as home wares, antiques, etc.

Public domain upgrades to River/Northwood Road and Kenneth Street will improve the ambiance and sense of place for the centre including street trees, verge widening to Kenneth Street for outdoor seating, lighting and signage.

Objectives

1. To create a high quality, vibrant and pleasant neighbourhood centre to serve local residents needs.
2. To prohibit large retail outlets requiring a larger floor area (max. 400m² as per LEP) such as major supermarkets, discount department stores, hardware or other retail that would compete directly with Lane Cove Village Centre.
3. To improve the pedestrian connectivity and amenity of the local centre.
4. To concentrate pedestrian and resident based retailing to Kenneth Street.
5. To improve bicycle access to this area, and encourage walking and cycling.
6. To provide a high quality landscaped public domain for the new centre.
7. To mitigate against the impact of traffic noise and movement from River Road and Northwood Road on the local centre.
8. To fully integrate Central Park into the local centre as the main public open space area and encourage establishment of cafe uses and seating opportunities co-located with the park and play areas.
9. To encourage upgrading of the park to improve its facilities for children and older residents.
10. To provide the opportunity for outdoor seating and dining in a pleasant neighbourhood environment.

Locality 3 - Little Lane Mixed Use

1. Introduction

1.1 Land to which this DCP Locality applies

Locality 3 applies to the area known as Little Lane Car Park located at 1-5 Little Street, Lane Cove, as shown in Figure 1.1. The site's property description is Lot 2 DP 524992, Lot B DP 411363, Lot 51 DP 5922 and stratum lot(s) created under Little Lane.

This part of the DCP applies to all future development of the site where a development application is required.

1.2 Relationship to Other DCP Parts

The provisions of this Locality are to supplement Council's general provisions that apply to the site as well as the Residential Flat Design Code (State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development). The plan also applies variations to the provisions of those Plans and the Code where they are considered unsuitable to the conditions of the site and its context.

This Locality prevails in the event of an inconsistency between this Locality and Part C – Residential Development and/or Part D – Commercial Development and Mixed Use.

In general terms the provisions of the RFDC will be primarily considered in determining a development application.



Figure 1.1: Land to which section applies (not indicating substratum lots)

1.3 Objectives of the DCP

The site has been identified as suitable for redevelopment because of its strategic location in the Lane Cove Village Centre. This Locality aims to ensure that development of the site achieves the following objectives. A Statement of Environmental Effects for a development application is to demonstrate in detail how the proposal meets these objectives.

1. Promote a well-designed built form providing streetscapes and vistas that contribute positively to the diversity and viability of the Lane Cove Village Centre, balancing the heritage and traditional character of Lane Cove Village with the desired future character of the Centre and its surrounds.
2. Interrelate with and provide transition to each of the differing streetscape characters facing the site: the civic spaces of the Council Chambers and Aquatic Centre, the open space of Pottery Green on Little Street, the shop top housing and service areas on the western side of Little Lane and the small-scale residential units to the south.
3. Maintain reasonable solar access to adjoining residential development.
4. Accommodate community facilities within the development.
5. Accommodate public car parking within the basement of the building.
6. Maintain the site's leafy outlook with the introduction of mature landscaping to enhance the site's leafy aspect viewed from other properties in the vicinity.
7. Create attractive and functional residential and commercial spaces of a high standard of amenity.
8. Provide an animated, safe, accessible and attractive landscaped public domain, with street activation along Little Lane and maximising opportunities for public meeting places and contributing to the Centre's pedestrian and cycle networks/facilities.
9. Adopt a contemporary approach to design, optimising the use of passive technologies in building design, construction and operation, and maximising the site's environmental, social and economic sustainability. The Statement of Environmental Effects for any application must assess the appropriateness of passive and / or active technologies in building design, construction and operation to minimise Greenhouse Gas emissions throughout the building's life.

2. Site Context

2.1 Background

A shortfall in car parking within the Lane Cove CBD has been identified in the "Traffic and Parking Master Plan for Lane Cove Town Centre and Business Park Traffic and Strategy Study" prepared for Council. To satisfy part of the shortfall predicted for 2016, it is proposed to increase the public car parking on the site to around 200 spaces.

The site also provides an opportunity for infill development that activates Little Lane as a shared space and extension of the Village. Council is seeking to protect and enhance the heritage value

of Longueville Road whilst looking for opportunities to promote the economic viability of the Centre.

Accordingly, Council commissioned Scott Carver in 2007 to undertake urban design analysis and community consultation to formulate preferred design principles, building envelopes and development controls to govern a mixed use redevelopment of the site.

This Locality is based on the recommendations of that study.

2.2 Site Context

The Little Lane Carpark is irregularly shaped and located on the corner of Little Street and Little Lane with a site area of 2,461 square metres. The site is currently used for car parking purposes with 86 spaces and has a high occupancy rate with regular turnover of spaces and a maximum period of 3 hours per day.

The Statement of Environmental Effects is to contain comprehensive photographic and other material in its analysis of site context.

The Little Lane Car Park is located on the north-eastern edge of the Lane Cove Village Centre.

The Centre is one of several commercial areas in the Lane Cove local government area and possesses a 'village' character that is modestly scaled.

The northern edge of the site is visible from Longueville Road, which is the principal retail street and consists of period buildings constructed in the 1910s and 1920s. These have traditional small shop street frontages and high facades. The Village Centre is:

- a) "characterised by intermingled one to two storey, low scale buildings, masonry construction with rendered or face brick, a general uniformity of alignment, and use of traditional box awnings over the footpath in a variety of styles and configurations" (Lane Cove Town Centre Masterplan 1998).
- b) North of the site, at the intersection of Little Street and Longueville Road, is a civic precinct which includes the Council Chambers and Civic Centre. The Lane Cove Aquatic Centre overlooks the "Pottery Green", and is located across the road to the east of the site.
- c) South of the site is a predominantly residential precinct. Adjacent to the site, at 9 Little Street, is a three-storey walk-up style residential flat building. This building has a setback of some 9m to Little Street, 4.8m from the common boundary and 5m from Little Lane. A second three-storey walk-up style residential flat building is located on the corner of Central Avenue.
- d) The west side of the site is bordered by Little Lane. This lane is used as secondary access to the buildings which have frontages on Longueville Road.

Refer to Photos 2.1 to 2.6 below for examples of site context photographs.



Photo 2.1: View of Little Lane Carpark



Photo 2.2: View along Little Street - existing vegetation



Photo 2.3: View of existing development backing on to Little Lane



Photo 2.4: View of 9 Little Street from Little Lane



Photo 2.5: View of Aquatic Centre



Photo 2.6: View of existing buildings along Longueville Road

3. Public Domain Principles

The public domain and streetscape surrounding the site will establish a strong image for the precinct and deliver a high level of community benefit reflective of a contemporary mixed use village centre. Designing for the public domain includes considerations of its relationship of the built form, in terms of scale, architectural elements and infrastructure.

Development of the site will provide the setting and definition for the activation of, and public domain improvements to, Little Lane while ensuring the continuity of the form of Little Street and its relationship with adjoining buildings.

The design principles outlined below will ensure that the elements of the urban spaces within the public domain are coordinated and integrated in a way that is sustainable, functionally efficient, aesthetically pleasing and safe.

1. Potential barriers are to be minimised in the design of the public domain in order to promote connectivity and legibility.
2. Streets are to be active environments that allow passive surveillance and equity of access.
3. Little Lane, in particular, is to become a pedestrian priority area adopting best practice approaches for “shared space” that encourages pedestrian movement and access to the Longueville Road commercial area.
4. Social and cultural exchange is to be promoted through the provision of considered spatial planning of the relationship of the site and any community facilities within the development, with the Aquatic Centre and Pottery Green, streetscape furnishings and artwork/cultural expression.
5. All elements chosen for use in the public domain should be robust, coordinated and thoughtfully located as appropriate for a village centre. All elements are to directly relate with the public domain of the Lane Cove Village Centre and utilise Part L - Public Art (DCP).
6. Streets are to be appropriately lit for safety and security, whilst ensuring minimal impact of lighting on residential apartments.
7. Where appropriate, signage and way finding elements are to be incorporated in the public domain.
8. A footpath and pedestrian environment is to be provided along the frontage of the site to Little Lane.
9. A pedestrian link through the site should be considered if it enhances connectivity and access within the Centre and adjoining facilities, but only if it will function safely with a high level of natural surveillance from adjoining buildings and does not impact on buffer-landscaping.
10. The design and layout of buildings and landscaped areas adjoining pathways in the public domain should ensure there is natural surveillance to protect the amenity of users.

11. An acceptable level of access, safety, convenience and amenity for all street and road users must be provided, minimising the negative impact of traffic. If pedestrian path taken away from Little St site boundary, the path adjacent to the pool should be widened.
12. Vehicles must enter and exit the street carriageway in a safe and efficient manner.

4. Development Controls

4.1 Introduction

The following section provides development controls applicable to the Little Lane Carpark site that either supplement the RFDC and other DCP Parts applying to the site or vary these in consideration of the site conditions and its context. In particular, proposals need to have regard to Section D.1 General Provisions - 1.11 Solar Access.

4.2 Site Use

Objectives

1. Development should aim to promote a diversity of uses and minimise potential adverse impacts between them.
2. A mixed use building is desired with ground floor uses used for retail, commercial and community purposes with residential apartments and/or offices on upper levels.

Provisions

- a) The ground floor should be used for retail, commercial and community uses while residential occupation may be suitable where adequate privacy and security can be provided while maintaining integration with, and surveillance of, the public domain.
- b) Provision of 600m² of floor space for community uses on the ground floor and/or mezzanine is preferred. The calculation of community space excludes the public foyer area but may include facilities such as toilets, intended principally for users of that community area.
- c) Non-residential uses may also be provided within remaining upper floors where potential conflicts with residential uses may be properly managed.

4.3 FSR and Height

Objectives

1. The Floor Space Ratio and Height of development are governed by the respective controls within the Lane Cove Local Environmental Plan 2009:

FSR: 2.7:1

Height: 30 metres.

4.4 Setbacks

Objectives

1. The ground floor and upper level building setback to Little Street and Little Lane should relate to the adjoining built form and allow for continuity and transition of the landscape and other elements of the public domain and its definition as well as a visual connection to the Aquatic Centre at the street corner.
2. Setbacks are also required to provide sufficient separation from the existing residential building to the south of the site to ensure adequate visual and acoustic privacy.

Provisions

The ground floor and the upper levels of the buildings are to be set back as follows:

- a) 7.8 metres to Little Street built to the setback line.
- b) 5.2 metres to Little Lane built to the setback line.
- c) A minimum of 9 metres between non habitable rooms and the existing building and a minimum of 12 metres between habitable rooms and the existing building on the southern property, to four storeys, and 18 metres above that to provide sufficient separation so as to conform with the RFDC 'rules of thumb' for visual privacy.
- d) The building setback at the corner of Little Street and Little Lane should consider the visual connection to the aquatic centre.

Refer to Figure 4.1 for setback diagram.

The carpark and podium:

- e) Are permissible above ground between the boundary and the setback applying to the remainder of the building. The design should have regard to amenity issues particularly visual viewed from the adjoining property to the south and from the public domain.



Figure 4.1 Site Setbacks

4.5 Landscaped Area

Objectives

1. The preservation of existing trees and vegetation is encouraged where warranted on Little Street.
2. 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 in balance with the provision of hard surface areas and maintain a leafy outlook when viewed from surrounding areas.
3. The landscape design should take into consideration the safety of residents and permit natural surveillance of common areas and pathways. Refer to Photos 4.2 & 4.3 for potential landscaping elements.

Provisions

- a) Landscaped areas must have minimum dimensions of 2 metres.
- b) Landscaping on the southern boundary should have regard to the need for balancing privacy and solar access needs of adjoining residents.
- c) Where access to deep soil is not available, landscaping may be provided within planter boxes on podiums with a depth of at least 900 mm but also be capable of accommodating plant selections to achieve landscaping objectives.

- d) Consideration should be given to siting the building with sufficient setback to allow street trees on Little Lane's eastern side.
- e) Existing vegetation along the Little Street frontage must be considered for retention, where appropriate, and supplementary landscaping proposed.
- f) Particular attention should be applied to the landscaping treatment of any protruding elements of the basement carpark to avoid an adverse visual or safety (pedestrian/cycling) impact on Little Street and Little Lane.



Photos 4.2 & 4.3 - Potential Landscaping Elements

4.6 Building Interface and Awnings

Objectives

1. To integrate the ground and upper floors with the adjoining public domain.
2. Provide for awnings which will enhance the pedestrian environment.

Provisions

- a) The building façades at ground level adjoining Little Lane should support animation and activity within the public domain.
- b) The building should address all street frontages through the articulation of façades which should maximise visibility from the building to the public domain and avoid the use of blank walls to the maximum extent possible.
- c) A continuous, horizontal awning should be provided on Little Lane with a minimum width of 2m (variations may be necessary for trees) using materials that shade sun and are rain proof.
- d) Locate awnings at least 3.3m, and no more than 4.2m, above the footpath level.

- e) Make provision for the use of temporary shade structures such as retractable blinds, umbrellas and pergolas in association with appropriate ground floor uses such as outdoor cafés.

Refer to Photo 4.4 for example of a mixed use streetscape.



Photo 4.4 - Mixed Use Streetscape

4.7 Entrances and Exits

Objectives

1. To promote equitable and legible access to the buildings.

Provisions

- a) Main entrances and exits are to be located on Little Lane at the front of buildings and visible from the Lane.
- b) The main entrance/s to the building is to comprise a continuous and direct accessible path of travel from the public domain to the internal destination.
- c) Entrances are not to be obscured by landscaping or other obstacles and have clear sight lines.
- d) Entrance types should be clearly identifiable to reduce confusion.
- e) If exits are closed after hours, indicate at the entrance of the building.
- f) Entrance lobbies to upper floor uses should be well illuminated, with seating provided and a firm and level non-slip floor surface.
- g) Design the building so that evacuation procedures for people with disabilities are in place.

4.8 Floor to Ceiling Heights

Objectives

1. Ceiling heights are to promote the sense of space and sun penetration into the building and in particular, ensure suitability and adaptability for commercial use of the ground floor.

Provisions

- a) Finished floor to ceiling heights are to be a minimum of 3.3m for the ground floor and 3.3m for any additional commercial floors.
- b) Floor to ceiling height, subject to BCA requirements, may be varied to include a mezzanine level within basement/ground floor space.
- c) In residential flat buildings, including residential apartments in mixed use buildings, the floor to ceiling height shall be:
 - I. for non-habitable rooms, a preferred minimum of 2.4m, however a minimum of 2.25m will be permitted
 - II. for the upper level of a 2 storey apartment, a minimum of 2.4m provided at least 50% of the apartment has a minimum of 2.7m height and
 - III. for all single level apartments, a minimum of 2.7m.

4.9 Building Materials

Objectives

1. Building materials and appearance will play a significant role in establishing the character of the new development.
2. Consideration should be given to the role of the building in providing a transition from residential areas to the commercial areas of the Village Centre.

Provisions

- a) 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.
- b) Choice of materials should be based on consideration of both their environmental and economic costs.
- c) Graffiti resistant materials should be used in areas that are accessible by the general public and communal areas within the development.

4.10 Car parking

Objectives

1. Ensure that sufficient parking is provided for residents, employees and visitors to the building while also providing additional public parking for the Lane Cove Village Centre.
2. The provision of public car parking on site is recognised in the provision of parking for commercial and community uses within the development.

Provisions

- a) The minimum parking requirements as outlined in Part R - Traffic, Transport and Parking of this DCP are to be adopted for this site subject to allowances below.
- b) A minimum of 200 off-street parking spaces are to be provided for public use (this may be reduced by 5% if it can be demonstrated that full provision is not economically viable).
- c) Car parking requirements of commercial uses may be included as public car parking spaces to be provided up to a maximum of 50 in excess of 150 public car parking spaces provided.
- d) Car parking requirements of community uses is satisfied by the public car park and additional parking is not required.
- e) If car parking is proposed to be shared, the rationale for doing so, as well as the management of shared spaces is to be provided.
- f) Visitor parking is not required.

4.11 Vehicular Access

Objectives

1. Allow vehicular access without having adverse impacts on pedestrian movement and access and to assist in achieving a better pedestrian environment to Little Lane.

Provisions

- a) All vehicular access is to be from Little Street.
- b) Adequate vehicular entry and exit and circulation areas are to be provided. The design must:
 - I. Provide a safe environment for both pedestrians and vehicles using the site and surrounding road networks
 - II. Ensure vehicular ingress and egress to the site is in a forward direction at all times
 - III. Provide for service vehicles if possible
 - IV. Minimise the visual impact of hard paved areas and basement entrances.
- c) The driveway shall be a minimum of 10m from any side boundary or street.

- d) Driveways are to have a minimum width of 6m at the property boundary for a distance of 6m within the development to ensure easy entry/exit of vehicles.
- e) Functional and visual separation of service entries to the site, and adjacent sites, from public and residential areas to be achieved as far as possible.
- f) Cycling: A DA is to take into account considerations such as setbacks to avoid blind corners; secure bike parking on-site and/ or other appropriate matters for the amenity and safety of cyclists.

4.12 Sustainability

Objectives

1. To adopt a contemporary approach to design, optimising the use of passive technologies in building design, construction and operation, and maximising the site's environmental, social and economic sustainability.

Provisions

- a) The Statement of Environmental Effects is to demonstrate that the design aims to achieve a high sustainability level throughout the site as a whole, additional to the BASIX requirements for the residential component.

4.13 Stormwater Controls

Provisions

- a) Where it is proposed to build in an area known to be affected by overland flow, all spaces are to have a minimum freeboard of 300mm (except parking and storage areas which are to have a freeboard of 150mm), above the calculated top water level for the 1 in 100 year ARI storm event.

Little Lane - Appendix A

Statement of Environmental Effects Guide for Submission of a Development Application

This aims to highlight particular matters relevant to the Little Lane Car Park site. A development application should also provide all other standard material required for DAs generally for Council.

Site Context:

Photographs and other images are encouraged to be provided to demonstrate the site and its context. It is important for these to be up to date at submission of the DA.

The development's scale and transition to adjacent properties and streetscapes in Little Lane and Little Street is important, given the difference in proposed height on this site relative to its surroundings and their topography. To assist the understanding of this and other matters, the design is to be demonstrated by 3D modeling.

The Statement is to include:

1. Maps showing the surrounding area to a minimum of 200m around the site
2. Existing and achievable heights for the context surrounding the site
3. Heritage items in proximity to the site i.e. the pub
4. Key facilities nearby and key linkages from the site to other uses or connections i.e. the recreational centres and sports field, the various arcade links up to Longueville Road to the laneway and the civic and open space in the vicinity
5. Adjoining uses including the amenity, overshadowing and overlooking considerations of the adjoining residential flat building
6. The changing character of Little Lane with the new development that is occurring along it
7. Orientation and views from the site as well as views to the site
8. Street hierarchy and existing pedestrian or cycle links
9. Location of open space on and around the site
10. Significant vegetation on the site and around it
11. Existing streetscape character (supplementing the photographs in the document)
12. Existing footpath locations and widths
13. Existing activation to Little Lane etc

and how the development would interrelate with these contexts.

Nos. 1- 5 Birdwood Avenue

Provisions

The following controls apply to proposals for redevelopment of Nos. 1-5 Birdwood Avenue. Where a development control is not covered below, refer to generic controls.

- a) Car parking for the club facility on Nos. 1-5 Birdwood Avenue shall be determined in accordance with the RTA's Guidelines for Traffic Generating Development.
- b) Car parking for club facilities shall be accessible independently of any other uses within the building.
- c) The height of any new or extended building is to be no higher than 71 Longueville Road, stepping down to the west to minimise overshadowing.
- d) Consideration is to be given to pedestrian cover at the street level.
- e) Access to the site, both pedestrian and vehicular, is to take into consideration the RTA's proposals for surrounding streets and the Lane Cove Bike Plan.
- f) External building finishes are to be non-reflective.
- g) Any new or extended building at 1-5 Birdwood Avenue is to have building facades compatible with the building at 71 Longueville Road.
- h) The setbacks to surrounding roads and future roads for any development shall be a minimum of 3.0m, which is to provide for a widening of the footpath and a landscaping strip 2.0m wide to allow for planting in accordance with Council's Landscape Policy.

Development Applications should include proposals to provide services and facilities for the Lane Cove community.

TRIM 50192/13

Locality 5 – 472-504 Pacific Highway, St Leonards

Land to which this DCP Locality applies

This precinct is located in the area bound by Pacific Highway on the north and east, Nicholson Street to the south, the eastern boundary of 472 Pacific Highway and the western boundary of 504 Pacific Hwy. Please refer to Clause 6.6 of Lane Cove Local Environmental Plan 2009 for site description.

Note: This DCP section prevails over the remainder of DCP 2010 where inconsistency occurs.

Objectives

- 1 Create a landmark precinct including taller and slender towers, of triangular form on 472-494 Pacific Hwy and rounded on 500 Pacific Hwy fronting Friedlander Place, at this prominent corner of the Pacific Highway to provide visual interest upon approach from all directions.
- 2 Achieve design excellence and iconic new development in the centre of St Leonards.
- 3 Create a distinctive architectural character to the Pacific Highway frontage with engaging and legible 'entrance' points to reinforce St Leonards as a key location as an activity centre.
- 4 Provide a new public space integrated with Friedlander Place to create a distinctive sense of place for residents, workers and visitors.
- 5 Activate and integrate existing and new public spaces with appropriate ground floor retail and other uses, specifically Friedlander Place and the new retail plaza on 472-494 Pacific Hwy and the colonnade fronting No.500.
- 6 Increase the amenity of Nicholson Street and the adjoining public access ways, maximising casual surveillance and activation.
- 7 Provide viewlines through Friedlander Place, the new plaza on 472-494 Pacific Hwy and the new towers on that site.
- 8 Promote site amalgamation to avoid the creation of isolated sites within the precinct.
- 9 Reinforce the LEP's requirements for a minimum FSR 1.5:1 non-residential floor space for each site.

Tables

Notes:

- Controls in all tables below are to be applied to the relevant properties.
- Setbacks are to apply to the outer edge of balconies.
- "Friedlander Place" refers to Lot 1DP 1179636.

Numbers 504 and 500 Pacific Hwy (regardless of amalgamation)			
	CONTROL	PROVISION	NOTES
1	Floor Space Ratio	1.5:1 min. (non-residential) 15.5:1 max (residential) 17:1 max (total)	
2	Setbacks – Ground Level Retail	4.0 m min.	Colonnade form to Pacific Hwy and Friedlander Place
3	Setbacks – Non-Residential Podium	0 m from all boundaries	All commercial, except where retail colonnade provided
4	Setbacks – Residential Tower	4.0 m min. from Pacific Hwy	
5	Setbacks – All Levels	0 m	Along common boundary between 500 & 504
6	Levels – Non-Residential (Including Retail)	Full 4 storeys of non-residential floor space are to be provided - horizontal from Pacific Hwy to the rear of the site above Pacific Hwy existing ground level.	To be floorplates above Pacific Hwy extending across the entire site area for buildings fronting Pacific Hwy
7	Floor to Floor Height Non-Residential - Ground Level Non-Residential - Each Level, Other Than Retail	4.8 m min. 3.6 m min.	Above ground level Pacific Hwy
8	Balcony Area	10.0 m ² min.	
9	Balcony Articulation Zone	2.0 m min.	Behind all building setbacks
10	Building Separation	24 m min.	To residential towers east of Friedlander Place.
11	Vehicle Access	From Nicholson St/ rear lane/ Friedlander Place	Via rights of way as necessary
12	Pedestrian Link	Within private property at rear of site. Rear lane to be redesigned to provide clear line of sight.	From rear lane to Friedlander Place

No. 504 (Charter Hall) – not amalgamated			
	CONTROL	PROVISION	NOTES
1	Site Area Approx.	1,834 m ²	
2	Height	138 m	Above ground level Pacific Hwy
3	Building Floor Plate	800 m ² max.	Excluding balconies
4	Setbacks – Residential Tower	9.0 m min.	From western boundary with No.530 (Telstra) - to edge of balconies
5	Setbacks – Residential Tower	4.0 m min.	From rear lane
6	Building Length	40.0 m max.	

No. 500 Pacific Hwy – not amalgamated			
	CONTROL	PROVISION	NOTES
1	Site Area Approx.	435m ²	From SP
2	Height	72 metres max.	Above ground level Pacific Hwy
3	Setbacks – All Levels	0 m	All boundaries

No. 504 and 500 Pacific Hwy – if amalgamated			
<i>These two sites must be amalgamated as a condition of development consent in order for the controls below to apply.</i>			
	CONTROL	PROVISION	NOTES
1	Site Area Approx.	2,268 m ²	
2	Height	138 metres max.	Above ground level Pacific Hwy
3	Building Floor Plate	1,075 m ² max.	Excluding balconies
4	Setbacks – All Levels	0 m min. from rear lane	
5	Setbacks – Residential	4.0 m min from Pacific Hwy 7.0 m min. from western boundary with No.530	
6	Building Length	51 m max. measured along the central east-west axis of the amalgamated site.	To a max. 10 m east of the eastern boundary of 504 Pacific Hwy. Rounded or stepped building form required – see diagrams.

Numbers 472-494 (Leighton)			
<i>These two sites must be amalgamated as a condition of development consent in order for the controls below to apply.</i>			
	CONTROL	PROVISION	NOTES
1	Floor Space Ratio	1.5:1 min. (non-residential) 10.5:1 max (residential) 12:1 max (total)	
2	Building Height	91m max. – building at front (Pacific Hwy) 115 m max. – building at rear (Nicholson St)	Above ground level Pacific Hwy
3	Floor to Floor Height Non-Residential - Ground Level Non-Residential - Each Level, Other Than Retail	4.8 m min. 3.6 m min.	Above ground level Pacific Hwy
4	Building Floorplate of Each Residential Tower	850 m2 max.	Excluding balconies
5	Levels – Non-Residential	4 levels min.- front building	To be entire levels of the building fronting Pacific Highway
6	Setbacks – Ground Level	4.0 m min. from Pacific Hwy 2m min. elsewhere in site	Colonnade form
7	Setbacks – Non-Residential Podium	0 m from all boundaries, except:- 20 m min from Friedlander Place – front building	All commercial, except where retail colonnade provided
8	Setbacks – Residential Tower	4.0 m min. from Pacific Hwy - front building 0 m min. from Nicholson St – rear building 7.0 m min. from side boundary with No.470 0 m from side boundary with Friedlander Place	
9	Balcony Area	10.0 m2 min.	
10	Balcony Articulation Zone	2.0 m min.	Behind all building setbacks
11	Building Separation	22 m min. between balconies	
12	Retail Plaza Width	22 m min.	
13	Vehicle Access	From Nicholson St/ Friedlander Place	Via rights of way as necessary
14	New Public Open Space	The proposed new public open space at the northern end of the site is to have a minimum area of 325sqm.	To ensure that the new public open space is provided at that location and contributes a desirable quality of public amenity.

PART D: COMMERCIAL DEVELOPMENT AND MIXED USE LOCALITIES

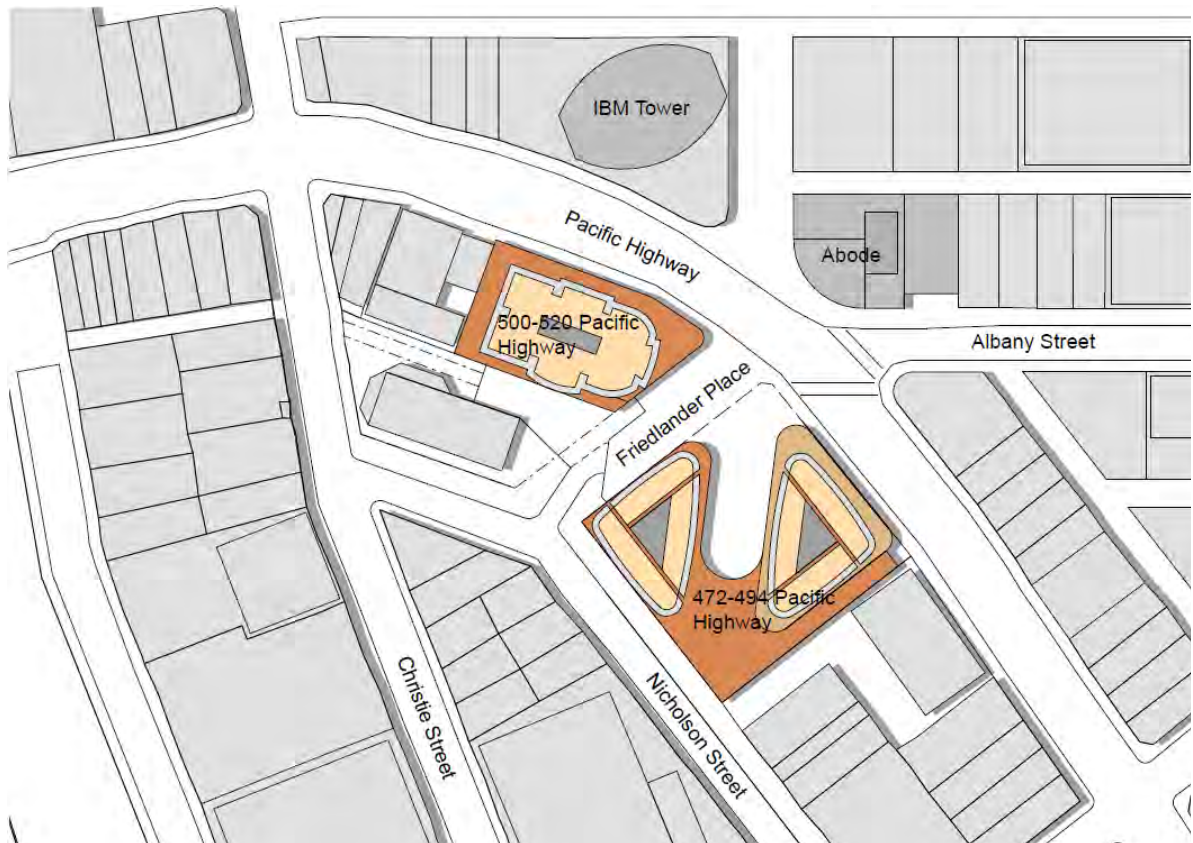
Numbers 472-494 (Leighton)

These two sites must be amalgamated as a condition of development consent in order for the controls below to apply.

	CONTROL	PROVISION	NOTES
15	Pedestrian Link	2.0. m min. within the property	To boundary with No.470 Pacific Hwy

All Developments			
	CONTROL	PROVISION	NOTES
1	Uses	<p>Encourage uses which operate during evening and early morning hours, such as local retail convenience stores, cafes and restaurants, community facilities, gymnasiums and other facilities, to encourage activity and safety outside of office hours.</p> <p>Provide active uses at street level, and flanking public spaces.</p> <p>In the tower form, provide a range of housing options, including more affordable housing with less required parking.</p> <p>Serviced apartments are not to be developed.</p>	<p>Ground level floor heights must allow for commercial or retail uses.</p> <p>Upper level non-residential uses may include gymnasium and child care.</p>
2	Podium Form	Podium height to be expressed through external façade material changes to reinforce commercial land use character	
3	Car Parking	Parking rates to comply with applicable rates in Table 2 of Part R, Draft DCP amendment, as at 31 August 2014.	
4	Landscaping/ Open Space	New street trees, paving and verge upgrades to be incorporated into the site development.	Tree species and paving design upgrades and specifications to be agreed on with Council.
5	Pedestrian Network/ Mid-Block Connections	Future development to satisfy the precinct plan to provide new and enhanced connections in the precinct	
6	Public Domain	<p>A public domain plan is required to be submitted ensuring that development contribute positively to the overall precinct wide public domain outcome.</p> <p>The lane to the rear of 504 Pacific Hwy and on-site pedestrian link are to be redesigned to provide a clear line of sight to promote visual connectivity and safety.</p> <p>The plan is to include details of materials and the like in consultation with Council.</p>	

All Developments			
	CONTROL	PROVISION	NOTES
7	Façade Colours and Materials	A mixture of non-reflective façade materials and colours are required to emphasis the podium level non-residential form and residential towers as separate elements. External materials to be durable with a high quality finish. Façade detailing to also address shading, wind protection and solar access considerations.	
8	Facade Articulation	Articulation of façades is to be designed to express a base and top, with layering of levels of the building complemented by the composition of rhythm, texture, and materials. Roof form should be integrated with the overall design of the building. The elements comprise balconies, sun-shading devices, bay windows and other similar elements, depending on internal programme and orientation	The intent of the building wall articulation control is to incorporate sufficient modulation in the architectural façade to reduce the scale and massing of the building form, adding visual interest and diversity to the overall design.
9	Solar Access	The guideline that new developments should achieve 2 hours direct sunlight for at least 70% of apartments, under the NSW Residential Flat Design Code, should be applied as a rule of thumb with discretion in Major Centres/ Specialised Centres where densities are high.	
10	Amalgamation	Development is to be committed to for each site in full as a pre-requisite to approval.	
11	Airspace	Federal legislation requirements relating to Sydney Airport are to be investigated and complied with by the applicant for any development.	



Part E

Industrial Development



E

INDUSTRIAL DEVELOPMENT:

- E.1 Introduction**
- E.2 Objectives**
- E.3 General Provisions**
- E.4 Site Layout**
- E.5 Building Setbacks**
- E.6 Cut and Fill**
- E.7 Building Design and Appearance**
- E.8 Parking and Vehicular Access**
- E.9 Landscaping**
- E.10 Fences**

SPECIAL INDUSTRIAL AREAS:

Locality 1 Land off Sirius Road

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Industrial Development

E.1 Introduction

This part of the plan applies to the land zoned 'Light Industrial IN2' and 'Working Waterfront IN4' as per the Lane Cove Council LEP 2009.

E.2 Objectives

The objectives are:

1. To promote industrial development which is both functional and attractive in the context of its local environment through appropriate design.
2. To ensure that all new development is compatible with the existing character of the locality in which it is located.
3. To encourage innovative industrial design which adds to and enhances the quality of the existing industrial areas.
4. To address access to the site other than by private motor vehicle.
5. To promote a pedestrian network throughout the industrial area.

E.3 General Provisions

This part contains the general controls that apply to all industrial zones as well as specific controls applying to particular centres such as:

- b) Land off Sirius Road

E.4 Site Layout

Objectives

The objectives of the site layout are:

1. To minimise any adverse environmental effects through planning of the site's layout.
2. To ensure the development is compatible with the streetscape and addresses the public domain.
3. To provide good access to pedestrians and cyclists.

Provisions

- Industrial sites are to be designed to locate offices addressing and activating the street/s where possible. The warehouse/factory functions as well as car parking, manoeuvring areas, loading and unloading facilities are to be located within the site.
- The total gross floor area used for ancillary office uses shall not exceed 49% for any one development.
- New buildings and the creation of new industrial units in close proximity to residential areas are to be designed to minimise adverse effects on the amenity of residential areas including overshadowing, overlooking, lighting, dust, noise or fumes.
- Internal spaces are to be designed to satisfy the operational requirements of the particular land use whilst providing a safe and convenient work environment.
- Floor space is to be distributed on the site to ensure the scale of the building reinforces the role of the street and buildings are arranged and aligned to create a pleasant working environment.
- Rights of way are encouraged to contribute to a pedestrian network throughout the industrial area.
- Cycle parking and pedestrian access close to covered access areas is encouraged.



Diagram 1 - Setbacks for industrial development

E.5 Building Setbacks

Objectives

The objectives of setbacks are:

1. To minimise the impact of development and buildings on the surrounding area.
2. To create a pleasant environment within and external to the site through adequate landscaping.
3. To provide landscape to the street.

Provisions

a) Setbacks are to comply with the following table:

Boundary	Landscaping Strip (which will form part of building setback)	Minimum Building Setback
Front	3.0m	8.0m
Side and rear – adjoining industrial zone	Zero*	Zero*
Side and rear – adjoining non industrial uses	2.0m	4.0m

* Zero side and rear setbacks may be permitted where deep soil/landscaping provisions are met elsewhere on the site, BCA fire regulations are met and merit issues are deemed acceptable in relation to adjacent properties.

- b) Landscaping strips are to be free from overhangs; hard elements such as paths, ramps, substations; fire hydrant boosters (where possible); signs and advertising structure (including pole signs). Landscaping strips may be used in calculation of landscaped area.
- h) All front setbacks are to be landscaped to provide a high quality street presence. Front setback areas must not be used for storage or display of goods or excessive signage, loading/unloading or large areas of car parking.
- i) Underground parking is to be situated underneath the building footprint and hard surfaces. The building setback is inclusive of the required landscaping strip as stipulated in the Setback Table.
- j) **Corner Sites:** New development on sites that have a corner frontage is to provide an 8 metre front setback to the main street/road and a minimum 4 metre setback to the secondary road/street

E.6 Cut and Fill

Objectives

The objectives of cut and fill are:

1. To minimise the impact of excavation on surrounding properties.
2. To achieve reasonable landscaping within developments.
3. To ensure development relates to the street level and the topography.

Provisions

- a) All development is to relate to the existing topography of the land at the time of the adoption of this DCP.
- b) Excavation for major development is to be contained within the footprint of the development and hard surfaces.
- c) For development within Centres, Council may consider full site coverage for underground excavation and podium footprints where it is demonstrated that mature landscaping, landscaped area and rainwater retention is able to be provided as roof terraces on podium structures.
- d) Uses at ground level are to respond to the slope of the street by stepping frontages and entries to follow the slope.

E.7 Building Design and Appearance

Objectives

The objectives of building design and appearance are:

1. To encourage a high standard of environmental design within new and existing industrial areas.
2. To achieve high quality and innovative architectural design for industrial buildings.
3. To ensure industrial development presents attractive facades to adjoining uses.
4. To ensure industrial developments activate the public domain.

Provisions

New construction is to achieve both functional and visually attractive buildings.

- a) Through careful site arrangements new building works should:
 - I. Address the street with any non-industrial aspects (i.e. office section) of the development.

- II. Avoid long blank walls of warehouse units facing the street or public domain and long unbroken roof lines. If unavoidable, use of single material and colour should be avoided.
 - III. Rear boundary walls are to be treated aesthetically.
 - IV. Provide regular articulation to the façade or division of massing.
- k) New buildings are to be designed to:
- I. Express the structure of the building through creative architecture and minimise use of reflective glass or large blocks of one material.
 - II. Visually reinforce entrances, office components and stair wells of units to create rhythm on long facades and a reduction of perceived scale. Strongly express structural bays and bracing.
 - III. Provide variation of unit design within industrial unit developments.
 - IV. Introduce solid surfaces, with a mix of materials; incorporate horizontal and vertical modulation including windows in appropriate proportions and configurations.
 - V. Address all streets to which it presents.
- l) Where blank walls on street frontages are unavoidable in new development they are to be treated as sculptural elements minimising bland streetscapes. They are to be finished to a high standard and minimise the potential for graffiti or other vandalism.
- m) All rooftop or exposed structures including lift motor rooms, plant rooms, etc., together with air conditioning, ventilation and exhaust systems, are to be integrated with the building design in order to ensure interesting and high quality appearance.
- n) **Corner Sites:** New development on corner sites is to address both street frontages in terms of facade treatment, fenestration and articulation of elevations.

E.8 Parking and Vehicular Access

Objectives

The objectives of parking and vehicular access are:

1. To ensure sufficient car parking is provided on-site to satisfy the likely peak parking demands of the development as per the RTA requirements.
2. To reduce potential conflict with street traffic and pedestrians.
3. To provide disabled parking where appropriate in accordance with the RTA's requirements.
4. Create attractive landscaped car parking throughout the development.
5. To provide sufficient secure bicycle storage facilities.

Provisions

- a. Parking is to be integrated into the site planning and must be visually mitigated by minimum 3m landscape strip along the frontage and other high quality landscaping.
- b. Separation is to be provided between service areas (i.e. loading and unloading areas) and parking. Service areas to be located and designed to facilitate convenient and safe usage.
- c. Access/Driveways- Vehicular movements to and from the site should be designed to reduce potential conflict with street traffic and pedestrians.
- d. Driveway width in front of the building line must be minimised.



Photo 1 - Poor example of integration of parking and landscaping

- e. Car parking areas are to be broken up by canopy trees between car parking bays to reduce their visual impact. Car parking areas are not to be exposed to the street and where they adjoin other uses they are to be screened with landscaping to reduce their impact.
- f. All vehicles should enter and leave the site in a forward direction.
- g. No tandem parking facilities will be accepted for new developments.
- h. Preferably, off-street parking is to be provided behind or at the side of buildings and away from street frontages.
- i. Visitor car parking is to be located close to the office component of the development.
- j. Loading docks should be positioned so they do not interfere with visitor and employee parking spaces and to ensure delivery vehicles do not stand on any public road, footway, laneway or service road.
- k. Proposed parking areas, truck docks, driveways, vehicular ramps and turning areas are to be maintained clear of obstruction and used exclusively for purposes of car parking, loading or unloading and vehicular access respectively. Under no circumstances are such areas or any portion thereof to be used for the storage of goods and waste materials. These areas are to be physically line marked and are to be maintained free of obstruction, for the sole use of delivery vehicles.
- l. Motorcycle parking spaces are to have an area of 1.2m x 3m.



Photo 2 - Good example of blank wall treatment



Photo 3 - Poor example of blank wall treatment

E.9 Landscaping

Objectives

The objective of landscaping is:

1. To improve the environmental amenity of industrial areas.
2. To screen unsightly land uses and open storage areas and provide buffers between industrial development and other land uses, especially residential.
3. To provide pedestrian linkages to surrounding streets on larger sites and through other sites to link with existing pedestrian networks.
4. To provide recreation areas for workers in larger developments.
5. To retain and provide for significant vegetation, particularly large and medium sized trees.
6. To conserve significant natural features of the site and contribute to effective management of biodiversity and to provide continuous vegetation corridors.
7. To encourage the planting of indigenous, native and low water consuming plants and trees.
8. To assist with on-site stormwater management.

Provisions

- a) A minimum of 20 % of the site shall be provided as landscaped area.
- b) In addition, a minimum of 10% of the site shall be provided and maintained as landscaped area or planting on structures, with lawns, trees, shrubs, for aesthetic purposes and the enjoyment of workers of the site. The minimum width for inclusion in calculations is 1.0m.
- c) All car parking areas are to be landscaped so as to break up large expanses of paving and cars. Landscaping shall be provided around the perimeter and between aisles and every 10 car spaces plus along pedestrian access routes. Contrasting finishes shall be used to break up large sections of paving and to delineate pedestrian areas, entries or car parks. Porous paving should be utilised wherever possible.
- d) Planter beds along the building façade are encouraged.
- e) All unbuilt-upon areas of a site are to be landscaped to soften the impact of buildings and car parking areas.
- f) Landscaping in the public domain should promote a cohesive landscape setting. Development is to provide street tree planting to match existing or to Council requirements, grasses, shrubs and accent planting or any combination of these.
- g) Storage areas and other potentially unsightly areas must be effectively screened from adjacent properties.
- h) Landscaping within setback areas should be of a similar scale to buildings on the industrial site. All landscaped areas are to be separated from vehicular areas by means of a kerb or other effective physical barriers.

- i) In open parking areas at ground level, 1 shade tree per 10 spaces should be planted within the parking area.
- j) A continuous landscaped buffer strip shall be provided between the driveway and side boundary. The buffer strip shall be a minimum of 2 metres, increasing to 3 metres where adjoining a residential land use. The buffer strip shall contain a mix of tall screen planting and plants with foliage at the ground level. Driveways central to the site shall be planted with avenue trees.
- k) Parking and circulation areas are to be delineated by planter beds at the ends of parking bays. Planter beds shall be a minimum width of 1.5 m surrounded by a 150mm concrete kerb and shall contain both trees and shrubs.

E.10 Fences

Objectives

The objective of fences are:

1. To integrate the landscape theme and minimise any visual impacts to the streetscape.
2. To provide associated site security and passive surveillance to the public domain.

Provisions

- a) All fencing along street frontage is required to be permeable metal palisade or picket finished in a suitable colour - dark colours are preferable. Maximum height allowed is 1.2 metres on street frontages.
- b) Taller fencing should be behind the building line for security. However, security fencing may be considered forward of the building line (behind the front landscape strip) if required for specific industrial uses.
- c) Chain wire is permitted only on the side and rear boundaries adjoining industrial developments, commencing at the front building alignment. All chain wire fencing is required to be black PVC coated.
- d) If the side or rear boundary faces a side or rear boundary of a residential premises, a timber paling/colorbond fence (commencing at the front building alignment) is allowed along with acoustic fencing with planting.
- e) Masonry retaining walls, If located along a street frontage are restricted to 600mm in height, where possible
- f) Solid metal panel fences (sheet metal or similar) of any height are not permitted along the street frontage or in front of the building alignment.

Locality 1 – Land off Sirius Road

E.11 Land to which this section applies

This Clause applies to Lot 2 DP 884454 (formerly part of Lot 1 DP 546860) Sirius Road, West Lane Cove.

E.12 Relationship to other DCP Controls

The provisions for Industrial Development in this DCP continue to apply to the land in this locality, except in the event of any inconsistency, these locality controls shall prevail.

E.13 Objectives

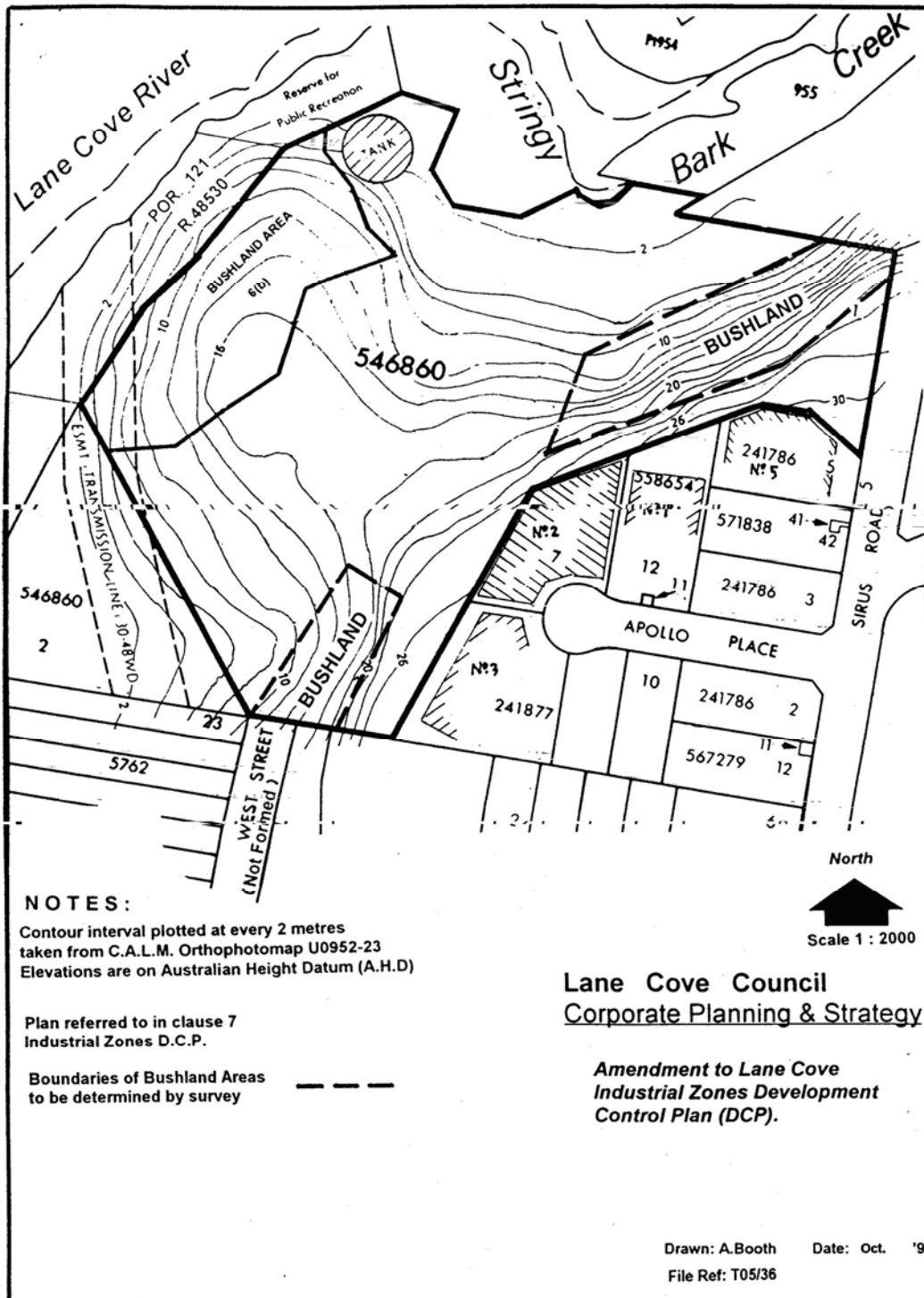
The objectives of this Clause of the Development Control Plan are to:

1. Provide for industrial development which is compatible with the environmentally sensitive nature of the area.
2. Encourage the design of buildings which will maintain the bushland character of the site when viewed from surrounding public lands, foreshore bush tracks, the Lane Cove River and Stringy Bark Creek.
3. Protect, maintain and enhance those parts of the site which contain bushland as identified on the DCP Map T05/36, dated October, 1998, and riparian vegetation and bushland which are considered part of the landscaping requirements for the site.
4. Provide for the location of buildings which allow for the provision of landscaping which will supplement the surrounding bushland area.
5. Provide for access improvements consistent with the traffic likely to be generated by development of the site.

E.14 Provisions

- a) Buildings shall be setback a minimum of 10 metres from any boundary which adjoins an open space and minimum of 20 metres from Stringy Bark Creek.
- b) The total gross floor area used for ancillary commercial or high technology uses, shall not exceed 49% of any one tenancy.
- c) Access to the site and internal access roads shall be designed in accordance with the RTA's "Guide to Traffic Generating Development".
- d) Building and work shall not be undertaken within the areas shown as bushland on the DCP Map T05/36, dated October, 1998. "Work" is defined as:-
- e) The erection of any structure on the land
- f) The removal of soil or rock from the land, and
- g) The deposit of soil, rock or any other matter on the land.
- h) Applications shall be accompanied by a statement as to the means by which the bushland, within the areas shown bushland on the DCP Map T05/36 dated October, 1998 shall be protected at all times.

- i) The requirements of the Environment Protection Authority for the containment area, which has been remediated.
- j) A landscape plan for the site is to include the plant species which are locally indigenous to the site.



7a

Part F

Access and Mobility



F

- F.1 Introduction
- F.2 Legislation and Policies
- F.3 Application

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1 Introduction

This Access Development Control Plan (DCP) was developed by Council in response to the Disability Discrimination Act 1992 (DDA) and Council Access Policies, to promote an accessible environment for residents and visitors, and to provide equal opportunities to participate in all aspects of the community. It should be read in conjunction with the Lane Cove Disability Action Plan.

Further to the DDA, the Disability (Access to Premises – Buildings) Standard 2010 emphasises and provides guidelines for the retrofitting and construction of buildings that aim to meet the relevant requirements of persons with disabilities and is required to be adhered to in conjunction with the previously outlined legislation. This Part of the DCP incorporates the relevant requirements of the Premises Standard.

Objectives

The Objectives are to:

1. Promote the total community benefits of an accessible environment and relate to the unique demographic and topographical characteristics of Lane Cove;
2. Relate to the process of access – linking information, communications, transport, built environment and FF&E (furniture, fixtures & equipment);
3. Provide guidelines for access to and within public spaces and buildings;
4. To raise public awareness and understanding of access and mobility issues for people with a disability through investigation and promotion of best practice in the design, construction and operation of developments;
5. Encourage construction in accordance with best practices, above the minimum prescribed requirements;
6. Ensure that new developments and services are accessible to, and usable by, everyone in the municipality.
7. To provide adaptable housing to meet a range of needs throughout the life cycle of its occupants.

1.1 Provisions

These access provisions have been developed in response to changes to access requirements in the Australian Building Codes Board's (ABCB) Building Code of Australia (BCA) and the release of the Disability (Access to Premises – Buildings) Standards 2010 in response to the Disability Discrimination Act (DDA).

The Disability (Access to Premises – Buildings) Standards 2010 commenced operation on 1 May 2011, in line with the adoption of the BCA 2011 which was revised to align

with the Access Code in the Premises Standards.

The overall aim of the Premises Standards is twofold. First it is to provide the building and design industry with detailed information about how they can design and construct their buildings in a way that meets their responsibilities under the DDA.

Second it is to improve access to buildings for people with a disability to ensure the greatest possible participation in the social, economic, cultural and political life of the community.

In general, this Access Code within the Premises Standards tells those responsible for buildings when and where access is required and then refers to technical specification documents such as Australian Standard 1428.1-2009 to describe how to design and build in an accessible way.

Buildings constructed prior to the adoption of the Premises Standard and BCA 2011 are subject to possible discrimination claims under the DDA as they shall not be deemed to comply with the prescriptive requirements of the Standard and Code.

The Disability (Access to Premises – Buildings) Standards 2010 requires that new building works, new parts and any part of an existing building, and any *affected part* of a building complies with the standards. An *affected part* is defined by the Premises Standards as follows:

An affected part is:

- (a) the principal pedestrian entrance of an existing building that contains a new part; and
- (b) any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

1.2 Liability

Applicants, property owners and/or occupants are responsible for understanding and complying with the intent of the Disability Discrimination Act 1992, in relation to these access provisions.

Council recommends that applicants, property owners and/or occupants investigate and identify applicable legal liability under the DDA.

The objectives of the DDA are:

- to eliminate, as far as possible, discrimination against persons on the basis of their disabilities in various areas, and in particular access to premises, work, accommodation and the provision of facilities, services and land;
- to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community; and

- to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

These objectives are the guiding principles of the Premises Standard which commenced on the 1st of May 2011. The objectives of the Premises Standard reflect those of the DDA and are as follows:

- to ensure that dignified, equitable, cost-effective and reasonably achievable access to buildings, and facilities and services within buildings, is provided for people with disability, and
- to give certainty to building certifiers, developers and managers that if the Standards are complied with they cannot be subject to a successful complaint under the DDA in relation to those matters covered by the Premises Standards.

1.3 Acronyms and Abbreviations

AS	Australian Standard
ABCB	Australian Building Codes Board
BCA	Building Code of Australia
CC	Construction Certificate
DA	Development Application
DCP	Development Control Plan
DDA	Disability Discrimination Act
FF&E	Fixtures, fittings and equipment
LEP	Local Environmental Plan
PS	Disability (Access to Premises – Buildings) Standards 2010
SOU	Sole-occupancy unit

1.4 Acknowledgements

These provisions have been prepared by Council staff, with input from the Lane Cove Access Committee and AE&D Access Pty Ltd (accessibility consultants) and Access Australia (authors of the original Council Access Policy).

2 Legislation and Policies

2.1 Disability Discrimination Act (DDA)

The Federal Government passed legislation in 1992 making it unlawful to discriminate on the grounds of disability in the areas of employment, education, access to premises and public spaces, clubs and accommodation, and provision of goods, services and facilities.

Further information is available at www.abcb.gov.au or www.humanrights.gov.au

Disabilities covered by the DDA include physical, intellectual, psychiatric, sensory, neurological and learning disabilities, physical disfigurement and disease causing organisms in the body.

The DDA and PS do however include a general exception which allows for development that would incur unjustifiable hardship, should the removal of existing barriers to access or the provision of full and equitable access be technically impossible or financially onerous.

A decision about what constitutes unjustifiable hardship can only be made by the Federal Court on a case by case basis in response to an actual complaint.

Applicants should note that the granting of consent by the consent authority that is non-compliant with the BCA or these provisions due to technical limits, topographical restriction or heritage significance does not protect the applicant against a complaint being made against them under the DDA.

2.2 Building Code of Australia (BCA)

The BCA provides Performance Based and Deemed-to-Satisfy provisions and criteria. The BCA performance requirements are based on the provision, of a reasonable level of, Safe, Equitable and Dignified access to services and facilities.

The BCA details minimum construction requirements, however any construction in excess of these requirements is encouraged and considered good practice.

The Deemed-to-Satisfy provisions of BCA that are accessibility related are primarily located in:

Part D3	Access for People with Disabilities
Part E3	Lift Installations
Part F2	Sanitary and Other Facilities

The Performance Requirements of the BCA that are accessibility related are primarily located in:

Performance Requirement DP1 and DP2
Performance Requirement EP3.4

Performance Requirement FP2.1

2.3 Australian Standards

Access related Australian Standards include:

AS1428.1	2009	General requirements for access
AS1428.2	1992	Enhanced and additional requirements
AS1428.4.1	2009	Tactile Ground Surface Indicators
AS1735.12	1999	Lifts and Escalators
AS2890.6	2009	Off-street Parking for People with Disabilities
AS3769	1990	Automatic Teller Machines
AS4299	1995	Adaptable Housing
AS4586	2004	Slip Resistance of Pedestrian Surfaces

Access Standards are subject to regular review and modification. Further information is available at www.saiglobal.com.

Australian Standard AS1428.1 is called up into the BCA. These access provisions require compliance with the relevant parts of AS1428.2, in addition to the above listed Standards.

2.4 Disability (Access to Premises – Buildings) Standards 2010

The production of the Premises Standard is intended to provide a prescriptive document that will ensure that the requirements of the DDA are met for new buildings and where new building work is being undertaken in existing buildings.

The Premises Standards and other useful information, including Guides, are available at www.abcb.gov.au or www.humanrights.gov.au

3 Application

3.1 General

These access provisions apply to all development types (excluding Class 1a buildings eg. single detached dwelling houses) throughout the Lane Cove Local Government Area and should be read in conjunction with the Lane Cove LEP and other Council policies; in particular Council's Disability Action Plan is to be taken into account, especially in relation to public spaces.

Specific uses may require additional consideration as noted under relevant sections below.

Provisions

1. Compliance with the BCA and Premises Standard;
2. These access provisions apply to a DA and CC for all new developments, subdivisions, and to alterations and additions affecting more than 50% of the total floor area over a combined 3 year period or that increase floor space by 30% or more;
3. The submission of a DA to Council requires the completion of the relevant DA checklist. In order to satisfy the requirements of these checklists, an accessibility report prepared by a suitably qualified access consultant is to form part of the DA documentation.

3.2 Subdivision

Wherever creation of a new lot takes place, the future means of access should be carefully planned to maximise accessibility to and within that lot.

Provisions

1. Subdivision layouts should maximise potential accessibility in future designs from the property boundary to and within parking areas, entrances and common areas within the site.

3.3 Public Spaces and links to Private Properties

Access for everyone, including people with a disability, is a process linking information, communications, transport, the built environment and furniture, fittings and equipment.

Public spaces connect roads, transport, private spaces, buildings, services and facilities. Access to and within private and public spaces should relate to the unique demographic

and topographical characteristics of Lane Cove, using its varied levels for innovative access paths and entries design.

For any development application proposed on Council's land, accessibility principles are to be considered in relation to the entire site to supplement any specific requirements in this chapter.

Provisions

1. Developments on public and / or private properties must provide and maintain accessible links and paths of travel between BCA Class 2 to Class 10 buildings and to adjacent public spaces or pedestrian networks;
2. For Class 1 developments containing 2 or more dwellings, barriers to access should be removed at private to public interfaces;
3. Public spaces are to have features as per AS1428.2, such as pathways, tables, seating, lighting, passing spaces, drinking fountains, rubbish bins, traversable play areas, etc.
4. Works requiring the submission of a Development Application shall require the inclusion of an access report prepared by a suitably qualified access consultant (excluding Class 1a buildings eg. single detached dwelling houses).

3.4 Heritage buildings

Heritage buildings and their curtilage should comply with relevant heritage controls and requirements. Heritage buildings are, however, covered by the DDA and could be subject to complaints to the Premises Standards if access was not originally provided. Designs should respect the principle that access to heritage buildings should be provided but not diminish the heritage significance of the building, curtilage or environment. Discussions should be held with Council staff to strike a balance between these issues.

Provisions

1. Designs should demonstrate, following discussion with Council staff, that a balance has been reached between the issues of providing access and retaining heritage significance.
2. New works are to comply with Premises Standard. Premises Standard provides a process of application for exemption under Unjustifiable Hardship granted by the Building Professionals Board where appropriate.

3.5 Adaptable and VISIBLE Housing (residential flats and dual occupancies)

Adaptable housing is to comply with AS4299, and is a dwelling unit designed in such a way that it can be modified easily in the future to become accessible to both occupants and visitors with disabilities or progressive frailties. Adaptable housing requires siting consideration – including access within the site, building location, landscaping, security, carparking, letterboxes and signage.

Adaptable housing requires design consideration – including floor levels, entrances, doorways, circulation space, sanitary facilities, kitchens, bedrooms, living areas, laundries, floors, lighting, fixtures and fittings.

To obtain approval of an adaptable housing unit, detailed plans and description of the pre-adaptation and post-adaptation unit are to be provided.

Visible housing is an important part of maintaining a connected community in which people are able to go to see family members and friends at home. Groups who benefit from visible housing include families with strollers or prams for young children, older and frail aged people and persons with disability. Visible housing is to provide a continuous path of accessible travel from the property frontage or carparking area to the living area and to a toilet that is either accessible or visible and common areas within the building.

Provisions

1. Adaptable housing to comply with AS4299, including the essential features in Appendix A for Class C housing (essential items only).
2. Adaptable housing to be equitably distributed throughout all types and sizes of dwelling units.
3. Adaptable housing to be provided at the rate of 20% of all dwellings in a Class 2 development.
4. Dual occupancies (attached) are to be visible (where topography permits – 1:10 fall or less steep).
5. Dwellings are to be visible at the rate of 80% in developments requiring adaptable housing.
6. Single Class 1a dwellings are not applicable to this part.

3.6 Public Transport

Public transport buildings, infrastructure and conveyances are subject to DDA and in turn are governed by the Disability Standards for Accessible Public Transport. The Disability Standards for Accessible Public Transport specifies conditions which are

generally more onerous than the Premises Standard and the BCA but do not provide any exception from other legislation.

The objectives of the Disability Standards for Accessible Public Transport are as follows:

- a) to eliminate, as far as possible, discrimination against persons on the basis of their disabilities;
- b) to ensure, as far as practicable, that persons with disabilities have the same rights to equity before the law as the rest of the community;
- c) to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

Provisions

1. Compliance to the relevant version of the Disability Standards for Accessible Public Transport and associated amendments as legislated at the time of commencement of construction.

3.7 Automatic Teller Machines (ATMs)

This Part of the DCP sets out guidelines for the installation of automatic teller machines (ATMs). Included are some recommendations for their design and performance to facilitate unobstructed access to a level, adequately sized, well-lit area in front of an ATM, and the provision of features of the user-interface of the ATM which are within reach and operable by the greatest possible number of users, under conditions of adequate privacy and security.

Provisions

1. ATM's are to be installed in accordance with the requirements of AS3769-1990.

3.8 Access to, and within, buildings

The BCA and Premises Standard require access for Class 1b - 10b buildings, inclusive.

These access provisions require compliance with the BCA and the PS as prescribed primarily within BCA Clause D3.1 Table D3.1.

Provisions

1. Access is to be provided in accordance with BCA Clause D3.1 and in accordance with Table 1 below.
2. Access is to comply with the relevant Provisions of the BCA, and associated referenced Australian Standards. Demonstration is required in the form of an access report prepared by a suitably qualified access consultant as part of the

DA documentation.

3. Buildings of a public nature are to have features in accordance with AS1428.2, when applicable, as follows:
 - a. Tables, counters and worktops for use by public.
 - b. Seating in pedestrian areas.
 - c. Drinking fountains and water coolers.
 - d. Gateways and checkouts.

Table 1

Access requirements for BCA – Class 1b to Class 10b buildings

BCA Class	Description	Access requirements
1b	Boarding Houses, short term accommodation, etc	To and within the appropriate number of dwellings as specified in Table D3.1 and 1 of each type of room or space for use in common by the building occupants
2	Residential flat buildings	From a required accessible entrance to at least 1 floor containing SOU's and to the entrance doorway of each SOU on that level. To and within 1 of each type of room or space for use in common by the building occupants
3	Hotels, longer term or transient living accommodation etc	From a required accessible entrance to at least 1 floor containing SOUs and to the entrance doorway of each SOU on that level. To and within 1 of each type of room or space for use in common by the building occupants and the appropriate number of accessible SOUs required by Table D3.1.
5	Professional or commercial offices	To and within all areas normally used by occupants
6	Retail shop or building, restaurant etc	To and within all areas normally used by occupants
7a	Public carparks	To and within any level containing accessible carparking spaces.
7b	Storage or display of wholesale goods for sale	To and within all areas normally used by occupants
8	Laboratories, production, assembly of goods	To and within all areas normally used by occupants
9a	Health care buildings	To and within all areas normally used by occupants

BCA Class	Description	Access requirements
9b	Assembly buildings and schools	<p>Schools and early childhood centres – To and within all areas normally used by occupants</p> <p>An assembly building not a school – to wheelchair seating spaces provided and to and within all other areas normally used by occupants.</p>
9c	Aged care	From a required accessible entrance to at least 1 floor containing SOUs and to the entrance doorway of each SOU on that level. To and within 1 of each type of room or space for use in common by the building occupants and the appropriate number of accessible SOUs required by Table D3.1.
10a	Private garage, carport, shed, or the like	<p>To and within –</p> <p>An accessible sanitary facility</p> <p>A change room facility</p> <p>A public shelter or the like</p>
10b	Swimming Pool	To and into swimming pools with a total perimeter greater than 40m, associated with a Class 1b, 2, 3, 5, 6, 7, 8 or 9 building that is required to be accessible.



Part G Acid Sulfate Soils



G

- G.1 What are Acid Sulfate Soils
- G.2 Introduction
- G.3 Assessment
- G.4 Joint Applications

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G.1 What are Acid Sulfate Soils?

Acid sulfate soil is the common name given to a range of soil types containing iron sulfides or their oxidation products. As the sea level rose and inundated land, sulfate in the sea water mixed with land sediments containing iron oxides and organic matter. The resulting chemical reaction produced large quantities of iron sulfides in the waterlogged sediments. When exposed to air, these sulfides oxidize to produce sulfuric acid. Acid sulfate soils are generally found in:

- Coastal lowlands, embayment and estuarine floodplains.
- Areas where the level of land is below 5m Australian Height Datum (AHD).
- Sediments of the recent geological age (Holocene).

The sulfuric acid produced by oxidation of iron sulfides affects soil and water and can severely damage the environment. Impacts include:

- Damage and destruction of vegetation.
- Reduction in soil fertility and increased salinity.
- Erosion problems.
- Pollution of surface water bodies and local ground water.
- Disease or death of aquatic species and ecosystems.
- Corrosion of materials such as concrete, iron, steel and aluminium. This has detrimental impacts on works and structures such as culverts, bridges, pipes, foundations, basement car parks and in-ground pools.
- Precipitation of iron hydroxide/oxide from acidic, iron-rich waters can cause the blocking of drains, wells and reduction of aquifer recharge.

G.2 Introduction

2.1 Land to which this plan applies

This Part applies to all land identified on Lane Cove Local Environment Plan 2009 – Acid Sulfate Soils Map.

Applicants should note that the land use tables contained in Lane Cove Local Environmental Plan (LEP) 2009 still apply. However, even if development consent is not required according to the land use tables, it may still be required under the Acid Sulfate Soils special provisions contained in clause 6.1 of the Lane Cove LEP 2009. All applicants are advised that they should contact Council if there are any questions in this regard.

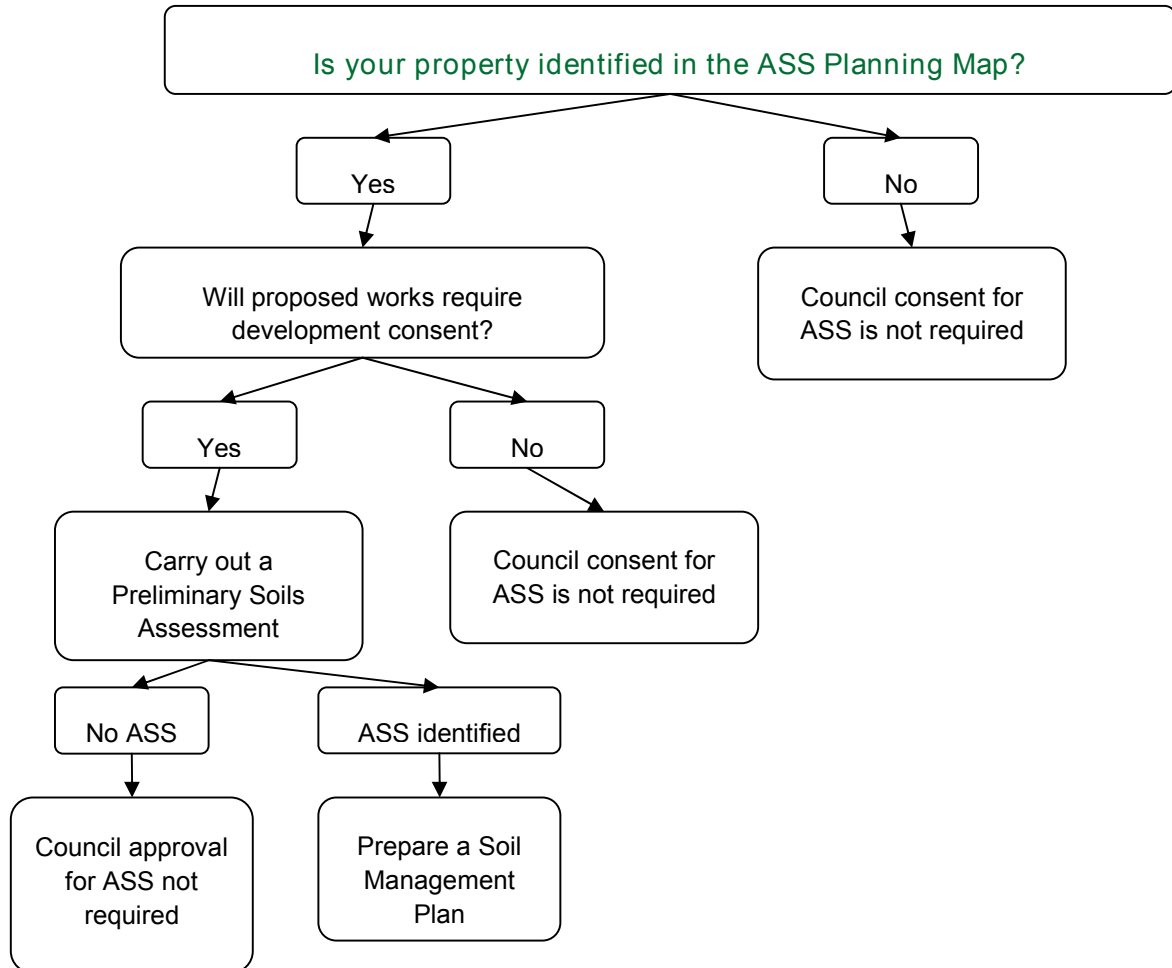
2.2 Aims and objectives

The aims and objectives of this Plan are to:

1. Ensure that development does not disturb, expose or drain acid sulfate soils and cause environmental damage;
2. ensure effective management of areas affected by acid sulfate soils;
3. provide guidance to landholders, consultants and the general community on the procedures involved in the management of developments in areas affected by acid sulfate soils;
4. ensure that activities located within an area of acid sulfate soils risk are identified.
5. ensure that an adequate preliminary assessment is undertaken to clarify the extent of risk; and
6. ensure where necessary, that an adequate Acid Sulfate Soil management plan or Plan of Management is prepared where the nature of the development poses an acid sulfate soil risk.

G.3 Assessment

3.1 Development Application Procedure



3.2 Local Environmental Plan – Acid Sulfate Soils Maps

Step 1

Check the Local Environmental Plan – Acid Sulfate Soils Map to determine whether the land in question is within an area affected by acid sulfate soils.

Lane Cove Local Environment Plan 2009 includes an Acid Sulfate Soils Map provided by the Department of Planning. This data was based on the former NSW Department of Land and Water Conservation's Acid Sulfate Soil Risk Maps.

3.3 Types of development that requires Council's consent

Step 2

Check whether the proposed works will require development consent.

Clause 6.1 of the Lane Cove Local Environment Plan 2009 requires development consent for specific works in each of the mapped land classes, as follows:

Class	Development Control Requirements
1	Any works.
2	Works below the natural ground surface; Works by which the watertable is likely to be lowered.
3	Works beyond 1m below the natural ground surface; Works by which the watertable is likely to be lowered beyond 1m below natural ground surface.
4	Works beyond 2m below the natural ground surface; Works by which the watertable is likely to be lowered beyond 2m below the natural ground surface.
5	Works within 500m of adjacent Class 1, 2, 3 or 4 land that is below 5m AHD by which the watertable is likely to be lowered to below 1 metre AHD in adjacent Class 1,2, 3 or 4 land.

The onus is on the landowner, contractor and proponent of any works to check which class their land falls within and to lodge a Development Application or Preliminary Soils Assessment with Council. Land not classified on the maps (shown in white) may still require development consent in accordance with the landuse tables of the particular zone. Applicants are advised to check with Council's Environmental Services Department planning staff.

The following activities, works, development and the like are subject to the need to obtain development consent if the land is within Classes 1-5 and the relevant criteria are met (unless a preliminary soil assessment is carried out which indicates that the works will not disturb any ASS or impact on groundwater):

- Agricultural-related works
- Aquaculture ponds
- Buildings and structures
- Construction of artificial waterbodies (including canals, dams and detention basins)
- Construction of roads

- Dewatering of dams, wetlands or quarries
- Drainage works (construction and maintenance)
- Dredging
- Engineering works
- Excavation works
- Flood mitigation works, including construction of levees
- Foundations
- Laying of pipes, cables, etc
- Sand and gravel extraction
- Site leveling and land forming works
- Works which may alter watertable levels

The following activities are NOT regulated by this Development Control Plan:

- Landfill (except where the fill material contains acid sulfate soil)

Action following Steps 1 and 2

If the area is affected by acid sulfate soils and the proposed activity is likely to materially alter the land; affect groundwater; result in any disturbance to acid sulfate soils or involve placement of any acid sulfate soils on any land, a Development Application is required. There are two options, either:

1. Carry out a Preliminary Soil Assessment to determine the specific extent of acid sulfate soil. Details are provided below, or
2. Assume that the soils within the site of the proposal contain acid sulfate soil and by-pass this step and carry out step 4 below.

3.4 Preliminary Soils Assessment

Step 3

Carry out a Preliminary Soils Assessment.

Where it is proposed to carry out any of the activities which are subject to the need to obtain development consent the application must be lodged with either a Preliminary Soils Assessment or Soil Management Plan.

A Preliminary Soils Assessment must be undertaken by a suitably qualified person and include the matters outlined in the Assessment Guidelines chapter within the Acid Sulfate Soil Manual.

If applicants wish to by-pass the Preliminary Soils Assessment step and assume that the soils within the site of their proposal contain Acid Sulfate Soil, they can proceed to the Soil Management Plan step below.

3.5 Soil Management Plans

Step 4

Prepare a Soil Management Plan

All Development Applications for proposals which will disturb Acid Sulfate Soils or impact on groundwater, must include a Soil Management Plan prepared in accordance with Assessment Guidelines chapter within the Acid Sulfate Soil Manual.

Note: During the preparation of the soil assessment or management plan applicants are urged to liaise with local offices of Department of Environment and Climate Change

G.4 Joint applications

Where a development involves, or may impact upon a number of properties in the one locality, a joint development application for the proposed works and ongoing management is encouraged by Council. This will include the Preliminary Soils Assessment and/or Soil Management Plan outlined above. Examples where joint development applications may apply include construction and/or maintenance of drains that traverse more than one property or flood mitigation works which may impact upon a specific area.

4.1 Drainage Management Plan

Where a property contains a series of drains or works which would require development consent for each individual section, the owner is encouraged to submit a Drainage Management Plan for the whole property. This plan would form part of the development application. Such a management plan would cover all the drains on that specific property, including their maintenance and rehabilitation details, as needed.

Council encourages this approach by landowners as it promotes better overall management of the property and provides Council with a more complete overview of the location, ongoing maintenance and interaction of such drains.

A property owner who has prepared a Drainage Management Plan may also enter into a joint application, however, the applicant should be aware that in the case of a joint development consent, any amendment to the Drainage Management Plan would require the written support of each landowner involved in the consent.

4.2 Determination by Council

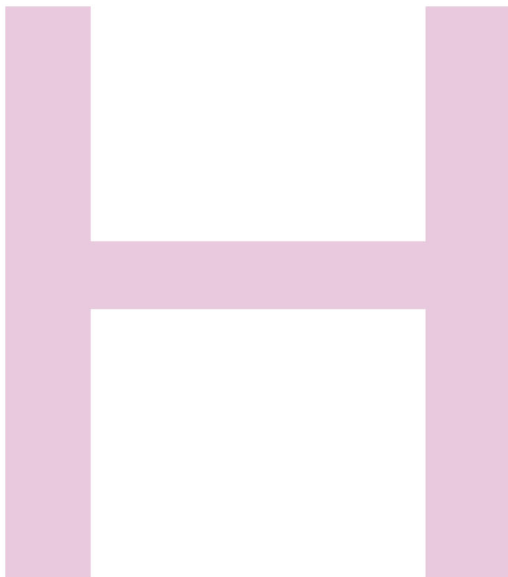
In the case of a joint application or a Drainage Management Plan Council will determine the application in accordance with the provisions of this DCP. Where development consent is given, no further development application will be required for those works provided any ongoing maintenance and management is carried out in accordance with the terms and conditions of the consent. For example: if an approved drain is to be deepened, widened or extended, etc and the original consent did not allow for that work, then development consent would be required. However, if the applicant continued maintaining the drain in accordance with the consent, no further application would be required.

Any applicant working under a joint development consent or drainage management plan is encouraged to contact Council's Environmental Services Department planning staff if there is any question as to the terms and conditions of a consent.

New owners of property should also contact Council's planning staff as the terms and conditions of a development consent issued by Council apply to the property. When a property is bought or sold the consent stays with the property. The new owner must comply with the consent or where an amendment is sought, have support, in writing, of all the joint applications.

Part H

Bushland Protection



- H.1 Objectives
- H.2 Relationship to Other Environmental Planning Instruments and Controls
- H.3 Land to which this Part Applies
- H.4 Application of Controls
- H.5 Development within Areas
- H.6 Location and Design of Development
- H.7 Preparation of a Landscape Plan for Building and Buffer Areas
- H.8 Preparation of a Bushland Rehabilitation and Maintenance Plan for Bushland Area
- H.9 Preparation of a Stormwater Plan
- H.10 Preparation of a Sediment Control Plan

Appendix A Declared Noxious Weed List of Lane Cove Council

Appendix B Environmental Weeds in Lane Cove

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H.1 Objectives

The objectives of this section are:

1. To protect both public and private bushland from adjacent development which could result in any adverse change to the condition of bushland through altered moisture conditions, increased nutrient levels, soil movement, invasive or inappropriate plant species and proximity of development.
2. To retain and protect natural topographic features, bushland areas, plant species and communities and native fauna habitat.
3. To maintain and regenerate areas of natural bushland which have been defined as an essential character of Lane Cove.
4. To acknowledge the importance of bushland to the character of the surrounding landscape and value of the locality and its importance to the region.
5. To encourage innovation and attractive designs which acknowledge the importance of bushland areas through the control of building location, building form, soft and hard landscape elements and engineering controls.

H.2 Relationship to Other Environmental Planning Instruments and Controls

This Plan relates to land which is subject to the provisions of the Lane Cove Local Environmental Plan 2009. It should be used in conjunction with:

- State Environmental Planning Policy 19 – “Bushland in Urban Areas”
- Environmental Planning and Assessment (EP&A) 1979*
- Environment Protection and Biodiversity Conservation Act 1999
- Threatened Species Conservation Act 1995*
- Rural Fires Act, 1997
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Planning for Bush Fire Protection 2006, NSW Rural Fire Service.
- Part J – Landscaping
- Part O – Stormwater Management
- Council’s *Plan of Management for Bushland in Lane Cove Council*
- Council’s Landscape Elements defined in the *Lane Cove Heritage Study*

*Council may require the submission of an Assessment of Significance (AoS) and Species Impact Statement (SIS) if there is evidence that a threatened species, population or ecological community, or its habitat may be affected by the proposed development.

H.3 Land to which this Part Applies

This Part applies to all parcels of land within Lane Cove which are identified in: Map – Land Adjoining Bushland available at Council or on Council’s website.

H.4 Application of Controls

Provisions

- a) The following matters will be taken into consideration by Council when determining the location of the buffer area on a property and, therefore, the applicant should give consideration to all of the following matters at an early date:
 - I. The objectives of SEPP 19 and SEPP 26
 - II. The aims of LEP 2009
 - III. The objectives of this DCP
 - IV. The protection of any areas designated Riparian Land
 - V. The protection of any areas designated Environmental Protection
 - VI. The site constraints (i.e. is the boundary of the buffer and bushland area practicable?)
 - VII. The existing quality of the bushland on the site
 - VIII. The existing quality of the bushland surrounding the site
 - IX. The potential of the bushland for regeneration.
- b) Council has Tree Preservation provisions applying throughout the municipality. A permit must be obtained prior to lopping or removing any tree except for those specifically exempt under the Tree Preservation provisions. Permits will not be given between the time a development application is lodged and determined.
- c) Where part of the site is designated as Riparian Land, Clause 6.3 of Council's LEP must be considered. This states that development consent must not be granted for development on this land unless the consent authority has considered the impact of the proposed development on the land and any opportunities for rehabilitation of aquatic and riparian vegetation and habitat on that land.
- d) Where part of the site is designated as Environmental Protection, Clause 6.4 of Council's LEP must be considered. This states that development consent must not be granted for development

on this land unless the consent authority is satisfied that the vegetation, topography or distinctive features of that land are unlikely to be adversely affected.

H.5 Development within Areas

Each site will be divided into three areas - bushland area, buffer area and building area. The owner, or an agent acting on the owner's behalf, may request Council to provide a general indication of the bushland/buffer/building areas on their land. Applicants can arrange for a pre DA meeting with a town planner and Council's Bushland Manager prior to submitting a development application. The extent of each area should be established prior to any application being prepared.

A Bushland Building Line exists for properties on parts of Crowther Avenue, Johnston Crescent, Ronald Avenue and Sirius Road which determines the built area of sites along these streets (Please refer to Map - Land Adjoining Bushland).

5.1 Bushland Area

Objectives

The objective of this section is:

1. To protect bushland, public and private, from the impacts of development.

Provisions

- a) This is the part of the site which contains bushland vegetation and other topographic and natural features.
- b) It is an extension of the areas of bushland zoned or reserved for public open space purposes and should exhibit the same characteristics as that for the land zoned "E2 Environmental Conservation" under the Lane Cove LEP.
- c) It may be land which is currently degraded but forms a continuous link with bushland on neighbouring properties.
- d) If land within the bushland area is identified as 'Environmental Protection' on the *Environmental Protection Map*, then any development on that land must comply with Clause 6.4 of the LEP. Notwithstanding this, development adjacent to bushland must also comply with this DCP.
- e) No development or alteration that leads to degradation will be permitted within the area irrespective of whether it is public or private bushland.

5.2 Buffer Area

Objectives

The objective of buffer areas is :

1. To provide a transition area between the building and bushland area so as to reduce the impacts of development upon bushland.

Provisions

5.2.1 In Residential Areas

- a) This is that part of the site which separates bushland from the building area.
- b) All work should have minimal to no adverse impact on bushland.
- c) Buildings, including swimming pools and enclosed garden rooms, are not permitted within this area. This area can be used for structures and/or works such as:
 - I. Paved areas, decking, lawn areas and garden beds,
 - II. stormwater detention/absorption pits and associated landscaping,
 - III. temporary storage of building materials, and
 - IV. bushfire fuel breaks.
- d) Paving and decking is not to exceed 25% of this area and should be permeable.
- e) Excavation must be kept to a minimum and must not impact upon any trees or bushland.
- f) The size of the area will depend on site area but a minimum depth of 10 metres should be taken as a guide. This area may increase if shallow bedrock occurs and/or the establishment of any works defined under part c) of this section cannot be achieved.
- g) Where there is insufficient space for a buffer due to the orientation, size or location of the site, then the applicant must show how the adjacent bushland can be adequately protected according to the aims and objectives of this Plan.

5.2.2 In Industrial and Commercial areas

- a) This is that part of the site which separates bushland from the building area.
- b) Stormwater infrastructure is permitted within the buffer area.
- c) In certain circumstances, Council may consent to roads within the buffer area after consideration of issues such as the objectives of this section, topography and retention of natural features.

- d) Hard surface areas must not exceed 25% of the total buffer area.
- e) Deep excavation or any excavation around trees or close to bushland is not permitted.
- f) Appropriate measures must be taken so that any construction in the buffer area does not impact upon the bushland.
- g) The size of the area will depend on site area but a minimum depth of 10 metres should be taken as a guide. This area may increase if the establishment of any works defined under parts b - f of this section cannot be achieved.

5.3 Building Area

Objectives

The objective of this section is:

1. The only part of the site where buildings are permitted.

Provisions

- a) Buildings, including swimming pools and outbuildings, are only permitted within this area up to the common boundary with the buffer area.
- b) Paving should be minimised within this area.
- c) Trees covered by Council's Tree Preservation Order should be retained where reasonably possible and should not require unnecessary tree removal. Existing trees should be retained by locating and designing buildings and structures to avoid the need to remove trees where there is an alternative. Trees that are to be retained should be protected during construction to Council's satisfaction.

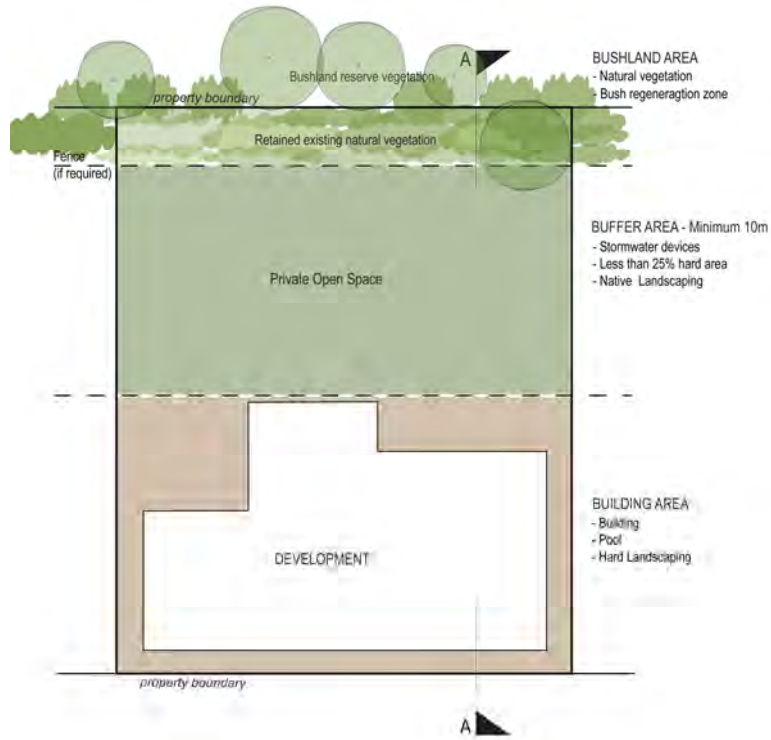


Figure 1: Plan view of site area

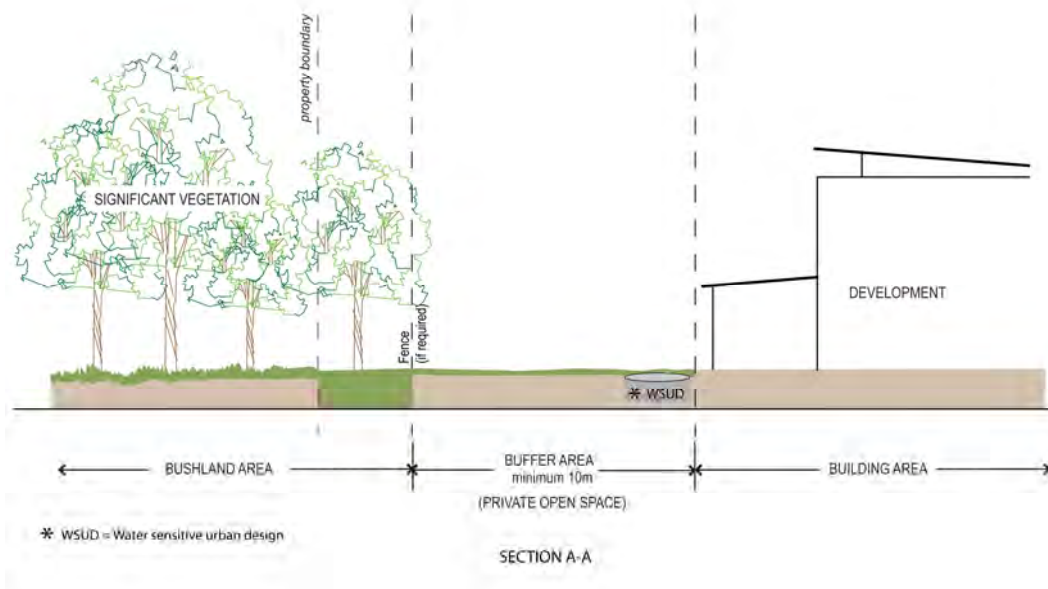


Figure 2: Section view of site areas

H.6 Location and Design of Development

6.1 Location

Provisions

- a) The location and design of development must aim to maximise the retention and protection of:
 - I. local indigenous plants, particularly if rare or uncommon in Lane Cove,
 - II. native fauna habitat,
 - III. the natural features of the site such as rock outcrops, cliffs and escarpments, and
- b) For industrial and commercial development direct access to bushland would only be allowed for emergencies. All measures should be taken to avoid any impact by the general activities of the business to bushland.

Lists of rare and uncommon indigenous plants and native fauna are available from Council's Bushland Manager on request.

6.2 Building Design and Visual Impact

Provisions

- a) Building design should have regard to the visual impact for users of the adjacent public bushland.
- b) All external building materials, finishes and colours should be non-reflective and blend with the natural landscape.
- c) The exposed portions of swimming pools, tanks, support structures or the undercroft of buildings should be screened and finished in dark non-reflective colours to minimise the visual impact along with screen planting using local indigenous species.

6.2.1 Solar Access and Views

- a) The placement, orientation and design of proposed structures, as well as alterations and additions to existing structures, shall have regard to the existing level of views of the bushland from adjoining and nearby properties and the impact on those views should be minimised.
- b) Proposed new buildings and structures are to be designed and orientated in order that a reasonable level of sun access is maintained to the adjoining bushland throughout the year, in order to ensure that the viability of the bushland is not threatened or adversely affected.

6.2.2 Bushfire Controls

- a) All development on bush fire prone land should comply with the aims and objectives of Planning for Bush Fire Protection 2006, by the NSW Rural Fire Service.
- b) Building design, including the layout and shape of the house, roof external openings, underfloor areas, construction material and landscape design must address the risk of bushfire.

H.7 Preparation of a Landscape Plan for Building and Buffer Areas

Provisions

- a) All applications must include a Landscape Plan. Details of the plan must be in accordance with the policies and landscape guidelines of Council.
- b) The Landscape Plan should indicate the proposed methods to be used during the construction and demolition period to protect those trees, bushland and other natural features required to be or conditioned to be retained. Retention of bushland elements in the buffer area is encouraged.
- c) The use of local indigenous plants is required and selected plant species should be of a type which is suited to the immediate landform and vegetation character of the surrounding bushland. A list of common indigenous plant species found in the Municipality of Lane Cove is found in Part J Landscaping.
- d) The Landscape Plan should include details of local indigenous plants to be planted in the buffer area. Vegetation belts of local indigenous plants should be planted in the buffer area immediately down slope of any stormwater dispersal trench or absorption pit. These belts need to be at least the width of the stormwater device and 2 metres deep.
- e) All noxious weeds must be removed. A list of Noxious Plants in Lane Cove is included below. Environmental weeds and other invasive plants, including berry plants, should not be planted. A list of environmental weeds is included below.

H.8 Preparation of a Bushland Rehabilitation and Maintenance Plan for Bushland Area

Provisions

- a) A Bushland Rehabilitation and Maintenance Plan prepared by a suitably qualified and experienced environmental consultant specialising in bushland management must be submitted. A landscape architect or designer is unsuitable.

- b) This plan should include an assessment of the existing bushland and its potential to regenerate with suitable management. It is expected that bush regeneration techniques will be used wherever possible rather than revegetation techniques. Planting may be carried out where the natural soils have been disturbed and the potential for regeneration is very poor.
- c) The Plan should also include proposals for the removal of weeds from the bushland area and include an extended maintenance program and period.

H.9 Preparation of a Stormwater Plan

Provisions

- a) All applications must include a Stormwater Plan in accordance with Part O *Stormwater Management*. Further information may be obtained from Council's Open Space & Urban Services Division.
- b) Appropriate measures must be taken to restrict the volume and rate of runoff to levels as near as possible to those which occur naturally prior to development.
- c) The discharging of stormwater directly into bushland without the use of an approved dispersal system will not be permitted. Council will not permit the construction of a discharge pipe through the bushland except where there is no alternative. The use of existing pipes will only be allowed in certain situations as outlined under Part O *Stormwater Management*.

H.10 Preparation of a Sediment Control Plan

Provisions

- a) All soil erosion, sedimentation and drainage controls must be wholly situated within the buffer and building areas.
- b) An Erosion and Sediment Control Plan (ESCP) prepared by a suitably qualified consultant, in accordance with this DCP - Part P *Stormwater Management*, is to be submitted with the DA.

Appendix A - Declared Noxious Weed List of Lane Cove Council

Noxious weeds require control as per the Action Category listed below. The owner of the property is required to comply with legal obligations under the Noxious Weeds Act, 1993 to carry out the control action indicated by their category.

Category Control	Control Action
1	<p>State Prohibited Weeds. The plant must be eradicated from the land and the land must be kept free of the plant.</p> <p>The control objective for weed control class 1 is to prevent the introduction and establishment of those plants in NSW.</p>
2	<p>Regionally Prohibited Weeds. The plant must be eradicated from the land and the land must be kept free of the plant.</p> <p>The control objective for weed control class 2 is to prevent the introduction and establishment of those plants in parts of NSW.</p>
3	<p>Regionally Controlled Weeds. The plant must be fully and continuously suppressed and destroyed.</p> <p>The control objective for weed control class 3 is to reduce the area and the impact of those plants in parts of NSW.</p>
4	<p>Locally Controlled Weeds. The growth and spread of the plant must be controlled according to the measures specified in a management plan published by the local control authority and the plant may not be sold, propagated or knowingly distributed.</p> <p>The control objective for weed control class 4 is to minimise the negative impact of those plants on the economy, community or environment of NSW.</p>
5	<p>Restricted Plants. The requirements in the Noxious Weeds Act 1993 for a notifiable weed must be complied with.</p> <p>The control objective for weed control class 5 is to prevent introduction of those plants into NSW, the spread of those plants within NSW or from NSW to another jurisdiction.</p>

The following plants have been declared Noxious Weeds in the Lane Cove Local Government Area as of March 2006.

Botanical Name	Common Name	Category
Trees and Shrubs		
Acacia karroo	Karoo thorn	1
Acacia nilotica	Prickly acacia	1
Annona glabra	Pond apple	1
Cestrum parqui	Green cestrum	3
Chrysanthemoides monilifera	Bitou bush/Boneseed	4
Cytisus scoparius	Scotch/English broom	4
Genista monspessulana	Cape broom	3
Lantana camara	Lantana (pink/red flowered)	4
Ligustrum lucidum	Broadleaf privet	4
Ligustrum sinense	Narrow leaf privet	4
Ludwigia longifolia	Ludwigia	4
Ludwigia peruviana	Ludwigia	4
Ochna serrulata	Ochna (mickey mouse plant)	4
Opuntia spp.	Prickly pears	4
Picnemon acarna	Soldier thistle	5
Ricinus communis	Castor oil plant	4
Salix spp. (except S. babylonica S. reichardtii and S. calodendron)	Willows	5
Tamarix aphylla	Athel pine/tree	5
Toxicodendron succedaneum	Rhus tree	4

Botanical Name	Common Name	Category
Climbers and Scramblers		
Acetosa sagittata	Turkey rhubarb	4
Anredera cordifolia	Madeira vine	4
Asparagus plumosus	Climbing asparagus	4
Asparagus asparagoides	Bridal creeper	4
Cardiospermum grandiflorum	Balloon vine	4
Cryptostegia grandiflora	Rubbervine	1
Delairea odorata	Cape ivy	4
Ipomea cairica	Morning glory	4
Ipomea indica	Morning glory	4
Macfadyena unguis-cati	Cat's claw creeper	4
Rubus fruticosus (agg. spp.)	Blackberry	4
Ground Covers/Grasses/Herbs/Other		
Achnatherum brachychaetum	Espartillo	5
Ambrosia artemisiifolia	Annual ragweed	5
Ambrosia confertiflora	Burr ragweed	5
Argemone mexicana	Mexican poppy	1
Arundo donax	Giant Reed	4
Asparagus densiflorus	Asparagus fern	4
Asystasia gangetica subspecies micrantha	Chinese violet	1
Avena strigosa	Sand oat	5
Brassica barrelieri subspecies oxyrrhina	Smooth-stemmed turnip	5

Botanical Name	Common Name	Category
Carthamus glaucus	Glaucous starthistle	5
Cenchrus biflorus	Gallon's curse	5
Cenchrus brownii	Fine-bristled burr grass	5
Cenchrus echinatus	Mossman River grass	5
Centaurea maculosa	Spotted knapweed	1
Centaurea nigra	Black knapweed	1
Chromolaena odorata	Siam weed	1
Cortaderia spp.	Pampas grass	4
Cuscuta spp. (except the native species C. australis, C. tasmanica and C. victoriana)	Dodder	5
Cynara cardunculus	Artichoke thistle	5
Cyperus esculentus	Yellow nutgrass	5
Gaura lindheimeri	Clockweed	5
Gaura parviflora	Clockweed	5
Harrisia spp.	Harrisia cactus	4
Helianthus ciliaris	Texas blueweed	5
Hieracium spp.	Hawkweed	1
Hymenachne amplexicaulis	Hymenachne	1
Hypericum perforatum	St Johns Wort	4
Kochia scoparia	Kochia	1
Lagarosiphon major	Lagarosiphon	1
Miconia spp.	Miconia	1
Nassella neesiana	Chilean Needle grass	4

Botanical Name	Common Name	Category
Nassella tenuissima syn Stipa tenuissima	Mexican feather grass	1
Nassella trichotoma	Serrated tussock	4
Orobanche spp.(Except O. minor and O. cernua var Australiana)	Broomrape	1
Oxalis spp. (except the native species O. chnoodes, O. exilis, O. perennans, O. radicata, O. rubens, and O. thompsoniae)	Oxalis	5
Parthenium hysterophorus	Parthenium weed	1
Paspalum quadrifarium	Tussock paspalum	3
Parietaria judaica	Pellitory	4
Pennisetum macrourum	African Feathergrass	5
Pennisetum setaceum	Fountain grass	5
Phyllostachys spp.	Rhizomatous Bamboo	4
Romulea spp. (except R. rosea var. australis)	Onion grass	5
Scolymus hispanicus	Golden thistle	5
Sonchus arvensis	Corn sowthistle	5
Sisymbrium runcinatum	African turnipweed	5
Sisymbrium thellungii	African turnipweed	5
Stachytarpheta cayennensis	Cayenne snakeweed	5
Striga spp. (except native species and Striga parviflora)	Witchweed	1
Tradescantia fluminensis	Trad/Wandering dew	4

Botanical Name	Common Name	Category
Aquatics		
Alternanthera philoxeroides	Alligator weed	3
Eichhornia azurea	Anchored water hyacinth	1
Cabomba spp.	Cabomba	5
Eichhornia crassipes	Water hyacinth	2
Equisetum spp.	Horsetail	1
Gymnocoronis spilanthoides	Senegal tea plant	1
Hygrophila costata	Hygrophila	2
Hygrophila polysperma	East Indian hygrophila	1
Limnocharis flava	Yellow burrhead	1
Mimosa pigra	Mimosa	1
Myriophyllum spicatum	Eurasian water milfoil	1
Oryza rufipogon	Red rice	5
Sagittaria montevidensis	Arrowhead	5
Salvinia molesta	Salvinia	2
Stratiotes aloides	Water soldier	1
Pistia stratiotes	Water lettuce	1
Trapa species	Water caltrop	1

For further information about identification and suggested weed removal techniques for specific noxious weeds, please contact Lane Cove Council Rangers on 02 9911 3555 during business hours Mon to Fri.

Appendix B – Environmental weeds in Lane Cove

GARDEN PLANTS WHICH CAN CAUSE PROBLEMS IN BUSHLAND

Environmental weeds are not scheduled noxious weeds but are garden plants which are or can become serious weeds in our bushland reserves. The plants either grow vigorously or are able to spread rapidly by seed, suckers, runners or prunings. Many are spread by birds or water. They should not be planted or cultivated in gardens where they can spread into nearby bushland.

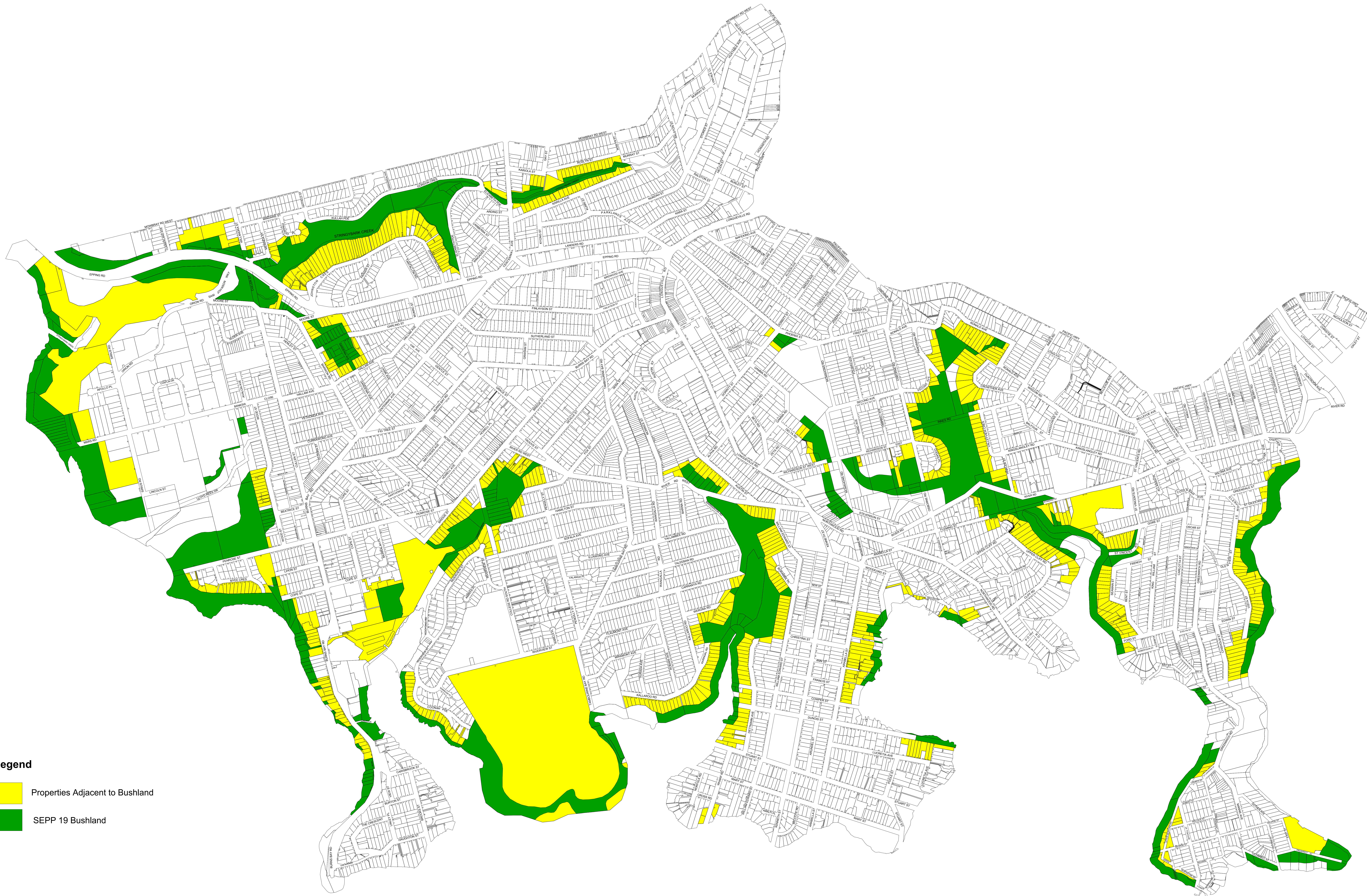
- Environmental weeds may be:
- commonly grown and cultivated garden plants, or
- garden escapes from overgrown or neglected gardens, or
- plants which grow rapidly on bare or disturbed ground around building sites, or
- contaminants in imported soils, mulch and potting mixes.

Botanic Name	Common Name
<i>Acacia saligna</i>	Golden Wreath Wattle
<i>Agapanthus orientalis</i>	Agapanthus
<i>Agave americana</i>	Century Plant
<i>Ageratina adenophora</i>	Crofton Weed
<i>Ageratina riparia</i>	Mist Flower
<i>Andropogon virginicus</i>	Whisky Grass
<i>Araujia hortorum</i>	Moth Vine
<i>Bidens pilosa</i>	Cobblers Pegs, Pitchforks
<i>Bryophyllum delagoense</i>	Mother of Millions
<i>Canna indica</i>	Canna

Botanic Name	Common Name
<i>Chlorophytum comosum</i>	Ribbon Plant
<i>Cinnamomum camphora</i>	Camphor Laurel
<i>Conyza</i> spp	Fleabane
<i>Coreopsis lanceolata</i>	Coreopsis
<i>Cotoneaster</i> spp	Cotoneaster
<i>Crocosmia</i> X <i>Crocosmiiflora</i>	Montbretia
<i>Dietes bicolor</i>	Dietes
<i>Ehrharta erecta</i>	Panic Veldtgrass
<i>Ehrharta longiflora</i>	Annual Veldtgrass
<i>Erigeron karvinskianus</i>	Seaside Daisy
<i>Erythrina</i> spp	Coral Trees
<i>Ficus elastica</i>	Rubber Tree
<i>Foeniculum vulgare</i>	Fennel
<i>Hedychium gardnerianum</i>	Yellow Ginger Lily
<i>Hydrocotyle bonariensis</i>	Kurnell Curse
<i>Impatiens balsamina</i>	Impatiens
<i>Lilium formosum</i>	Lily
<i>Lonicera japonica</i>	Honeysuckle
<i>Nephrolepis cordifolia</i>	Fishbone Fern
<i>Northoscordum gracile</i>	Onion Weed
<i>Olea europea</i> ssp <i>africana</i>	African Olive

Botanic Name	Common Name
Passiflora edulis	Passionfruit
Phytolacca octandra	Inkweed
Rhaphiolepis indica	Indian Hawthorn
Salix spp	Willow Trees
Senecio madagascariensis	Fireweed
Senna pendula var glabrata	Cassia
Watsonia bulbifera	Watsonia

Reference: Noxious Weeds Committee - Sydney North, Regional Weed Strategy, 1998.

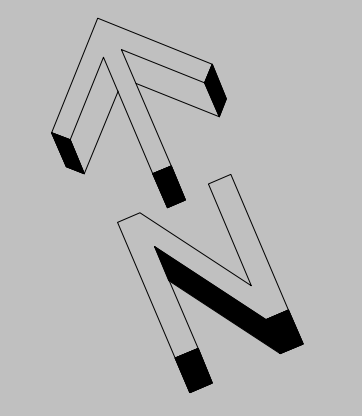


Legend

- Properties Adjacent to Bushland
- SEPP 19 Bushland



Land Adjoining Bushland	
Date:	22:04:10
Scale:	1:5000



THE INFORMATION CONTAINED ON THIS MAP WAS COMPILED FOR USE BY LANE COVE COUNCIL. ITS ACCURACY CANNOT BE GUARANTEED AND ADVICE SHOULD BE SOUGHT BEFORE THE INFORMATION IS USED FOR DOCUMENTARY PURPOSES.

Part I

Child Care Centres



- I.1 General Information
- I.2 Locational Considerations
- I.3 Indoor & Outdoor Space
- I.4 Built Form and Building Appearance
- I.5 Car parking / Traffic
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- I.7 Safety / Security / Fencing
- I.8 Environmental hazards / Air quality
- I.9 Landscaping / planting
- I.10 Privacy and Noise Minimisation
- I.11 Sustainability
- I.12 Hours of Operation

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I.1 General Information

1.1 What are the roles of Council and State Government?

The establishment of new Child Care Centres and variation to the operation of existing centres requires approvals from two authorities:

- The NSW Department of Community Services (DOCS), who is responsible for licensing a Child Care Centre under the *Children's Services Regulation 2004* and under the *Children and Young Persons (Care and Protection) Act 1998*. The Regulation contains the requirements for the licensing of Child Care Centres, and includes provisions relating child numbers and staffing ratios, facilities, equipment, and administrative and operational requirements. The provisions of this Regulation have been considered in the preparation of this policy.
- Lane Cove Council, who is responsible for the land use planning and building standards for the centres. This is regulated through plans and policies prepared under the Environmental Planning and Assessment Act (1979) and the Local Government Act (1993).

1.2 What approvals do you need?

This Child Care Centres chapter is intended to complement the requirements of DOCS, which are not re-iterated in any detail in the chapter. This chapter contains Council requirements which must be met.

Before you can operate a Child Care Centre you need to have:

- a development consent from Council; and
- a license from DOCS (the DOCS license will be a condition of consent for the Council's development application) .

1.3 What plans and policies need to be considered?

The following table includes a summary of resources you need to consider prior to preparing an application. Applicants should confirm this with relevant government authorities at the time of application:

Legislation/Policies/Controls	Purpose	Statutory Weight	Available at:
Lane Cove Planning instruments: Lane Cove LEP 2009 Lane Cove CDCP, in particular sections relating to: Access Tree Preservation and	Town planning requirements	The LEP is a legal document and is rarely varied. The DCP is not a legal document and can be varied if there	Council

Landscaping Residential Zones Business Zones Industrial Zones		is substantial justification for the variation.	
Environmental Planning and Assessment Act 1979 and Regulations	Town planning legislation	Legislative requirements. Must be complied with.	Enquire at Council
Children and Young Persons (Care and Protection) Act 1998 and Children's Services Regulation 2004 Guide to Children's Services Licensing	DOCS licensing requirements Assistance for applicants.	Legislative requirements. Must be complied with. Guide to Applicants	DOCS www.community.nsw.gov.au
Building Code of Australia Part D3 – Access and Egress for people with disabilities Part E – Lift Installations Part F – Sanitary Facilities for People with Disabilities	Structural requirements of the building	Legislative requirements. Must be complied with.	Council
Food Act 1989 and Food Safety Standards	Requirements for food preparation areas	Legislative requirements. Must be complied with.	NSW Health Department
Guide to Traffic Generating Development	Controls relate to traffic circulation and car space provision	Guidelines only	RTA
Australian Standards – AS 1428 - Access and Mobility AS 1428.1 - Building Access AS 1428.3 – Requirements for children and adolescents with physical disabilities	Detailed building requirements	Legislative requirements. Must be complied with.	Lane Cove Public Library (and all public libraries) Standards Australia website: www.standards.com.au or telephone 131 242.

AS 1735.12 - Lifts and escalators – Facilities for people with disabilities AS 1851.1 - Fire Safety AS 2172 - Sleeping Facilities AS 2890.1 - Off-street Car Parking Facilities AS 2890.6 - Parking spaces for people with Disabilities			
Disability Discrimination Act 1992 – Human Rights and Equal Opportunity Commission (HREOC)			www.austlii.edu.au
NSW Buildings Sustainability Index (BASIX) (for residential zones only)	Encourage sustainable development	Legislative requirements. Must be complied with.	Council
NSW Cancer Council – Shade for Child Care Services	Guidance to childcare providers – can assist with licensing	Required to be considered under Children’s Services Regulations	NSW Cancer Council www.nswcc.org.au

1.4 Submitting your DA

Applicants should inquire at Council’s Customer Service Counter or on Council’s website for the full Development Application checklist. Applicants must include the following information:

- Statement of intention to obtain a DOCS licence
- Statement indicating the maximum number of children to be attending, staff numbers and hours of operation
- Traffic Assessment indicating parking requirements and vehicle movements for both staff and parents.
- Waste Management Plan
- Access & facilities for disabled persons
- Noise assessment for sites on arterial roads or as may be required by Council
- Note - It will be a condition of consent that applicants must have obtained a DOC’s licence prior to operation.

1.5 Covered by this section of the DCP

These Centres can be privately run as a small business, or sponsored by a church, local government, a community committee or by an employer for their employees.

Children's services not covered by this policy include:

- A care-giving service that is provided by a registered care-giver within the meaning of Family Day Care and Home-Based Child Care as defined in the LEP.
- A home-based child care service which is provided by a licensed care giver within the meaning of the Children's Services Regulation 2004
- A mobile child care service, which is provided by a licensee within the meaning of the Children's Services Regulation 2004.

1.6 Objectives of this section of the DCP

1. To encourage the provision of Child Care Centres in the Lane Cove Local Government Area which meet the needs of the community, in particular with the provision of spaces for 0-2 year olds.
2. To ensure that sites containing Child Care Centres are appropriate for that purpose and provide a functional and pleasant environment for their users.
3. To ensure that sites containing Child Care Centres are compatible with the environment in which they are situated, particularly in terms of visual character, landscaping etc.
4. To ensure that potential adverse impacts from Child Care Centres on surrounding residential areas, such as those created by noise, traffic generation and on-street parking, are minimized.

I.2 Locational Considerations

Under the Lane Cove LEP 2009, Child Care Centres are permitted with development consent in the following zones:

- R2 Low Density Residential
- R3 Medium Density Residential
- R4 High Density Residential
- B1 Neighbourhood Centre Zone
- B2 Local Centre;
- B3 Commercial Core
- B2 Mixed Use
- IN2 Light Industrial
- RE1 Public Recreation

- Child Care Centres will be permitted only on sites with appropriate topography for safe play and use.
- In low density residential areas, child care centres are encouraged to be single storey in height for reasons of safety and access.
- It is particularly important to consider the health and security of children by providing for them an environment, which, ideally, protects them from pollution by considering the location and design of the centre.
- Sites on arterial roads will only be consented to if the Statement of Environmental Effects satisfies relevant issues in relation to the location and access is be provided from a smaller street.
- A Child Care Centre is not to be located in any site which shares its access with a brothel or is situated within 100 metres of a property used for the purpose of a brothel.

I.3 Indoor & Outdoor Space

3.1 Indoor play area:

Objectives

The objectives for indoor play areas are:

1. To ensure that the design and layout of the play area provides a safe and pleasant environment for children.
2. To provide adequate space to meet the minimum NSW licensing standards for children's indoor play areas.

Performance Criteria / Development control:

At least a minimum of 3.25 square metres of unencumbered indoor play space for each licensed child care place (children aged 0-6 years).

In calculating unencumbered indoor play space, the following are not to be included: passageways or thoroughfares, door swing areas (approx. 0.5 square metre per door), kitchen, cot rooms, storage rooms, bed storage areas, children's lockers, toilet or shower areas, nappy change areas, wall cavities, cupboards and craft preparation sinks located in the playroom are not included.

Playrooms should be adjacent to the outdoor play area – providing easy supervision.

3.2 Other indoor space:

Objectives

The objectives for other indoor space is:

1. To provide adequate space for indoor facilities.

Performance Criteria / Development control:

- a) A Child Care Centre should have 5 square metres in total for each employee (for office space, adult toilet etc.)
- b) A Child Care Centre must provide a room or an area that is used only for administration of the service and for private consultation between staff and parents, and a room or an area, located away from the areas used by children, that is used for respite of staff.

3.3 Outdoor play area

Objectives

The objectives for outdoor play areas are:

1. To provide a stimulating environment for children.
2. To provide a well designed outdoor play area giving consideration to visual supervision throughout the site, sun and shade and ground surfaces.
3. To provide adequate space to meet the minimum NSW licensing standards for children's outdoor play areas.

Performance Criteria / Development control

- a) A centre must provide at least a minimum of 7 square metres of unencumbered outdoor space for each licensed child care place.
- b) Outdoor areas should if possible be located to the north or north east of a building. The exposure to external noise, pollution and wind should be minimised.
- c) The outdoor play space must be adequately shaded in accordance with guidelines published by the New South Wales Cancer Council under the title Shade for Child Care Services. Fifty percent of all outdoor open spaces should be shaded during the hours of 10am – 3pm. Shading may be provided by trees, awnings, or similar structures.
- d) In calculating outdoor play space, areas where children cannot be readily supervised such as areas used for car parking, storage sheds, garden beds, hedges, side boundary setbacks or other areas unsuitable for play are not to be included.
- e) The design of the outdoor play space should allow at least half the area to be unencumbered and available for free vigorous play.
- f) In Child Care Centres located in the commercial areas, the provision of outdoor space may be in the form of podium levels and rooftops if designed in accordance with the Building

Code of Australia/ safety standards. Special attention must be given to reduce or minimise noise, pollution and wind.

- g) If the location of a Child Care Centre makes it impracticable to provide the required amount of useable outdoor play space, consent may be given to the provision of some or all of the space in an indoor area that is to be designed and equipped to permit children to participate in activities that promote gross motor skills.
- h) A Child Care Centre in a commercial area must ensure that children have access to three hours of sunlight a day.
- i) Visual features, plants and climbing equipment must be provided to create an interesting and stimulating experience for the children.
- j) Outdoor areas should ideally include a variety of surfaces such as soft-fall, grass, sand, hard paving and mounding with at least 30% natural planting (including opportunity for deep planting).

I.4 Built Form and Building Appearance

Objectives

The objectives for this section are:

1. To ensure child care centres are compatible with the scale of existing buildings in the vicinity;
2. To ensure that the appearance of the development is of high visual quality and enhances and complements the streetscape of the area.

Performance Criteria / Development Control

Building Design

- a) Child care centres must comply with the same standards for built form controls as provided under the DCP of the respective zone.
- b) The design and layout of the child care centres must respond to the character of the existing neighbourhood and streetscape. Existing residential character of the locality must be maintained through the use of appropriate finishes, materials, landscaping, fencing and plantings.
- c) In low density residential areas, child care centres are encouraged to be single storey in height for reasons of safety and access. In the case of 2 storey buildings, the second storey should only be used for the purposes of storage and staff facilities.
- d) All child care centres are preferred to be located at ground floor level where achievable and in areas where the opportunity for natural landscaping comprising deep planting is possible (ie, not located entirely over a basement area)
- e) In buildings including both residential uses and child care centres, the residential areas of the property are to be designed so as to prevent access to them by non-resident children. This includes both indoor and outdoor areas (such as washing lines etc.)

I.5 Car parking / Traffic

Objectives

The objectives for car parking and traffic are:

1. To ensure that adequate parking is available for the dropping off/picking up of children so that it does not cause inconvenience to residents and congestion in nearby streets, or is detrimental to child safety.
2. To ensure that adequate parking is provided on site for staff.
3. To allow for minimal on-site parking, where the traffic environment will allow and the amenity of the street is not compromised.

Performance Criteria / Development controls

Car parking:

- a) Refer within DCP Part R for car parking rates (Tables 1 and 2), and Section 2.12 for criteria for exceptions.

Traffic:

- b) The centre should not be located on a road which carries traffic volumes in excess of 1,000 vehicles per hour, unless satisfactory off-street parking and entry/ exit provision is made.

I.6 Accessibility

Objectives

The objectives for accessibility are:

1. To ensure that the Child Care Centre can satisfactorily accommodate all children, parents and staff, including those with a physical disability.

Performance Criteria / Development control

- a) Access should be in accordance with Australian Standard 1428.1 to 4 and comply with Part D of the Building Code of Australia.

I.7 Safety / Security / Fencing

Objectives

The objectives for this section are:

1. To ensure a safe environment for all users of the Child Care Centre
2. The design and height of fencing should prevent children from scaling, or crawling under the fence.

Performance Criteria / Development control

- a) Floors should be of a non-slip surface and easy to clean.
- b) Fire safety precautions must be provided in accordance with Building Code of Australia and Australian Standard 1851.1–1995.
- c) Every gate should be provided with a childproof self-locking mechanism, but must still be accessible for adults in wheelchairs.
- d) Child Care Centres which are not entirely located at ground level must satisfy Council as to their high safety level relating to fence / balcony heights, reduced window opening sizes etc.
- e) Any part of the Child Care Centre that is designated for outdoor play space must be fenced on all sides.
- f) Any side of a stairway, ramp, corridor, hallway or external balcony that is not abutting a wall must be enclosed to prevent a child being trapped or falling through.
- g) Fences should be designed to minimise noise transmission (on busy roads), improve privacy and must not dominate the streetscape. Materials and finishes for fences may be used that complement the surrounding streetscape.

I.8 Environmental hazards / Air quality

Objectives

The objectives for this section are:

1. To provide a non pollutant environment for children and staff

Performance Criteria / Development control

- a) In Child Care Centres located on roads where there is an average daily traffic rate of more than 5,000 per day, exposure to air and noise pollution sources should be minimised by the use of air conditioning and the location of outdoor play areas.
- b) To avoid mosquito bite infections Council may require that all doors and windows should be screened. Mosquito breeding must be minimized by ensuring that drains and gutters are cleared and/or covered and that dark, damp areas are clear of vegetation and clutter.

I.9 Landscaping / planting

Objectives

The objectives of landscaping/planting are:

1. To provide light and shading on the site.
2. To provide an educational outdoor area.
3. To ensure that there is no hazardous vegetation on the site.

Performance Criteria / Development control

- a) Planting should be used for its quality of shading, screening and decorating outdoor areas. Trees located on the northern and western boundary will shade the place during the hottest part of day.
- b) The planting and vegetation should provide educational features.
- c) Where the outdoor play area is proposed above ground level natural plants are to be provided in pots.

I.10 Privacy and Noise Minimisation

Objectives

The objectives for privacy and noise minimization are:

1. To provide visual and acoustic privacy for children, staff and nearby residents.

Performance Criteria / Development control:

- a) Effort should be made to reduce any possible adverse noise impact into the Child Care Centre. In certain situations, this may require double-glazing of windows or appropriate location of windows.
- b) The development application should demonstrate that privacy and noise minimisation for neighbouring properties have been considered in designing the centre.

I.11 Sustainability

Applications in residential zonings need to indicate that they fulfil any requirements for a BASIX Certificate which may have been introduced by the State government for relating to water and energy efficiency etc.

I.12 Hours of Operation

The maximum hours of operation shall be between 7.00am and 6pm, Monday till Friday, in a residential zone.

Hours of operation for other zones will be assessed on demand and merit considerations.

Property maintenance may be conducted outside the hours of operation in accordance with Council's Exempt and Complying Development DCP.

Part J Landscaping



J

- J.1 Landscaping
 - J.2 Tree Preservation and Landscape Guidelines
 - J.3 Preservation of Significant Trees
- Appendix 1 - Plant Lists

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J.1 Landscaping

1.1 Purpose

The purpose of this section is to provide information to applicants on the required standards for landscaping of new development and how to prepare compulsory landscape requirements (see Landscape Checklist) and landscape plans to accompany development and construction certificate applications.

1.2 Landscape context of Lane Cove

The Lane Cove area has a rich diversity of natural, cultural and scenic landscapes. Of particular importance to the local community is the natural heritage that includes remnant indigenous trees and the corridors of bushland along the valleys and escarpments of the Lane Cove River and tributary creeks. The conservation of the significant areas of bushland and the general leafy landscape character of the suburbs of Lane Cove is a major priority for the local community and is reflected in Council's plans and policies.

1.3 General aims and objectives

One of the aims of Lane Cove Local Environmental Plan, 2009, is to 'to preserve and, where appropriate, improve the existing character, amenity and environmental quality of the land to which this plan applies...'. Appropriate and sensitive landscaping of new development, including medium/high density residential, commercial and industrial development, is essential if this goal is to be achieved.

1.4 Objectives for landscaping of new development

Landscape plans submitted with the Development/ Construction Certificate Applications should achieve the following objectives. Proposed development and landscaping that does not comply with the following objectives may be refused or delayed.

The objectives for landscaping of a new development are:

1. For medium/high density residential, commercial and industrial development, all substantial trees and that part of the landscaping scheme visible from the public domain shall comprise indigenous plants.
2. The proposed landscape treatment should assist in ensuring that the development is not visually intrusive by providing visual softening of buildings, driveways and car parking areas.
3. The development should retain existing trees where reasonably possible and should not require unnecessary tree removal. Indigenous canopy trees should be provided where space permits. In particular where tree removal is required compensatory tree planting is required. Street trees are a community asset and approval to remove because of a development application is not readily available.
4. Mass planted areas, comprising indigenous trees, shrubs and groundcovers should be included in the landscaping scheme in preference to unnecessarily large areas of lawn.
5. The proposed landscape treatment should be compatible with the existing environmental character of the area and be planned so as not to affect adjoining properties. The use of

native trees and shrubs to provide privacy screening is desirable.

6. Existing natural features such as rock outcrops, cliffs and natural bushland should be conserved where reasonably possible.
7. Where existing trees are proposed to be retained, the method of protecting the trees during construction should be specified in a report submitted by a suitably qualified arborist with AQF Level 5 qualifications.
8. Hard paved areas should be minimised thereby providing the maximum landscaped area possible. The utilisation of permeable paving materials in hard-scapes is encouraged.
9. The establishment and ongoing maintenance of new plantings should be considered. Plants with low watering requirements are preferred. The use of plants with high watering requirements should be minimised. Where these are used, details of the proposed irrigation system should be specified. Irrigation should be supplied to plantings over slabs and in planter boxes but not areas that are adjacent to bushland.
10. In foreshore areas the landscape scheme should 'establish and maintain an aesthetic form as close as possible to the natural character which would best compliment the pleasing waterway of the Lane Cove River...'
11. Foreshore areas are determined under the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005. It should be noted that this includes a large portion of properties that are not adjacent to foreshores and waterways.
12. Trees that are removed as part of the DA process must be replaced at a 1:1 ratio. Replacement trees must be able to reach the potential mature dimensions of the removed tree.

1.5 When is a landscape plan required?

The following types of developments require a separate landscape plan to be submitted with the Development / Construction Certificate Application:

- Multi dwelling housing (townhouses and villas)
- Residential flat buildings / or residential within a mixed use development.
- Motels
- Development on heritage listed sites
- Industrial & Commercial/Mixed use development
- Development adjacent to bushland, additionally refer to DCP Part H - Bushland Protection.
- Properties within the Sydney Foreshores & Waterways boundary area.

1.6 How much landscaped area is required?

For most types of development in Lane Cove, a percentage of the total site area is required to be vegetated; including a proportion of "landscaped area" and/or "planting on structures" see definitions of both. Swimming pools are excluded from the landscaped area and are included within the building area when assessing the percentage of hard surface.

Development Type	Minimum % of site to be landscaped area (ie, deep soil)	Additional - Minimum % of site to be planting on structures or landscaped area
Single dwellings & dual occupancies	35%	N/A
Attached dwellings*, townhouses and villas	35%	N/A
Residential flat buildings	25 %	15%
Motels	50%	N/A
Industrial	20 %	10%

* For attached dwellings, landscaped area is to be calculated per lot, not on the overall development as these dwellings will be subdivided into individual Torrens title allotments.

1.7 Who can prepare landscape plans?

Landscape Plans must be prepared by a suitably qualified consultant. Landscape design consultants who are members of accredited organisations should be engaged to ensure professional standards are achieved. Accredited organisations include:

- Australian Institute of Landscape Architects
- Australian Institute of Landscape Designers and Managers.

1.8 Who can construct the landscape works?

Landscape construction should be carried out by a qualified landscape contractor to ensure that adequate standards of workmanship are achieved. Landscape contractors who are members of the Landscape Contractors Association of NSW should be engaged.



1.9 Tree Protection measures

Tree protection measures are important when undertaking development. These measures ensure that all trees, within and neighbouring the site, are dually protected. Substantial benefits are realized for many years when appropriate actions are taken during the short period of construction. Council will include a number of specific and robust tree protection conditions if/when approval has been granted.

Tree protection conditions of consent will be determined by Council's Officers following a site inspection and assessment of the development application. Tree protection measures and subsequent conditions of consent shall be consistent with the principles of Australian Standard AS4970- 2009 'Protection of trees on development sites' as deemed necessary by Council Officers.

Council may require an Arboricultural Assessment Report and/or Tree Protection Plan to assess the likely impact to trees on site or in close proximity to the site. This report shall be compiled by a qualified Arboriculturalist with a minimum AQF Level 5 qualification.

Consideration should be given to the impact of any proposed development on the retained soft landscape areas including the soil profile. Soil manipulation, soil profile inversion and the retention of tree stumps on site may contaminate soft landscape areas therefore soil remediation or soil replacement may be required. This will ensure soft landscape areas within development sites are maintained, protected and consequently left in a state whereby future landscaping and tree planting can be achieved.

<p>1. Short-term protection of trees during construction – Throughout this period tree damage due to construction can be significant enough to result in the death of the tree, which can either occur suddenly, or over a longer period.'</p>	 <p>Temporary fencing around trees is necessary to protect the critical root zone. Council may require applicants to protect trees that are not within the property, but may be affected during construction.</p>
<p>2. Long-term protection of trees post-construction - Development design needs to take into consideration the essential elements that a tree requires. By modifying the growing environment, over time that tree can slowly be 'choked' and eventually die. In some cases death to the tree happens over such a long period, the connection made to poor architectural design is often overlooked.</p>	 <p>Large trees located on property boundaries or along fence lines can easily be retained by cutting out a section of fence.</p>
<p>3. Tree protection measures should also consider such facets as location within the property, its significance within the wider landscape, and the type of short and long term activities conducted within and around the critical and primary root zones.'</p>	 <p>Living areas and trees can co-exist and often add a nice feature to a development. Open decking allow for the roots to still 'breathe'.</p>

1.10 Planting on structures

Objectives

The objectives for planting on structures are:

1. To contribute to the quality and amenity of communal open space on podiums and in internal courtyards.
2. To encourage the establishment and healthy growth of trees in urban areas.

As urban densities increase, planting on structures such as basement carpark or rooftops increases as a way to improve site amenity where land is scarce.

Provisions

The following are recommended as minimum standards for a range of plant sizes to be grown on structures:

	Plant size	Minimum standards
A	Large trees (canopy diameter of up to 16m at maturity)	<ul style="list-style-type: none"> • minimum soil volume 150m³ • minimum soil depth 1.3m • minimum soil area 10m x 10m area or equivalent
B	Medium trees (8m canopy diameter at maturity)	<ul style="list-style-type: none"> • minimum soil volume 35m³ • minimum soil depth 1m • approximate soil area 6m x 6m or equivalent
C	Small trees (4m canopy diameter at maturity)	<ul style="list-style-type: none"> • minimum soil volume 9m³ • minimum soil depth 800mm • approximate soil area 3.5m x 3.5m or equivalent
D	Shrubs	<ul style="list-style-type: none"> • minimum soil depths 500-600mm
E	Ground cover	<ul style="list-style-type: none"> • minimum soil depths 300-450mm
F	Turf	<ul style="list-style-type: none"> • minimum soil depths 100-300mm

Any subsurface drainage requirements are in addition to the minimum soil depths mentioned above.

1.11 Trees and Shrubs Indigenous to Lane Cove suitable for Landscape Plans

Since the 1970s, Lane Cove Council's landscape strategy has been to create a municipal landscape in harmony with the ecological and aesthetic values of the local bush. The regenerating bushland

with its well used bush walks and beautiful parks and gardens create habitat for birds and other animals, and contribute significantly to the bushland character and cultural landscape of Lane Cove.

Using native plants that are local to Lane Cove in your garden is worthwhile for a number of reasons. It helps preserve the historic and aesthetic landscape qualities of the area. Secondly, planting the local species helps maintain the ecological viability of the native fauna by providing habitat for many birds, mammals, reptiles and insects that are still found throughout the area. Using native plants is one way of demonstrating that you care for your environment. The third reason is that local plants, selected with care, are already adapted to the local soils and microclimates, so they often grow more rapidly and need less constant attention.

See Appendix 1 for list of suitable plants.

J.2 Tree Preservation and Landscape Guidelines

Objective

1. The preservation, re-establishment and reinforcement of the part of the environmental character of the Municipality which is related to the large number and significant areas of indigenous trees and other flora still existing and deserving of conservation.

2.1 Landscaping

2.1.1 Objective

The objective of this section is for:

1. The use of landscaping of public and private land as a unifying element in the special environmental character of Lane Cove.

2.1.2 Landscaping of Public Land

Only indigenous trees and shrubs are to be planted in public Open Space, street planting etc., excepting:

- in special circumstances: for example, landscaping associated with Items of Landscape Significance listed in the Heritage Register; and
- in Lane Cove Plaza and in planter boxes on Longueville Road and Burns Bay Road.

Indigenous means, those trees, shrubs and plants occurring naturally in the Lane Cove area.

The type of tree is to be determined by consideration of the form, ultimate height and canopy density of the tree. In general, open canopied trees are recommended.

The location and density of tree planting to take into account traffic hazards, availability of winter sun, views and utility services.

2.1.3 Landscaping of Specific Types of Development

Landscape plans are required for medium/high density residential, commercial and industrial development. All substantial trees and that part of the landscaping scheme visible from the public domain shall comprise indigenous plants.

Landscape plans are also required for residential properties adjoining bushland and properties within the foreshores waterways area defined by Sydney Regional Environmental Plan (Sydney Water Catchment) 2005.

Development sites shall be landscaped to achieve the following results:

- Trees will be visually prominent from streets and other public places.
- An informal and softening effect on buildings and the overall environment.
- Screen poor views.
- Not significantly obstruct desirable views.

- Give privacy to occupants and neighbouring properties.
- Be easily maintained.

Properties subject to Part H Bushland Protection are required to be landscaped using indigenous plants in the bushland and buffer areas within the property adjacent to the bushland reserve.

For single dwelling houses excepting those affected by Part H Bushland Protection, residents are encouraged but not required to plant indigenous plants in their gardens.

Any landscaping plan should include consideration of planning, planting and future maintenance and effect on adjoining properties.

All plant material used on landscape works shall have been grown to NATSPEC specifications.

2.2 Tree Preservation

2.2.1 Objective

The objective of this section is:

1. The retention of the maximum possible number of existing trees, particularly native trees, within the Municipality in healthy condition and natural form and shape.

2.2.3 Regulatory controls in the Lane Cove LGA with respect to the preservation of trees and vegetation

LEP Clause 5.9 – Preservation of trees or vegetation, aims to preserve the amenity of the area through the preservation of trees and other vegetation. This clause refers to species or kinds of trees or other vegetation that are prescribed for the purpose of the LEP clause 5.9 by a development control plan made by Council. For this purpose, the following information is prescribed by Council:

Note from Council:

- a) The following kinds of trees have been prescribed for the purposes of clause 5.9 by a development control plan made by Council:
 - any tree, whether indigenous or exotic, which has BOTH a height exceeding 4 metres AND a trunk diameter greater than 150mm (measured at 1 metre above the ground); and
 - trees in bushland which are not subject to an approved plan of management.
- b) However, a permit is not required in respect of any of the following exempt trees and/or acts:
 - Any tree having a height not exceeding 4 metres and a trunk diameter not greater than 150mm (measured at 1 metre above the ground)
 - Pruning of dead branches. Council encourages that such pruning works are undertaken by a qualified Arborist and in accordance with Australian Standard AS4373-2007 – Pruning of Amenity Trees
 - Pruning of tree branches that are within 2 metres of electric powerlines as required by State Legislation (Council encourages that such pruning works are undertaken by a qualified Arborist where necessary and in accordance with AS4373-2007)
 - Removal of trees approved through the DA process.

- Pruning or removal of fruit trees and Ornamental fruit trees affected by QLD Fruit Fly.
- Pruning and reshaping of Cypress Pines (*Cupressus* sp, *Chamaecyparis* sp) not greater than 10 % of whole canopy
- Pruning or removal of Crepe Myrtle (*Lagerstroemia* sp) and Camphor Laurel (*Cinnamomum Camphora*) with a height less than 6 metres
- Pruning or removal of any tree of a tree species that has been declared a noxious plant in the Lane Cove local government area under the Noxious Weeds Act 1993
- Pruning or removal of any trees belonging to any of the following species of trees:

Plant Name	Common Name
<i>Ailanthus altissima</i>	Tree of Heaven
<i>Cotoneaster</i> spp	Cotoneaster
<i>Ficus elastica</i>	Rubber Tree
<i>Schefflera actinophylla</i>	Umbrella Tree
<i>Syagrus romanzoffianum</i>	Cocos Palm
<i>Olea africana</i>	African Olive

2.2.4 Trees on Public Land (Including Street Trees)

- The pruning or removal of any tree growing in one of the indigenous bushland areas listed below is not permitted unless the tree is dangerous as determined by Council.
- The pruning or removal of any naturally occurring indigenous trees will not generally be permitted unless the tree is a risk to public safety.
- Subject to requirements above, the pruning of trees for solar access and the preservation of views is permitted only provided it is in the form of judicious thinning of the canopy of the tree, retaining the natural height, form and character and a maximum of 25% of the canopy of the tree is removed. This pruning is subject to the work being carried out by Council's Staff or Contractor and the cost of the work being paid in advance of the work being carried out, by the person seeking the pruning. Written approval of the Tree Assessment Officer is required before any pruning or thinning will be undertaken.
- In respect of the cost of pruning referred to above, where pruning has been carried out in the past by Council without charge, consideration will be given by Council to the bearing of part of the cost.
- Certain trees, which are not indigenous, will be regarded as being of landmark or historic value and these should not be pruned or removed unless they are dangerous. All Moreton Bay and Port Jackson Fig trees will be considered to be landmark trees.
- Council plants street trees at regular intervals to contribute to the streetscape character and visual amenity. Street trees will be species indigenous to the area or other species consistent with the existing streetscape. Such work will be carried out by Council's Staff or Contractors.
- Street trees which create a traffic hazard by obstructing the vision of drivers or pedestrians will be pruned or removed, as appropriate.

- h) Where in the opinion of the Manager – Open Space, the thinning of the canopy of a street tree or trees is warranted to provide solar access to adjoining residential properties, such pruning may be carried out in conjunction with other tree pruning nearby in that street provided it is in the form of judicious thinning of the canopy of the tree retaining the natural height, form and character and a maximum of 25% of the canopy of the tree is removed, without charge to the adjoining owner.

2.2.5 Trees on Private Land:

- i) The pruning or removal of any naturally occurring indigenous trees will not generally be permitted unless the tree is dangerous as determined by Council.
- j) The pruning of trees for solar access and the preservation of views is permitted only providing it is in the form of judicious thinning of the canopy of the tree retaining the natural height, form and character and a maximum of 25% of the canopy of the tree is removed and the prior written approval of the Tree Assessment Officer is obtained.
- k) The removal of trees, where warranted on safety grounds, is to be permitted only where safety considerations cannot be met by pruning of the tree and subject to each tree removed being replaced with two other trees of suitable type on the same property unless this additional planting is impractical. Prior written approval of the Tree Assessment Officer must be obtained.
- l) In locations where a tree planted by a property owner has grown to a size which causes its retention in its existing site to be undesirable in the opinion of both the owner and the Tree Assessment Officer or where it can be shown to the satisfaction of the Tree Assessment Officer that a tree threatens the structural stability of a building, the tree may be removed on condition that it is replaced by a more suitable tree to the satisfaction of the Manager – Open Space.
- m) Dead trees are not to be removed from indigenous bushland areas unless they are dangerous (as determined by Council), as dead trees provide an important habitat for fauna.
- n) Any approval given to the pruning or removal of a tree is valid for six months only from the date of giving approval.

2.3 Indigenous Bushland Areas

The indigenous bushland areas within the Municipality are those areas of public and private land where vegetation is predominantly indigenous, including areas so planted by Council and include the following:-

- a) Manns Point Park (bushland areas).
- b) Greenwich Point foreshore reserve between Shell Park and Mitchell Street.
- c) Greendale and Holloway Parks, extending south to the Shell property.
- d) Gore Creek Reserve foreshore reserve between the unmade section of Ford Street and Gore Creek Reserve.
- e) The section of Gore Creek Reserve from the north of the playing field to River Road.
- f) Lane Cove Bushland Park.
- g) The section of Lane Cove Park surrounding the golf course and Osborne Park.
- h) Woodford Bay foreshore reserve at the southern end of Kelly's Esplanade.
- i) The foreshore reserve on the west side of Woodford Bay between Woodford Street and Cowper Street and on the south side at the eastern end of Dunois Street.

- j) Aquatic Park (natural bushland area).
- k) Warraroon Reserve, including the bushland reserve north of River Road.
- l) The foreshore reserve between Tambourine Park and Warraroon Reserve.
- m) The foreshore reserve on the west side of Tambourine Bay.
- n) Burns Bay foreshore reserve at the rear of properties fronting Coonah Parade.
- o) Hartman Hill to the east of home units fronting Cope Street.
- p) Linley Point Reserve, including foreshore reserve adjoining Carisbrook.
- q) Tennyson Park.
- r) Lovetts Reserve between the western end of Cope Street and Blackman Park and south to Cunninghams Reach
- s) Blackman Park - perimeter bushland areas.
- t) Ventemans Reach between Blackman Park and Epping Road.
- u) Stringybark and Batten Reserves between the western end of Murray Street and Epping Road.
- v) Hands Quarry Reserve and lower Stringybark Creek bushland reserves.
- w) Bushland reserves along Epping Road from Mowbray Road to Merinda Street.
- x) Yangoora Reserve

No native vegetation of any type or soil or fallen timber is to be removed from any public reserve except in the context of selective hand clearing for fuel reduction authorised by Lane Cove Council.

J.3 Preservation of Significant Trees

3.1 Objectives

The objectives of this section are to:

1. To identify significant trees or tree stands within Lane Cove Municipality, and
2. To adopt planning and conservation strategies for the preservation of these significant trees or tree stands.

3.2 Significant trees

A significant tree or tree stand is one that in the opinion of Council makes a major contribution to the landscape of Lane Cove and meets one or more of the appropriate significance criteria listed below. Consistent with the Lane Cove Council LEP Clause 5.9 – Preservation of Trees or vegetation, a prerequisite is that the tree be greater than 4 m in height and have a trunk diameter greater than 150 mm.

3.3 Other relevant policies and studies

- Tree Preservation s (J.2) which identifies certain, non-indigenous, trees on public land to be of landmark or historic value. All Moreton Bay & Port Jackson Fig trees will be considered as landmark trees.
- Lane Cove Local Environment Plan Schedule 5 which includes street trees listed as heritage items having been identified in the Heritage Study of Lane Cove.
- Remnant indigenous trees of Lane Cove were surveyed and mapped in 1997. These remnant trees form part of the natural heritage of Lane Cove.
- Noxious weeds which have been declared for Lane Cove Municipality.
- “Significant Environmental Weeds” that have been listed in the Regional Weed Strategy prepared by Noxious Weed Committee Sydney North in 1998.

3.4 Identification of trees of significance

By establishing its Significant Tree Register the community identifies and places value on existing trees or tree stands with special qualities. These values are visual/aesthetic; heritage (historic plantings or indigenous remnants); cultural/commemorative; scientific.

Council will progressively establish a Significant Tree Register as trees are assessed. Owners or interested members of the public may nominate trees or tree stands for entry onto the Significant Tree Register. For trees or tree stands on private property, nominations will proceed to formal registration only with the agreement of the property owner(s) and after the adjoining neighbours have had an opportunity to comment on the nomination. A nomination form is available from Council.

Nominated trees or tree stands will be assessed by Council against the significance criteria. A description of the tree or tree stand and statement of significance will be prepared for each listing.

3.5 Planning and preservation strategies

Significant trees or tree stands should be preserved, including their form and character. Generally, permission will be given under Clause 5.9 of the LEP for remedial works only, such as removing dead wood.

A significant tree in poor physical condition can still be included on the Register. However, the safety of the property owner, their family and the public is paramount and, on request, Council will expedite an inspection of a tree in potentially dangerous condition. Permission to remove the significant tree will only be given if all options to render the tree safe and preserve it have been explored but Council is satisfied that the tree's removal is the only practical option.

In determining development applications Council will give priority to the preservation of significant trees. The development must aim to maximise the preservation of significant trees or tree stands and the application must include strategies for the maintenance of their long term health. Where a tree or trees not listed on the Register may be affected by a proposed development, then the tree(s) will be assessed according to the significance criteria listed below, as part of the Development Assessment process.

Council may require the lodgement of a bond by way of bank guarantee where significant trees or tree stands are to be retained but are potentially affected by development. The level of that bond should reflect the value of the particular tree as determined by a Tree Valuation Methodology recommended by the Institute of Landscape Architects.

3.6 Significance criteria

	Significance criteria	Detail
1	Remnant indigenous tree:	The tree or tree stand is, in the opinion of Council, a remnant of the indigenous tree cover which once occurred in the Municipality. The species occurs naturally in the Municipality, the tree is the local form and has not been planted.
2	Outstanding aesthetic quality	The tree or tree stand has, in the opinion of Council, visual and/or sensory appeal and/or landmark qualities.
3	Important contribution to the Landscape / Townscape	The tree or tree stand makes, in the opinion of Council, a major contribution in establishing a distinctive and highly valued landscape or townscape within Lane Cove Municipality.
4	Growth habit or physical features	The tree is, in the opinion of Council, worthy of recognition and is of value for its growth habit or physical features as follows: <ol style="list-style-type: none"> I. its form is a good representation and typical of its species, or; II. it has a curious growth habit, or; III. it is of large size at the upper recognised limits for that species on a regional basis.
5	Part of an historic garden, park, etc.	The tree or tree stand forms, in the opinion of Council, an integral element in a garden, park or landscape, which is individually heritage listed or which forms a precinct or curtilage to heritage listed property.

6	Historical associations or commemorative tree	<p>There is, in the opinion of Council, conclusive evidence that:</p> <ul style="list-style-type: none"> I. the tree or tree stand was planted to commemorate a major event, or; II. the tree or tree stand is associated directly with an historical event of major significance to Lane Cove Municipality, the State of New South Wales or the Australian Nation.
7	Associated with public figure and/or ethnic group	<p>The tree or tree stand has, in the opinion of Council, a verified key (major) association with a person who is recognised for his/her contribution to Lane Cove Municipality, the State of New South Wales or the Australian Nation, and/or; the tree or tree stand has, in the opinion of Council, a verified key (major) association with an ethnic group and is recognised by that group for its considerable historical or cultural significance to that group.</p>
8	Horticultural/scientific value	<p>In the opinion of Council the tree or tree stand; has significance as an early-introduced horticultural variety, or; is a locally indigenous species recognised by a state or national scientific conservation body (CSIRO, NPWS, etc) as being rare, threatened or endangered at the state or national level, or; is at its extreme limits of its distribution, or; has scientific research potential and these values can be confirmed by a relevant authority (Royal Botanic Gardens, NSW Agriculture, State Forests, etc).</p>
9	Old specimen	<p>The tree or tree stand is, in the opinion of Council, reliably documented to be at the upper limit of the scale of longevity of the species in the Sydney Region and the scale of longevity can be confirmed by a relevant authority (Royal Botanic Gardens, State Forests, NPWS, etc).</p>

APPENDIX 1 – PLANT LISTS

KEY TO FOLLOWING PLANT LISTS	
Soil	C grows well in Clay Soil D requires Dry sandy Soil H Prefers Humus rich, sandy garden soil R grows well in sandy soil along River foreshore
Aspect	F requires Full sun S grows Well in Semi shade D tolerates Deep shade
Water needs	M needs Moist soil or tolerates damp areas - has no special watering needs D requires very well Drained soils

TREES, SINGLE TRUNKED, GROWING > 4 M				
BOTANIC NAME	COMMON NAME	SOIL	ASPECT	WATER NEEDS
<i>Acacia implexa</i>	Hickory	C, H	F, S	-
<i>Acacia irrorata</i>	Green Wattle	C, H, R	F,S	-
<i>Acacia longissima</i>	Wattle	C,D,H	F,S	-
<i>Acacia parramattensis</i>	Sydney Green Wattle	C,H	F,S	-
<i>Acacia parvipinnula</i>	Silver Stem Wattle	D	F	-
<i>Acmena smithii</i>	Lillypilly	C,H,R	S,D	M
<i>Allocasurina torulosa</i>	Forest Oak	C,H,R	F,S	-
<i>Angophora costata</i>	Sydney Red Gum	D,H	F	D
<i>Backhousia myrtifolia</i>	Grey Myrtle	C,H	S,D	M
<i>Banksia serrata</i>	Old Man Banksia	D	F	D
<i>Banksia integrifolia</i>	Coast Banksia	D,R	F,S	-
<i>Callitris rhomboidea</i>	Port Jackson Cypress	D,H	F	-
<i>Casuarina glauca</i>	Swamp Oak	R	F,S	M
<i>Ceratopetalum gummiferum</i>	Christmas Bush	C,H	F,S,D	-
<i>Ceratopetalum apetalum</i>	Coachwood	C,H	S,D	M
<i>Clerodendrum tomentosum</i>	Hairy Clerodendrum	All	S,D	-
<i>Corymbia gummifera</i>	Red Bloodwood	C,D,H	F	-
<i>Elaeocarpus reticulatus</i>	Blueberry Ash	C,H	S,D	-
<i>Eucalyptus racemosa</i>	Scribbly Gum	D,H	F	-
<i>Eucalyptus paniculata</i>	Grey Ironbark	C,H	F	-
<i>Eucalyptus pilularis</i>	Blackbutt	All	F,S	-
<i>Eucalyptus piperita</i>	Sydney Peppermint	D	F	D
<i>Eucalyptus resinifera</i>	Red mahogany	All	F,S	-
<i>Eucalyptus globoidea</i>	White Stringybark	C,D,H	F,S	-
<i>Eucalyptus haemastoma</i>	Scribbly Gum	D	F	D

TREES, SINGLE TRUNKED, GROWING > 4 M				
<i>Eucalyptus saligna</i>	Sydney Blue Gum	C,H,R	F,S	-
<i>Glochidion ferdinandi</i>	Cheese Tree	C,H,R	S,D	M
<i>Melaleuca linariifolia</i>	Paperbark	C,H,R	F,S	M
<i>Melaleuca nodosa</i>	Needle Paperbark	C,H	F	-
<i>Melaleuca styphelioides</i>	Prickly-leaf Paperback	C,H,R	F,S	M
<i>Myoporum acuminatum</i>	Northern Boobiella	R	F,S	-
<i>Rapanea variabilis</i>	Muttonwood	C,H	S,D	-
<i>Syncarpia glomulifera</i>	Turpentine	C,H	F,S	M
<i>Tristaniopsis laurina</i>	Water Gum	C,H,R	S,D	M
<i>Tristaniopsis collina</i>	Mountain Water Gum	C	S,D	-

TALL SHRUBS > 2 METERS				
BOTANIC NAME	COMMON NAME	SOIL	ASPECT	WATER NEEDS
<i>Acacia floribunda</i>	Sally Wattle	all	F,S	-
<i>Acacia longifolia</i>	Sydney Golden Wattle	all	F,S	
<i>Angophora hispida</i>	Dwarf Apple	D	F	D
<i>Baeckea linifolia</i>	Swamp Baeckea	D,H	F,S	M
<i>Banksia ericifolia</i>	Health Banksia	D,H	F	D
<i>Banksia marginata</i>	Silver Banksia	D	F	D
<i>Banksia oblongifolia</i>	Banksia	D	F	D
<i>Bursaria spinosa</i>	Boxthorn	C	F	D
<i>Callicorna serratifolia</i>	Black Wattle	D,H	S,D	M
<i>Callistemon pinifolius</i>	Pine leaf Bottlebrush	C,D,H	F	D
<i>Callistemon citrinus</i>	Red Bottlebrush	D,H	F,S	M
<i>Callistemon linearis</i>	Narrow leaf Bottlebrush	D,H	F	M
<i>Cassinia aureonitens</i>	Yellow Cassinia	D,H	F,S	-

TALL SHRUBS > 2 METERS				
<i>Eupomatia laurina</i>	Bolwarra	C,D,H	S,D	M
<i>Hakea sericea</i>	Needle Bush	D,H	F	D
<i>Hakea teretifolia</i>	Dagger Hakea	D	F	D
<i>Kunzea ambigua</i>	Mountain Water Gum	C,D,H	F	D
<i>Leptospermum trinervium</i>	Shrub Tea-tree	D	F	D
<i>Leptospermum polygalifolium</i>	Yellow Tea-tree	C,D,H	F,S	M
<i>Oleria viscidula</i>	Daisy-bush	D,H	F,S	-
<i>Persoonia pinifolia</i>	Pine-leaf Geebung	D	F	D
<i>Persoonia lanceolata</i>	Lance-leaf Geebung	D	F	D
<i>Phebalium dentatum</i>	Phebalium	D,H	F,S	-
<i>Pittosporum revolutum</i>	Yellow Pittosporum	all	F,S,D	M
<i>Pomaderris ferruginea</i>	Rusty Pomaderris	D,H	F	D
<i>Prostanthera linearis</i>	Narrow-leaf Mint-bush	D	S,D	-
<i>Pultenaea flexilis</i>	Yellow Pea	D	F,S	D
<i>Pultenaea daphnoides</i>	Large-leaf Brush-pea	D,H	F,S	D
<i>Solanum laciniatum</i>	Kangaroo Apple	C,D,H	F,S	-
<i>Synoum glandulosum</i>	Scentless Rosewood	C,D,H	S,D	M
<i>Trema aspera</i>	Native Peach	C,D,H	S	-
<i>Viminaria juncea</i>	Native Broom	D	F	M

SMALL TO MEDIUM SHRUBS < 2 METRES				
BOTANIC NAME	COMMON NAME	SOIL	ASPECT	WATER NEEDS
<i>Acacia terminalis</i>	Sunshine Wattle	D	F	D
<i>Acacia falcata</i>	Sickle Wattle	C,D,H	F	-
<i>Acacia linifolia</i>	Flax Wattle	D	F	D
<i>Banksia spinulosa</i>	Hairpin Banksia	D	F	D

SMALL TO MEDIUM SHRUBS < 2 METRES				
<i>Bauera rubioides</i>	Dog Rose	D,H	F,S	M
<i>Bossiaea obcordata</i>	Spiny Bossiaea	D	F	D
<i>Breynia oblongifolia</i>	Breynia	C,D,H	F,S	-
<i>Correa reflexa</i>	Common Correa	D	F	D
<i>Crowea exalata</i>	Crowea	D,H	F,S	D
<i>Crowea saligna</i>	Crowea	D	F	D
<i>Dillwynia retorta</i>	Egg and Bacon	D	F	D
<i>Epacris longiflora</i>	Fuchsia Heath	D	F,S	D
<i>Epacris pulchella</i>	Heath	D	F	D
<i>Goodenia ovata</i>	Hop Goodenia	C,H	F,S	M
<i>Grevillea sericea</i>	Pink Spider-flower	D	F	D
<i>Hibbertia linearis</i>	Fuinea Flower	D	F	D
<i>Grevillea buxifolia</i>	Grey Spider-flower	D	F	D
<i>Hovea longifolia</i>	Rusty Pod	D	F,S	-
<i>Lasiopetalum ferrugineum</i>	Rusty Petals	D	F	D
<i>Leucopogon lanceolatus</i>	Lance-leaf Bear-heath	D	F	D
<i>Olearia microphylla</i>	Small-leaf Daisy-bush	D,H	F	-
<i>Ozothamnus diosmifolius</i>	Pill Bush	D,H	F	-
<i>Pimelia linifolia</i>	Rice-flower	D	F	D
<i>Platylobium formosum</i>	Handsome Flat-pea	S	S	-
<i>Podocarpus spinulosus</i>	Podocarpus	D,h	S	-
<i>Pomaderris lanigera</i>	Woolly Pomaderris	D	F	D
<i>Senna odorata</i>	Cassia	D,H	F,S	-
<i>Tetradlea thymifolia</i>	Black Eyed Susan	D	F	D
<i>Woolfsia pungens</i>	Woolfsia	D	F	D
<i>Zieria smithii</i>	Sandfly Zieria	D,H	F,S	-

TUFTED OR CLUMPING PLANTS

BOTANIC NAME	COMMON NAME	SOIL	ASPECT	WATER NEEDS
<i>Austrostipa ramosissima</i>	Stout Bamboo Grass	C,D,H	F,S,D	-
<i>Dianella caerulea v.caerulea</i>	Paroo Lily	D,H	F,S,D	-
<i>Dianella revoluta</i>	Spreading Flax Lily	D	F,S	D
<i>Dichelachne crinita</i>	Long-Hair Plume Grass	D,H	F	-
<i>Gahnia clarkei</i>	Tall Saw-sedge	H	F,S	M
<i>Gahnia erythrocarpa</i>	Saw-sedge	D,H	F,S	-
<i>Gahnia aspera</i>	Rough Saw-sedge	D	F,S	-
<i>Gahnia melanocarpa</i>	Black-fruit Saw-sedge	H	F,S	M
<i>Juncus usitatus</i>	Common Rush	C,D,H	F	M
<i>Lomandra longifolia</i>	Spiny Headed Mat-rush	all	F,S	-
<i>Notodanthonia longifolia</i>	Wallaby Grass	D,H	F	-
<i>Patersonia sericea</i>	Dwarf Purple-flag	D	F	D
<i>Patersonia glabrata</i>	Leafy Purple-flag	D	F,S	D
<i>Themeda australis</i>	Kangaroo Grass	all	F,S	-

CLIMBERS AND SCRAMBLERS

BOTANIC NAME	COMMON NAME	SOIL	ASPECT	WATER NEEDS
<i>Clematis aristata</i>	Travellers Joy	H	F,S	-
<i>Clematis glycinoides</i>	Old Mans Beard	H	F,S	-
<i>Eustrephus latifolius</i>	Wombat Berry	D,H	F,S	-
<i>Glycine microphylla</i>	Glycine	C,D,H	F,S	-
<i>Hardenbergia violacea</i>	Purple Twining-pea	C,D,H	F,S	-
<i>Hibbertia scandens</i>	Climbing Guinea Flower	all	F,S	-
<i>Hibbertia empetrifolia</i>	Guinea Flower	D	F,S	-

CLIMBERS AND SCRAMBLERS

<i>Hibbertia dentata</i>	Twining Guinea Flower	D,H	F,S	-
<i>Kennedia rubicunda</i>	Dusky Coral-pea	all	F,S	-
<i>Morinda jasminoides</i>	Morinda	C,D,H	S,D	M
<i>Pandorea pandorana</i>	Wonga Vine	C,D,H	S,D	-
<i>Rubus parvifolius</i>	Native Raspberry	C,D,H	F,S	-
<i>Sarcopetalum harveyanum</i>	Pear Vine	C,H	S,D	-
<i>Smilax glycyphylla</i>	Sweet Sarsparilla	C,H	S	-

GROUNDCOVERS

BOTANIC NAME	COMMON NAME	SOIL	ASPECT	WATER NEEDS
<i>Centella asiatica</i>	Swamp Pennywort	C,H	F,S	M
<i>Commelina cyanea</i>	Scurvy Weed	C,H	F,S	M
<i>Dichondra repens</i>	Kidney Weed	C,H	F,S	-
<i>Geranium homeanum</i>	Cranes Bill	C,H	F,S	-
<i>Isotoma fluviatilis</i>	Swamp Isotoma	C,H	F,S	M
<i>Microlaena stipoides</i>	Microlaena	all	F,S	-
<i>Oplismenus spp</i>	Basket Grass	C,D,H	F,S	-
<i>Pelargonium inodorum</i>	Storks Bill	C,H	F,S	-
<i>Poa affinis</i>		D,H	F,S	-

FERNS

BOTANIC NAME	COMMON NAME	SOIL	ASPECT	WATER NEEDS
<i>Adiantum aethiopicum</i>	Maidenhair Fern	H,R	S,D	M
<i>Adiantum hispidulum</i>	Rough Maidenhair Fern	H,R	S,D	M
<i>Asplenium flabellifolium</i>	Necklace Fern	H	S,D	-

FERNS					
<i>Asplenium australasicum</i>	Birds-nest Fern	H	S,D	M	
<i>Blechnum ambiguum</i>	Gristle Fern	H	S,D	-	
<i>Christella dentata</i>		H	S,D	M	
<i>Cyathea australis</i>	Rough Tree Fern	H	S,D	M	
<i>Davallia pyxidata</i>	Hares Foot Fern	H	S	-	
<i>Doodia aspera</i>	Rasp Fern	h	S,D	-	
<i>Histiopteris incisa</i>	Bats-wing Fern	H	F,S	M	
<i>Lindsaea linearis</i>	Screw Fern	H	S,D	-	
<i>Platycerium bifurcatum</i>	Elkhorn Fern	H	S,D	-	
<i>Pteris tremula</i>	Tender Brake	H	F,S	M	
<i>Todea barbara</i>	King Fern	H,R	F,S,D	M	

Part K Motels



K

K.1 Motels

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K.1 Motels

1.1 Objective

The objective of this section is:

1. maintaining, and where necessary, enhancing the existing high standard of residential development in the R4 Zone, whilst providing for the establishment of motel developments.

1.2 Minimum Site Area

- a) Motel developments will not be permitted on sites of less than 2,000m².

1.3 Building Design and Scale

- a) To ensure the preservation of the existing residential character in the vicinity of the development, the architectural style of motel proposals must be sympathetic to the adjoining and surrounding buildings in terms of height, the materials used, roof pitch, and overall building character.
- b) The area of the site devoted to driveways and vehicle turning areas should be minimised. Designs which include an excessive paved area or which do not screen paved areas adequately from the street and neighbouring development, will not be accepted. Similarly, designs which show little imagination in the placement of buildings mass and with straight driveways are also unacceptable.

1.4 Views and Overshadowing

- a) The siting of a motel on an allotment needs to be related to the particular effect the development may have on the adjoining dwellings. For a proposal to be sympathetic to the existing immediate neighbouring buildings, it is required that the development will not significantly affect any available views from adjoining dwellings, nor significantly decrease the amount of sunshine access available to the adjoining allotments.
- b) Motel developments are to be so located and designed that a total of five hours sunshine is available daily over 80% of the southern contiguous allotment during 21st June.

1.5 Setbacks

- a) Building setback from a public street are to match that of neighbouring residential development. Side and rear boundary setbacks should not be less than that of neighbouring or nearby flat development.

1.6 Landscaping

- a) Fifty percent (50%) of the site shall be landscaped. Landscaping does not include paved areas, such as driveways.
- b) A separate landscape plan is required with any development proposal. The landscape plan should achieve or include the following:-
 - I. An informal softening on building and paved areas generally.

- II. The screening of the development from the side and rear boundaries and, particularly, from the street.
- III. The exclusive use of the plant species indigenous to Lane Cove in areas from the public domain.
- IV. Existing medium and large size trees are to be protected during construction and maintained in a viable condition through the siting of buildings, access ways and paths and swimming pools.

Part L Public Art



1. **Developer Commissions**
2. **Council Projects**
3. **Contractual Processes**

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L Public Art

Objectives:

1. The involvement of artists, craftspersons, design teams, developers and the community in the creation of a distinctive local visual character, stimulating the community to interact with its built and natural environment within the creation of a distinctive visual environment
2. The interpretation by artists and craftspersons of the locality's natural, social, cultural and historic characteristics and vitality.

Provisions:

1. The Lane Cove Council Public Art Policy & Implementation Plan and Section 94 Contributions Plan are to be complied with in determining the relevant public and private developments to incorporate a public art component, and in achieving its provision.

Selected key features of the Public Art Policy are highlighted below.

1. Developer Project-Based Public Art Commissions

Developers are encouraged to propose the provision of public art to Council as an integral part of their individual projects and developments, in particular taking advantage of opportunities in the residential and employments growth areas in the Lane Cove LGA.

Should Council have projects initiated and undertaken by private developers who are providing public space as components of the development (e.g. a public plaza in front of an office building or apartment complex, a public park as an integral element of a medium-density housing development, etc), Council will require that the developer agrees in writing to the following conditions:-

- The developer is willing to use the same process of appointment of a Council-approved professional Public Art Coordinator contracted as a specialist consultant to the Architect or lead design consultant and coordinated by that Architect within the Project Team;
- An appropriate Public Art Budget is identified within the overall Cost Plan for the project for Council's approval;

- A Memorandum of Agreement is to be prepared in advance of the commissioning of any works of public art, which identifies whether Council or the developer will own the works upon their completion and who will maintain them, as well as confirming that Council's standard formats for Artists' contracts and Design Briefs shall be utilised by the developer in all project stages;
- The developer agrees to follow an acceptable version of the standard commissioning process outlined above, including use of Council's Public Art Advisory Committee and the specified sequence of submissions on public art master planning, artist selection, and artists' designs to that Committee and Council for approval; and
- Council is not being asked by the developer for inappropriate trade-offs against the approved Development Control Plan or other statutory agreements in return for the provision of public art, thereby weakening or debasing the urban design quality of the Lane Cove LGA.

Unless these conditions are met and the standard commissioning steps outlined above are to be utilised, Council will decline provision of public art by the developer.

The following chart serves as a sample "check-list" for use by Council's Public Art Internal Committee, its Cultural Development Officer, and the Art Advisory Committee when Council is presented with a public art commission proposal from a developer in advance of a Development Application. This checklist is intended to aid Council's Cultural Development Officer to conduct a brief risk management assessment of any such commission proposals:

CRITERIA FOR ASSESSMENT OF A DEVELOPER'S COMMISSION PROPOSAL IN RELATION TO THE PUBLIC ART POLICY'S GOALS & REQUIREMENTS
<p>Conformity to the Policy: The proposed work of art has regard to the essential principles, goals, and objectives of the Lane Cove Council Public Art Policy in its design, development, contract process, fabrication, installation, maintenance requirements, and longevity.</p>
<p>Selection of the Artist(s): Artist selection processes for the commission will be conducted by the developer in accord with the specified methods and principles described in Council's Public Art Policy Implementation Plan.</p>
<p>Ongoing Maintenance Costs: The commissioned work, if completed, will not result in Council ownership and a requirement for Council to maintain the work from its own Maintenance Budget annually, since the developer has made provision for the annual cleaning and maintenance costs to be funded by others as a certainty over time.</p>
<p>Ongoing Risk and Liability: If Council agrees to accept the commission proposed by the developer, the developer's method of provision ensures that Council staff will be able to have sufficient involvement in the scrutiny of the commissioning process by the developer's Public Art Coordinator to ensure that the ongoing liability and ongoing risk to Council will be low or manageable in relation to the structural certainty of installation systems and procedures, or will the commission upon completion result in an unknown ongoing risk or liability?</p>
<p>Is the Proposal a Gift? No aspect of the proposed commission involves "gifting" to Council in any way, or, if it does, the proposed commission in accord with Council's approved "Gifts Policy" forming part of the Public Art Policy Implementation Plan.</p>
<p>Written Design Brief & Committee Assessment: The design stages of the commission will be conducted according to a well-structured written conceptual Design Brief with specified submission requirements, and will it be assessed by a properly-constituted Public Art Advisory Committee in accord with this Plan which is committed to the principles of the Lane Cove Council Public Art Policy & Implementation Framework Summary.</p>

In general, Council notes as an essential part of this Policy that if public art is "fast-tracked" in its design and fabrication as part of a development project, the results are usually significantly compromised. Quality site responsive-art is inevitably "one-off" in every aspect of its conception and realisation and, by nature, requires adequate time, care, and support in its evolution.

2. Council's Redevelopment Sites, Streetscapes and other Projects

2.1. Project levels

The public or private developments to involve a component of public art are determined in the Lane Cove Council Public Art Policy and Implementation Plan. Such projects include:-

- In-house custom design with a contracted artist (e.g. projects designed by Council staff in collaboration with an artist or designer/maker contracted under the Public Art Policy's guidelines);
- In-house design in collaboration with a contracted artist with community input/ workshops/ consultation/fabrication;
- In-house design incorporating a contracted artist, designer or craftsperson as the fabricator engaged in accord with the Public Art Policy;
- major projects with an outsourced design team and one or more public artists/designers/ craftspersons contracted under the provisions of the Public Art Policy; or new development projects, whether Council initiated or private sector, incorporating contracted artists.

The Policy states as one of its key principles that in order to achieve a high degree of excellence within their commissions, artists require the support and collaboration which integration of their work within the context of multi-disciplinary design teams provides. These design teams may contain other appropriate urban design, architectural, engineering, and landscape design professionals.

In response to that principle, works of public art in the Lane Cove LGA shall be commissioned as an integral part of a Council design project which is anchored by one or more design professionals (e.g. an architect, landscape architect, urban designer, etc) engaged by Council for the design, documentation, construction administration or supervision of the project.

It is important to ensure that the commissions to artists, craftspeople, and designers under the Policy implicitly reflect the wide, rich range of contemporary professional and community art practice in Australia which is appropriate for inclusion in Lane Cove's LGA.

3. Contractual Phasing and Approval Processes during Design and Fabrication of Commissions

All design/fabrication commissions to artists and craftspeople to be let under the Implementation Plan of Council's Public Art Policy shall consist of three project stages:

- Schematic Design
- Design Development
- Fabrication/Installation

Each of these three project phases is to be covered by a separate contractual agreement with an attached Brief:

- a "Design Agreement" covering the Schematic Design phase of the commission; Fabrication/ Installation
- a "Design Development Agreement" covering the Design Development phase of the commission; and
- a "Commission Agreement" or "Fabrication/Installation Phase Agreement" covering the Artist's fabrication and installation phases of work or the Artist's maintenance of design intent supervision of the Work's fabrication and installation by others commissioned for that purpose

The purpose of using three separate contracts for these phases of work is that it clearly expresses both to the contracted Artist and to Council (as the "client") that each phase constitutes a discrete and separate phase of the work, with full payment provided to the Artist under the contract for the time expended and work completed within that phase.

As guaranteed by those contractual formats, at the time of submission and evaluation of the Artist's work completed under each phase, Council, upon its acceptance of the recommendations of the Public Art Advisory Committee, has the obligation to pay for the work successfully completed according to the Brief for the specified fee.

However, the contract also provides Council as the Client with the option not to initiate a contract and negotiate a fee for the next phase of the work, thereby keeping a close control on cost, commitment, and risk for both the contracted Artist and Council.

Part M

Sex Services Premises



M

- M.1 Introduction
- M.2 Objectives
- M.3 Council's Relationship with Other Authorities
- M.4 General Requirements for Development Applications
- M.5 Internal Design
- M.6 Surveillance
- M.7 External Display
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- M.12 Size and Location
- M.13 Serving Alcohol

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M.1 Introduction

Sex services premises (that is, brothels which are not home occupations) are permitted under the Lane Cove LEP 2009. Clause 6.5 of the LEP states that:

Development consent must not be granted to the carrying out of development for the purposes of sex services premises unless the consent authority is satisfied that::

for sex services premises permitted on land in Zone B3 Commercial Core under Schedule 1 – the only access to the premises is from the Pacific Highway; and

for sex services premises permitted on land in Zone IN2 Light Industrial - the premises are located more than 100 metres from any school.

M.2 Objectives

The objectives of the Plan are to:

1. ensure that all sex industry premises are appropriately regulated under the Environmental Planning & Assessment Act, 1979;
2. minimise any amenity impacts of sex industry premises upon adjoining land uses, particularly residential areas and other nearby sensitive land uses;
3. avoid any detrimental change to the social character, identity, or perceived image of neighbourhoods within Lane Cove; and
4. discourage the clustering of sex industry premises.

M.3 Council's Relationship with Other Authorities

Council's responsibilities are primarily concerned with land use planning under the Environmental Planning & Assessment Act, 1979. Public health complaints in relation to the operation of brothels are the responsibility of the NSW Department of Health. Occupational Health & Safety issues are matters for the WorkCover Authority. The NSW Department of Health is responsible for safe health practices in the workplace, ensuring safe sex practices, dealing with public health complaints and advising sex workers working with sexually transmissible conditions.

However, as a consent authority, Council may undertake inspections of sex industry premises so as to determine compliance with NSW Public Health Act and Regulations, Protection of the Environment Operations Act and conditions of development consent made in accordance with this DCP.

The Australian Federal Police and the Department of Immigration deal with issues of illegal immigrant sex workers.

M.4 General Requirements for Development Applications

The following must be included in all development applications:

- a) site plan and floor plans
- b) location of parking spaces
- c) advertising signs (size, number, colour, illumination and content)
- d) details of existing and proposed external lighting
- e) the number and location of sanitary facilities including toilets, showers and hand basins
- f) details of food preparation area and storage areas
- g) details of garbage and recycling storage areas.

In addition, applications should conform with the:

- a) Lane Cove Comprehensive Development Control Plan (CDCP) in relation to B3 Commercial Core and IN2 Light Industry Zones
- b) Building Code of Australia 1993
- c) Disability Discrimination Act 1992
- d) Australian Standards

All applicants are advised to ensure that the application complies with "Brothels: Health and Safety Guidelines 2001", NSW Health and WorkCover NSW.

These Guidelines summarise applicants' responsibilities under the:

- a) Occupational Health and Safety Act 1983
- b) Public Health Act 1991
- c) Disorderly Houses Amendment Act 1995
- d) A Statement of Environmental Effects is to accompany the Development Application and should address these matters as detailed below. Applications may be forwarded for consideration to neighbouring Councils, and to the NSW Department of Health, Workcover NSW or other relevant organisations.

Applicants are also advised to take into consideration the grounds on which the Land and Environment Court (under the Restricted Premises Act 1943 Section 17(5)) may consider complaints lodged against brothels operating with consent:

- a) whether the brothel is operating near or within view of a church, hospital, school or any place regularly frequented by children for recreational or cultural activities;
- b) whether the operation of the brothel causes a disturbance in the neighbourhood when taking into account other brothels operating in the neighbourhood or other land use within the neighbourhood involving similar hours of operation and creating similar amounts of noise and vehicular and pedestrian traffic;
- c) whether sufficient off-street parking has been provided if appropriate in the circumstances;
- d) whether suitable access has been provided to the brothel;
- e) whether the operation of the brothel causes a disturbance in the neighbourhood because of its size and the number of people working in it;
- f) whether the operation of the brothel interferes with the amenity of the neighbourhood;
- g) any other matter that the Land and Environment Court considers is relevant.

M.5 Internal Design

5.1 Staff Rooms

All brothels and other appropriate sex industry premises are to have a safe and accessible non-working area with appropriate facilities for food and beverage preparation areas and sanitary facilities available for staff on breaks.

5.2 Sanitary Facilities

Adequate sanitary facilities must be provided for staff and clients. One shower room with full facilities would be sufficient to accommodate three rooms or a three sex worker operation. Additionally, each workroom should have a handbasin with hot and cold water with soap and single use disposable towels. If pools, spas, saunas or steam rooms are proposed, then additional shower facilities are required also. The pool and spa and its surrounds must be maintained in a clean condition to prevent the transmission of scheduled medical conditions. Maintenance of the pool and spa pool must comply with the NSW Department of Health's *Public Swimming Pool and Spa Pool Guidelines 1996* and *Protocol for Minimising the Risk of Cryptosporidium Contamination in Public Swimming Pools and Spa Pools*.

5.3 Waste Handling

There should be provision for disposal of used condoms, dams, gloves, soiled tissues and the like in rooms where sexual activity takes place. All waste containers should be capable of being kept clean and be waterproof. Handling of sharps and clinical waste to comply with the NSW Health Department's Infection Control Policy (1999).

If contaminated sharps (e.g. needles or razors) are generated, then non re-usable sharps containers,

which comply with Australian Standard AS 4031, should be provided for their disposal.

Advice for separating waste products for disposal is provided in the NSW Health Department's Waste Management Guidelines.

Council does not collect trade waste. Disposal should be arranged by private contractors. The Department of Health should be contacted regarding private contractors specializing in the disposal of sharps. All disposal of waste, including sharps should be in accordance with the NSW Health Department's "Infection Control Policy", 2007.

5.4 Security Intercom/Alarms

All premises are to have an alarm or intercom in each room that is used for sexual activity. These alarms are to connect back to a central base (such as reception) that is to be monitored at all times. This is to ensure the safety of both clients and sex workers.

5.5 Lighting

Good lighting is to be provided in each workroom to enable physical examination for sexually transmitted diseases, in accordance with Department of Health requirements.

5.6 Accessibility

Access for people with a disability should be provided in accordance with all relevant legislation, including AS1428 – Design for Access and Mobility and the Anti-Discrimination Act 1977. Major entrances to premises to which the public is entitled to enter need to be designed and constructed to provide equitable treatment of users and meet minimum standards of grade, doorway width and connectivity.

M.6 Surveillance

Casual surveillance of exits and entries is essential to ensure the safety of all workers and visitors to such premises. Accordingly, entrances and exits of sex industry premises should be designed to facilitate the privacy of workers and clients, without compromising personal safety (such as isolated back lanes and poorly lit areas). Adequate lighting of entrance and exits is essential to ensure the safety of sex workers and clients who are leaving and arriving at the premises. Any landscaping that is proposed should not obstruct the visibility and overlooking from public areas of entrances and exits so as to ensure the safety of all workers and visitors to such premises.

M.7 External Display

Sex industry premises shall not display sex workers or sex related products from windows, the front door or outside of their premises. However, premises are to minimize nuisance to neighbours by clearly numbering the building, with the number being clearly visible from the street. The building is

not to be of a colour which draws undue attention to the premises.

M.8 Level

Brothels are not permitted at ground floor level. The floor level of any brothel is to be a minimum of 2.5 metres above street level measured vertically at each and every point at the street front on the street which has the highest RL (reduced level – AHD).

M.9 Entrance

The brothel must be accessed by a separate entrance from other premises in the building, so as to ensure separation of staff and clients from other users of the property. Any breach of the requirement for entry to be from Pacific Highway in the B3 Zone may be prosecuted by Council.

M.10 Signage

No signs may display words or images, which are in the opinion of the Council, sexually explicit, lewd or otherwise offensive. Council must be satisfied that the content, illumination, size and shape of the signs are not likely to interfere with the amenity of the neighbourhood. All signs are subject to a separate development application.

M.11 Access

All access to the premises shall be from the Pacific Highway except in industrial zones.

M.12 Size and Location

In order to minimize the prominence and proliferation of this form of development, and to maintain the existing character of the area:

No brothel shall be permitted within 500 lineal metres of another brothel.

The size of a brothel shall be no greater than 160m² gross floor area.

M.13 Serving Alcohol

Under NSW Liquor Licensing laws, brothels cannot sell alcohol on the premises.



Part N Signage and Advertising



N

- N.1 Introduction
- N.2 Background
- N.3 General Signage Controls

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This document was prepared by SCOTTCARVER Urban Planning on behalf of Lane Cove Council.

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Acknowledgements

This DCP was prepared based on consultation with Lane Cove Councillors, Lane Cove Council strategic planning staff and selected community stakeholders.

N.1 Introduction

1.1 Relationship to Other Plans and Policies

This DCP is made under and conforms to the principal environmental planning instrument which applies to land in the Municipality of Lane Cove. The DCP also conforms to other environmental planning instruments which apply.

All advertising and signage proposals are required to consider the provisions of State environmental Planning Policy No. 64 – Advertising and Signage (SEPP 64). This DCP has been prepared with consideration of the provisions of SEPP 64 and should be read in conjunction with it and its Guidelines. The DCP does not override the provisions of SEPP 64. Therefore, this DCP does not exempt land in Lane Cove to which this DCP applies from the provisions of SEPP 64, in particular:

- a) Advertisements greater than 20sqm in area and within 250m of and visible from a Classified Road under the Roads Act 1993;
- b) Advertisements on Freeways or Tollways within the meaning of the Roads Act 1993;
- c) Advertisements with an area greater than 20sqm in area or higher than 8m above ground;
- d) An advertising display area greater than 45sqm;
- e) Advertisements on bridges;
- f) Building wrap advertisements;
- g) Special promotional advertisements;
- h) Wall advertisements;
- i) Roof or sky advertisements;
- j) Freestanding advertisements;
- k) Advertisements within navigable waters

Where an advertising structure is within 250 metres of, and visible from, a classified road and is greater than 20 square metres or higher than 8 metres above the ground, the local council must obtain concurrence from the RTA prior to issuing consent.

1.2 Aims and Objectives of this Plan

Aim

The provisions of this DCP are intended to ensure the character of buildings, streetscapes and vistas are consistent with Council's desired future outcomes. In addition, the purpose of this DCP is to encourage well designed and located signs which contribute positively to the diversity and viability of businesses in Lane Cove.

This DCP provides objectives and provisions for various types of signs and also contains specific provisions to assess whether a sign is acceptable on its merits. This DCP has been prepared to ensure all types of signage and advertising are required to be considered, including:

1st Party Advertising - Business and building identification signs.

2nd Party Advertising - Products/goods sold within a premise.

3rd Party Advertising - General advertising – billboards etc.

4th Party Advertising - Building owner's signage when not a tenant – e.g. "Owned and managed by..."

Objectives

The objectives to control signage and advertising in this plan are:

- a) To permit signage and advertising which is consistent with the desired future character of Lane Cove;
- b) To permit signage and advertising which is consistent with the streetscapes of each precinct in Lane Cove;
- c) To ensure that signage and advertising is consistent with the provisions of this DCP;
- d) To encourage signage and advertising which is complementary to the use and architecture of buildings in Lane Cove;
- e) To ensure that the amenity of residential development is not adversely affected by signage and advertising in Lane Cove;
- f) To ensure all signage includes wording, symbols and logos of a suitable nature;
- g) To promote well designed and located signage which contributes to the diversity and viability of businesses and activities within Lane Cove;
- h) To ensure that all signage and advertising achieves a high level of design quality and does not detract from the visual quality of the public domain of Lane Cove.

1.3 Information to be included in DAs

When submitting a DA, the following information and requirements must be provided:

- i) completed Development Application Form from Council;
- j) Statement of Environmental Effects detailing the proposal and its impacts;
- k) fees – DA fee plus additional fee if concurrence is required from the RTA;
- l) land owners consent if the applicant is not the land owner.

The Statement of environmental effects (SEE) should provide the consent authority with adequate detailed information to determine whether consent should be granted, including:

- a) Summary Statement. – an overview of the proposal.
- b) Details of proposed sign location. - Local Government Area (LGA); zone in the relevant Local environmental Plan (LEP); permissibility and planning controls related to the specific site; location of existing buildings, structures and vegetation in proximity to the sign; surrounding land use including any trends in changing land uses.
- c) Description of the proposed sign. – Information on the size of the sign, whether it is static, illuminated or non-illuminated, and other details including:

- d) Site details. - Plans showing: site location; setbacks from affected boundaries; proximity to easements, power lines or mains; proposed modifications to existing structures, buildings or vegetation. (NB: Detailed drawings and surveys, with elevations showing height above ground level.)
- e) Colour photographs and photo-montages. – current panoramic colour photographs of the location of the proposed site are required including when viewed from ground level within the visual catchment as analysed (using the Optics of Scale Principles in Chapter 2) the site and all critical viewpoints. Photographs should show any traffic control devices located within 100m of approaches to the proposed site, and any traffic control devices that would be visible beyond the proposed site. Accurate perspective photo-montages of the proposed sign, at human eye level from the street opposite, taken from critical viewing points in advance of the sign. Where view corridors or vistas are impacted by the proposed sign a photo-montage should be included clearly demonstrating the sign's impact.
- f) Assessment of the advertising proposal in or adjacent to a transport corridor – when the Minister for Planning is the consent authority.

The SEE must outline how the proposal meets the following:

- a) any relevant provisions in SEPP 64;
- b) general land-use compatibility;
- c) assessment of the context of advertising within the site identifying the character, quality and features of an area;
- d) road safety considerations;
- e) all relevant development control plan reviewed;
- f) road safety considerations as detailed in the SEPP 64 Guidelines;
- g) a Public Benefit Test, if it is a proposal for an advertisement on a bridge or requires the concurrence of RTA under the SEPP 64 Guidelines;
- h) the requirements of RTA, if RTA concurrence is required.
- i) Justification of the proposal. – The SEE must provide a justification for erecting the advertisement in the proposed location. The justification must take into consideration the assessment criteria in Schedule 1 of SEPP 64 and any mitigation or management measures to be employed by the proponent in minimising the potential impacts of the proposed advertisement. When the Minister for Planning is the consent authority or for signs on bridges or signs requiring the concurrence of RTA, the justification of the proposal should also justify the development in terms of public benefit.

1.4 Structure of this Plan

Chapter 1 - Introduction

Chapter 2 - Background to Controls

Chapter 3 - General Signage Controls

Chapter 4 - Other Signage Considerations

N.2 Background

This section provides a background to the Lane Cove DCP - Advertising & Signage, a summary of the methodology which influences the controls contained in Chapter 3 as well as the character statements for the different village and neighbourhood centres in Lane Cove.

2.1 Urban Design Analysis

2.1.1 Maertens' Optics of Scale

To assist in the urban design analysis of existing signage in Lane Cove the methodology has included the use of Maerten's 'Optics of Scale' as described in the following extract:

Maertens' Optics of Scale (Der Optische-Maassstab) can be usefully employed today to predict effects of scale, and to enable a shared understanding of scale, during development approval processes. This is true regardless of the style or artistic expression of the architect.

The 18° or 3:1 Guideline

Building elements below an angle of 18°, or below a third as high as the distance from the observer's eye, are no longer space defining but are background elements.

The 27° or 2:1 Guideline

Building elements defining public space are legible, without being threatening, if they are as high as half the distance from the observer's eye, (i.e. not above 27°).

This is, more or less, the angle at which an observer is not required to tilt his or her head upwards to perceive the building. In other words, where the scale is not intimidating.

The 45° or 1:1 Guideline

Building elements warranting close inspection of detail are appreciated within an angle of 45° from the observer's eye, (i.e., within a height the same as the viewing distance).

Source: Robert Perry, "Optics of Scale", as published in 'Architecture Bulletin' Jan/Feb Issue, 2005.

2.1.2 Application to Lane Cove

As such the urban design analysis of signage in the Lane Cove LGA was undertaken using Maerten's 'Optics of Scale' methodology for the identification of existing appropriate and inappropriate signage. Maerten's principle relates to the optics of scale and comfortable viewing angles at which a person views structures and the built form. Refer to figure 2.1.

The most relevant viewing angles for advertising and signage are the 1:1 (45 degree) and 2:1 (27 degree) ratios, where a person views signage at ground level under the awning at the footpath and where a person views signage from the opposite side of the road.

Therefore, the location of advertising and signage is important to effectively and comfortably engage viewers. Additionally, the consistency and quality of signage has important effects on the

urban design characteristics of an area. An area with high quality urban design characteristics will be a more inviting and comfortable place for users.

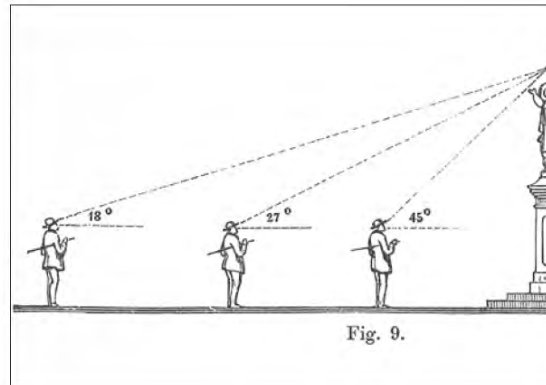


Figure 2.1: Maerten's principle viewing angles Source: Maerten, 1884, *Optics of Scale*

2.1.3 Location and Design of Signage and Advertising

All signage and advertising proposed is to be designed and located to consider the following matters:

- a) ensure the façade of a building is not cluttered with signage and that the portion of any building above an awning is generally free of signage;
- b) that signage is well designed, complementary to the architecture on which the signage is to be erected, in terms of materials, finishes, colours and ensure that architectural features of a building are not altered or obscured;
- c) consideration of existing signage on a building, land and streetscape to ensure that the new signage does not result in visual clutter or overcrowding of signage;
- d) consideration of the viewing angles of signage, visibility from the street level and nearby buildings;
- e) that proposed signage does not unduly obstruct viewing angles to existing approved signage;
- f) signage which is supported from, hung from or placed on other signs will not be supported;
- g) all proposals must detail the contents of the signage and advertisements in English, regardless of other content/languages used;
- h) where a logo is sought as part of a sign or advertisement in addition to the written component (as part of the contents), it will be necessary to demonstrate the need for the logo; and
- i) whether proposed signage is appropriate in relation to the desired future character of the precinct in which it is proposed to be located, see Section 2.2 "Character Statements".



Figure 2.2: Lane Cove Village Town Centre Plaza section with Maerten's viewing angles



Figure 2.3: Longueville Road section with Maerten's viewing angles

2.2 Character statements

The Lane Cove Local Government Area (LGA) includes a range of commercial areas with different characters. The Lane Cove Village Town Centre is the predominant village centre, with other neighbourhood centres including Blaxlands Corner, Yorks Corner, Greenwich, Lane Cove West, Burns Bay Road and Mowbray Road corner of Willandra Street. A part of St Leonards is also located within the Lane Cove LGA and this has a distinct urban character and desired future character as set out in the St Leonards Strategy.

2.2.1 Lane Cove Village Town Centre

The 'village' character and modest scale of the Centre's Period buildings 1910 - 1920's, is typically presented as two storey buildings with traditional small shop street frontages and high facades to the principal retail streets which they address. Refer to figures 2.2 and 2.3 for character studies.

"The Town Centre is characterised by intermingled one to two storey, low scale buildings, masonry construction with rendered or face brick, a general uniformity of alignment, and use

of traditional box awnings over the footpath in a variety of styles and configurations”.

(Lane Cove Town Centre Masterplan 1998)

The heritage value of the principal retail street of the Centre, Longueville Road is to be protected and enhanced.

Signage and advertising in the Lane Cove Village Town Centre should respect and enhance the village character of the Centre, while appropriately informing users of the business type and location in order to promote the economic viability of the Centre.

2.2.2 St Leonards

In 2005, Lane Cove Council in collaboration with Willoughby and North Sydney Councils commissioned the St Leonards Strategy. St Leonards is nominated as a “specialised centre” under the NSW Governments “City of Cities”, Sydney Metropolitan Strategy.

The Lane Cove Council area of the St Leonards Strategy states:

“Western Gateway: South side of Pacific Highway, west of railway line. A primary business precinct with shop and the possibility of hotels. Mixed use is also a possibility. In particular, this precinct will provide for health- related organisations capitalising on proximity to hospitals and general offices capitalising on the high profile locations. p. 30”

St Leonard's is an area containing a major hospital, research and business activities that perform vital economic and employment roles across the metropolitan area. The way they interact with the rest of the city is complex. Therefore growth and changes in and around them requires signage and advertising in the St Leonards centre that reflects the changing character of the centre, with high quality and consistent signage for new buildings.

New signage for the existing low-rise buildings is to reduce the visual clutter and create visually consistent signage in relation to size, type and location. Refer to Figures 2.4 and 2.5.

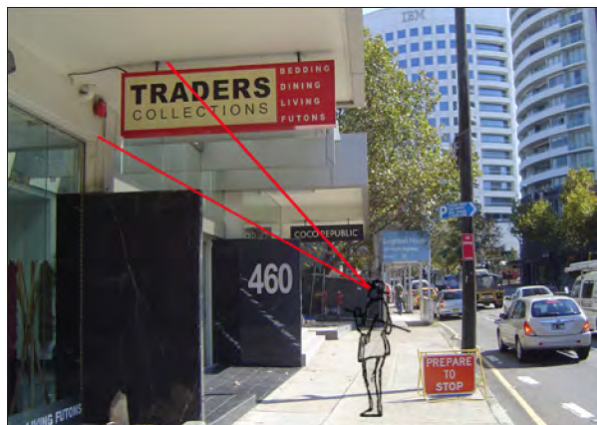


Figure 2.4: St Leonards section (recent mixed use development) with Maerten's viewing angles



Figure 2.5: St Leonards section (older retail strip development) with Maerten's viewing angles



Figure 2.6: Lane Cove West section with Maerten's viewing angles



Figure 2.7: Blaxlands Corner section with Maerten's viewing angles

2.2.3 Neighbourhood centres (Blaxlands Corner, Yorks Corner, Greenwich Village, Lane Cove West, Burns Bay Road and Mowbray Road corner of Willandra Street)

The neighbourhood centres in the Lane Cove LGA, including Blaxlands Corner, Yorks Corner, Greenwich, Lane Cove West, Burns Bay Road, and Mowbray Road corner of Willandra Street, are characteristic of retail development predominantly of one to two storeys, generally with awnings. These areas are of a smaller scale 'village' character than the Lane Cove Village Town Centre as is demonstrated by the scale of the buildings.

Advertising and signage in the neighbourhood centres should be sympathetic to the nearby residential uses and not adversely impact amenity through size or illumination. Signage should be concentrated mainly at ground floor level, with minimal signage above awning level.

2.2.4 Innes Road

Innes Road is a very small and understated neighbourhood commercial area and includes low-key buildings that blend into the surrounding residential area. Signage at Innes Road should respect the neighbourhood character of the area and involve small scale and unobtrusive building and business identification signs.

2.2.5 Lane Cove West Business Park

Lane Cove West Business Park is characterised by low-rise industrial development with warehousing and light manufacturing capabilities. More recently, modern 'industrial park' developments have been built, with multiple tenancies and a clean high-tech character.

Signage in the Lane Cove West Business Park should be consistent with the evolving business park style and scale of development and should be consistent with the scale of the development to which it relates. Minimal signage is necessary for business parks, as signs serve as directional assistance and convey the location of tenancies for users with direct dealings with the relevant business.

2.3 Unauthorised signage

Signage that has been constructed or erected without the Council approval is unauthorised development and is not permitted. Before changing the content of a sign, the owner or tenant must be sure that the original sign has approval. For example, an approved business identification sign (first party signage) may not be replaced by second or third party advertising without gaining Council consent in accordance with this DCP or the relevant controls.

Council may serve an order for an unauthorised sign to be removed.

2.4 Prohibited signage

All signage and advertising of a temporary nature within a road or on a road reserve is prohibited, such as signage attached to an electricity power pole and parked advertising e.g. scooters or trucks towing advertisement.

All signage and advertising within residential zoned land is prohibited except home business signs. Where signage or an advertisement is proposed on a building or land which is not zoned business or industrial under the Lane Cove Council Local Environmental Plan (LEP), it will be necessary to demonstrate consistency with the aims, objectives, merit requirements and general signage controls of this DCP.

Objectives

The objectives of this section are:

1. To ensure the safety of residents and users of Lane Cove.
2. To minimise visual clutter and the unnecessary proliferation of signage.
3. To maintain the village character of Lane Cove and the commercial character of St Leonards by promoting appropriate, high quality and relevant signage.
4. To prohibit advertising and signage in relation to a brothel and advertising/signage cannot indicate the nature of activities.

Controls

Prohibited signage in the Lane Cove LGA is as follows:

- a) A-frame signs/portable signs. A-frame signs and portable signs such as signs propped against the façade are prohibited on Council and private property.
- b) Real estate agent directional signage in road reserves;
- c) Revolving signs e.g. public safety/access;
- d) Parked third party advertising e.g. truck or trailer advertisements;
- e) Roof signage in neighbourhood zones;
- f) Flag signs. This includes pennant flags attached to the façade as well as flag signs on poles in the ground.
- g) Canvas signs hung from/on the façade, other signs and parts of the building. Temporary canvas signs may be permissible with Council consent. Please see "Section 2.5 – Temporary Signage" for more detail.

- h) Third party advertising is not allowed within the Lane Cove LGA except with special permission from Council.
- i) Signage which projects lights or images onto the footpath.
- j) Flashing signage of a permanent nature.
- k) Advertising signage, unless otherwise specified in this DCP.

Refer to Figures 2.8 and 2.9.



Figure 2.8: Prohibited flag signage



Figure 2.9: Prohibited A-Frame and canvas banner signage



Figure 2.10: Temporary signage

2.5 Temporary signage

Objectives

The objectives of this section are:

- 1 To retain and enhance the village character in the Lane Cove Village Town Centre,
- 2 To maintain consistency with the high quality of new development in St Leonards.
- 3 To prevent visual clutter and tackiness.
- 4 To ensure temporary signage does not adversely affect public safety or access to public land and roads.

Controls

Temporary signage is permitted on a shopfront or in a shop window and is permissible when it is:

- a) no greater than 10% of a window frontage;
- b) consistent with the provisions of 2.5:1 Real Estate Signage;
- c) displayed for no greater than 1 week each month;
- d) may be displayed no greater than 4 times in a calendar year; and
- e) temporary banners advertising an event may be displayed 3 weeks prior to the event but must be removed within 48 hours following the event.

2.5.1 Real estate signage

Temporary real estate signage is permissible in all zones.

Temporary signage must be removed within 10 days of the sale or letting of the property.

Applications are not required for the following:

- f) Temporary signage for the sale or letting of residential premises by private treaty is not to exceed 0.915m H x 1.22m W.

- g) Temporary signage for the sale of residential premises by auction is not to exceed 1.22m H x 1.83m W, with returns not exceeding 180mm. Temporary auction signage is to be displayed no earlier than 42 days prior to the auction.
- h) Temporary signage for the sale or letting of commercial or industrial premises is not to exceed 1.83m H x 2.44m L.

Real estate signs must be located on the property or tenancy which is for lease or sale with one sign per frontage of the property or site permitted.

Applications for the erection of temporary real estate signage in excess of the numerical controls listed may be submitted to Council where the development is of a large scale and the signage is proportionate to the property to which it relates. Assessment of temporary signage of this nature is at Council discretion.

2.6 Signage on heritage items or in conservation areas

Objectives

The objectives of this section are:

- 1 To retain the heritage significance of items and areas within Lane Cove.
- 2 To ensure high quality and consistency of signage on heritage items and areas.

Controls

Signage on heritage items or in conservation areas may be limited in what is permitted in comparison to nearby buildings. Signage should be sympathetic to the architectural design of the heritage item or conservation area and should be of a scale which is appropriate for the articulation and modulation of the building on which it is located.

2.7 Advertising structures

Objectives

The objectives of this section are:

1. To minimise visual clutter and the aesthetic appeal of Lane Cove.
2. To maintain the village atmosphere of the Lane Cove Village Town Centre and the other villages.

Controls

With the exception of bus shelters, “Advertising Structure” means a structure used or to be used principally for the display of an advertisement.

Third Party advertising structures will only be considered in the commercial core of St Leonards.

Advertising Structures are generally not permitted within the Lane Cove LGA. General advertising structures are not permitted in residential areas.

2.8 Other signage

Signage required by other legislation and Australian Standards for safety or public benefit reasons is permissible and is to be in accordance with the relevant legislation, standards or guidelines.

2.8.1 Advertising on bus shelters & telephone booths

Third party advertising on bus shelters and telephone booths may be permitted and is subject to a merit assessment by Council in relation to its location and potential impacts on amenity. This type of signage must be contained wholly within the structure on which it is located.

2.8.2 Direction and information signs

Council will consider applications for signage of a directional and informative nature, such as pedestrian access and general directional signs. The signage should be appropriately located and integrated with the architectural design of the building on which it is located. The assessment of these signs is at Council's discretion.



Figure 2.11: Undesired signage - inconsistent and cluttered



Figure 2.12: Preferred signage - consistent and orderly

2.9 Merit assessment

Signage should be integrated into the architectural design of the building on which it is located and have regard to Maertens principles (see section 2.1). Where the controls of this DCP do not allow for effective and appropriate integration of signage into a building facade and a building's design elements, the applicant must provide justification and Council may assess a signage application on its merits.

The scale of the articulation and modulation of the building will be considered and proposed signage should reflect this where a departure from this DCP is proposed.

Some applications may need to be assessed differently due to built form and site characteristics which are not covered in this DCP. Where the applicant can clearly demonstrate the need for alternative signage and compliance with relevant objectives, Council may assess the application on merit.

Variations

Where an applicant can demonstrate that horizontal signage is more appropriate than vertical signage or vice versa, Council may assess a signage application on merit.

Where a departure from the maximum size of signage permitted by this DCP is sought, the applicant must demonstrate that the architectural design and character of the building is appropriate for the scale of signage proposed.

Signage should be consistent with the location of preferred signage shown at figure 2.12.

Whilst the guidelines in this DCP form the basis of the Council's decision-making in relation to advertising and signage, the Council reserves the right to determine applications on their individual merits, constraints and characteristics of the site and development.

Signage should be consistent with the appearance, location and scale of signage in the area. Additionally, signage should be consistent with the desired character of the precinct.

Where new signage is proposed and the site on which the proposed signage is to be erected will result in additional, inconsistent and unattractive visual clutter (refer to figure 2.11) the proposal may not be supported by Council.

2.10 Corner sites

Where a site is located on a corner and is a gateway site to an area, different types of above awning signage may be permitted to appropriately identify the gateway location of the building. Above awning signage for gateway buildings must only be for first party signage and must be integrated into the building facade. Signage which adversely impacts on residential amenity is not permitted.

N.3 General Signage Controls

Introduction

The following chapter relates to the various signage types shown in figure 3.1 below. General signage controls are contained in the section, with specific controls nominated for each precinct also included. It should be noted that generally, signage should be contained to:

- One under awning sign for property street frontage;
- One above awning sign for property street frontage;
- One top hamper sign per property street frontage;
- One awning sign per property street frontage; and
- One pylon/plinth sign per property street frontage.

Where multiple tenancies are located within a building, a co-ordinated signage strategy should be prepared and submitted with a DA.



Figure 3.1 Signage Types


3.1 Window Signage


Window signage is useful to efficiently communicate the location and type of business within a site and is viewed by users at the 1:1 **Maerten's** viewing angle by users on the footpath next to the business. However, overuse of window signage can lead to visual clutter and visual pollution. Excessive advertising can fail to achieve the original intended purpose of the signage, which is to gain the attention of users and promote the business, due to the vast amount of advertising and signage a user must view.

Objectives

The objectives of this section are:

1. To encourage relevant and appropriate signage which contributes to the streetscape.
2. To minimise visual clutter and maximise the effectiveness of signs.
3. To allow users to see into shops and businesses
4. To permit high quality window signage.

Signage Type/Location	Controls
<p>3.1.1 Window Signage (Lane Cove Village Town Centre, Blaxlands Corner, Yorks Corner, Greenwich Village, Burns Bay Road & Mowbray Road corner of Willandra)</p>  <p><i>Figure 3.2 : Window coverage of no more than 25%</i></p>	<p>Window signage is to have a maximum coverage of 25% of the area of the shop window fronting a public area, or visible from a public area. Refer to figure 3.2.</p> <p>Window signage is to be primarily for the purposes of business identification signage and may also include the hours of operation of the business and a minimum of second party signage. As such, the business identification sign must form the majority of the window signage. Third party signage is not appropriate.</p> <p>Sign structures which are located behind the window and are not directly affixed to the window are to be included for the purposes of calculating the window coverage if the structure's predominant purpose is for an advertising display to be viewed through the shopfront.</p> <p>Goods sold within the premises which are displayed in the shopfront do not count towards the window coverage calculation.</p>

Signage Type/Location	Controls
<p>3.1.2 Window Signage (St Leonards)</p>	<p>Where the ground level use is not a street activating use such as a retail shop or refreshment room, window signage is not permitted except for a building identification sign. Signage in the form of a directional tenancy board is encouraged to contribute to visual consistency and orderly signage in St Leonards.</p>
<p>3.1.3 Window Signage (Innes Rd)</p>  <p><i>Figure 3.3 : Window signage limited to one building identification sign on Innes Road</i></p>	<p>Window signage at Innes Road is limited to one building identification sign and one business identification sign per tenancy. The size of these signs is to be limited to respect the residential nature of the area. Refer to figure 3.3.</p>
<p>3.1.4 Window Signage (Lane Cove West Business Park)</p>	<p>Window signage is generally not permitted in the Lane Cove West Business Park. Business identification signage in the Lane Cove West Business Park should be in accordance with the relevant controls in this DCP.</p>

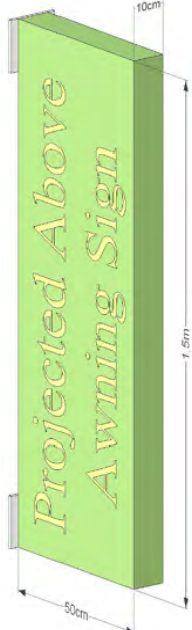

3.2 Above Awning Signage

Above awning signage is effective in relating the location of a business type for users on the opposite side of the street, or further up the road, from the business and is viewed at the 2:1 angle according to Maerten's principle. Disorganised and random above awning signage can create visual clutter and negatively impacts on the streetscape.

Objectives

The objectives of this section are:

- 1 To permit consistent and orderly above awning signage which contributes to the streetscape.
- 2 To minimise visual clutter.
- 3 To permit high quality above awning signage.
- 4 To complement building form.

Signage Type/Location	Controls
<p>3.2.1 Above Awning Signage (Lane Cove Village Town Centre)</p>  <p>Figure 3.4 : Projected above awning sign details</p>  <p>Figure 3.5 : Projected wall signs</p>	<p>One above awning sign per building may be located at first floor level where the building is more than one level and the sign relates directly to the approved business within the building. Where a building has more than one frontage, an above awning sign may be permitted on each.</p> <p>Above awning signage is to be in the form of vertical projecting wall signs or flush wall signage (refer to 3.7.2). Maximum dimension of above awning signage are 1.5m H x 0.5m W x 0.10m D. Refer to figure 3.4.</p> <p>The bottom of the projected wall sign is to be 1m from the top of the awning level to maintain consistency. Refer to figure 3.4.</p> <p>Where shop top housing is located, above awning illuminated signage is not appropriate. Above awning signage on the opposite side of the road from shop top housing or residential premises is not to be illuminated after 10pm.</p> <p>Should shop top housing be built opposite existing illuminated signage, illumination would be limited to 10pm.</p> <p>No other above awning signage is permitted.</p>

Signage Type/Location	Controls
<p>3.2.2 Above Awning Signage (St Leonards)</p>	<p>Roof signs are permitted in St Leonards. Roof signage must not extend past the parapet of the building and are to be an appropriate scale for the building on which it is located.</p> <p>Above awning signage is not permitted on mixed use buildings. Where there is no awning, signage above ground floor level is not permitted on mixed use buildings, 1st party signage is permitted on commercial buildings above the awning for branding purposes. E.g. Clemenger.</p>
<p>3.2.3 Above Awning Signage (Other Neighbourhood Centres)</p>	<p>Above awning signage is not permitted in the neighbourhood centres, with the exception of Blaxlands Corner, where one above awning sign per building may be located above awning level where the building is more than one level and the sign relates directly to the business approved within the building.</p> <p>Above awning signage at Blaxlands Corner is to be in the form of flush wall signs, with a maximum dimension of 0.5m x 2.5m.</p> <p>No other above awning signage is appropriate.</p>
<p>3.2.4 Above Awning Signage (Lane Cove West Business Park)</p>	<p>Industrial buildings generally do not incorporate awnings into their design. Signage above ground floor level is appropriate for industrial zones where it is business identification signage, with a maximum of one sign per building permitted above ground floor level.</p>


3.3 Below Awning Signage

Signage below awning level engages users at the 1:1 viewing angle according to Maerten's principle and can be useful for conveying information about a business. Where a window frontage is not available or is of limited size, alternative signs may be appropriate for first and second party signage.

Objectives

The objectives of this section are:

- 1 To encourage relevant and appropriate below awning signage.
- 2 To encourage signage which effectively engages, rather than overwhelming users.
- 3 To permit high quality below awning signage.

Signage Type/Location	Controls
<p>3.3.1 Under awning signs (all locations)</p>  <p>Figure 3.6: Under awning signage</p>	<p>Under awning signs are permitted in all areas where there are awnings, except in St Leonards, where the ground floor use is not a street activating use (e.g. a retail or cafe use).</p> <p>Under awning signage is to be located at a consistent height from the footpath and of a similar size to the predominant type of under awning sign in the area which it is located. The sign is to be located so as not to affect pedestrian safety or road users.</p> <p>One under awning sign is permitted per building. Where a building has more than one frontage, an under awning sign may be permitted at each, located approximately in the middle of the frontage. Under awning signs are to be a minimum of 3m apart to ensure that each sign is visible for pedestrians on the footpath. Signage is not to extend beyond the edge of the awning.</p> <p>The maximum dimensions of an under awning sign are to be 2.5m W x 0.4m H x 0.15m D.</p> <p>Where there is no awning, a projected wall sign of a similar size is permitted at a height of a typical awning (minimum of 2.7m from the ground below).</p>
<p>3.3.2 Temporary Content Signs (all locations)</p>	<p>Tenancies may apply to Council for flush wall permanent signs e.g. “blackboards” which allow for temporary content such as weekly specials and deals.</p> <p>Temporary content signs are permitted to have maximum dimensions of 900 x 620mm.</p> <p>Approval for this type of signage is at Council discretion and the purpose and need for it must be demonstrated to Council.</p> <p>This signage may be movable, e.g. to display specials to diners at a restaurant, but must not be located on the footpath at any time.</p>

3.3.3 Top hamper signs (all locations)



Figure 3.7: Top hamper signage

Top hamper signs are appropriate in all business and industrial zones and must incorporate predominantly first party signage. A minor amount of second party content which is of a secondary nature is permissible. One top hamper sign is permitted per property street frontage with maximum dimensions to not extend beyond any wall/boundary and below top of door/ window head.

Flush wall signs (all locations)



Figure 3.8 : Flush Wall Signage

Where a tenancy has a minimum of two frontages first party, flush wall signs are permitted at a rate of one per frontage, where flush wall signage is not located on the primary frontage.

A flush wall sign is to be a maximum of 5% of the tenancy frontage on which it is located on. Flush wall signs are to be located a minimum of 1m from ground level.


3.4 Awning Signage (All Locations)

Awning signage is effective in relating the location of a business type for users on the opposite side of the street, or further up the road, from the business and is viewed at the 2:1 ratio according to Maerten's principle.

Objectives

The objectives of this section are:

1. To encourage consistent and orderly awning signage which contributes to the streetscape.
2. To appropriately identify businesses.
3. To permit high quality awning signage.


Signage Type/Location	Controls
 <p>Figure 3.9 : Awning signage</p>	<p>Controls</p> <p>Awning signage is to be contained entirely within the dimensions of the awning and tenancy on which it is located and a maximum of 500mm high.</p> <p>The content of awning signage is to be first party signage only.</p>



3.5 Pylon, Plinth and Pole Signage


Objectives


The objectives of this section are:

1. To ensure tenancies removed from the street can sufficiently identify the location of their business.
2. To permit signage that reflects the size of the building to which it relates.
3. To allow high quality pylon/plinth signage.
4. To allow uninterrupted pedestrian movement along footpaths.
5. To enhance and contribute to the amenity of streetscape

Signage Type/Location	Controls
<p>3.5.1 General</p>	<p>Pylon, plinth and pole signage is to be in accordance with the relevant Australian Standards and must be structurally sound and able to withstand wind.</p>
<p>3.5.2 Lane Cove Village Town Centre</p>  <p><i>Figure 3.10 : Tenancy pylon & pole sign details</i></p>	<p>Pylon signage is generally not appropriate in the Lane Cove Village Town Centre. An arcade which is setback from the street may be permitted to have a tenancy direction pylon sign that identifies the businesses located within the arcade.</p> <p>The maximum size of tenancy direction signage is 2m H x 0.8m W x 0.1m D. Refer to figure 3.10.</p> <p>Pole signage is suitable in the Lane Cove Village Town Centre, having a maximum height of 2m. The signage area having maximum dimensions of 0.4m x 0.6m.</p>

Signage Type/Location	Controls
<p>3.5.3 St Leonards</p>  <p><i>Figure 3.11 : Low slung plinth signage</i></p>  <p><i>Figure 3.12 : Pylon signage</i></p>	<p>Where a building is removed from the street, a first party signage plinth or pylon sign is appropriate.</p> <p>The maximum height of the pylon sign is 4m, however a low slung pylon sign of pedestrian scale is preferred. The preferred type of pylon sign is shown in figure 3.11.</p>

Signage Type/Location	Controls
<p>3.5.4 Neighbourhood centres</p>  <p><i>Figure 3.13 : Tenancy pylon & pole sign details</i></p>	<p>Where an arcade is removed from the street and there are multiple tenancies, a pylon sign may be appropriate.</p> <p>The maximum size of a pylon sign in the village centres is 2m H x 0.8m W x 0.1m D Refer to figure 3.13.</p>
<p>3.5.5 Innes Road</p>	<p>Pylon/plinth signs are not permitted at Innes Road.</p>

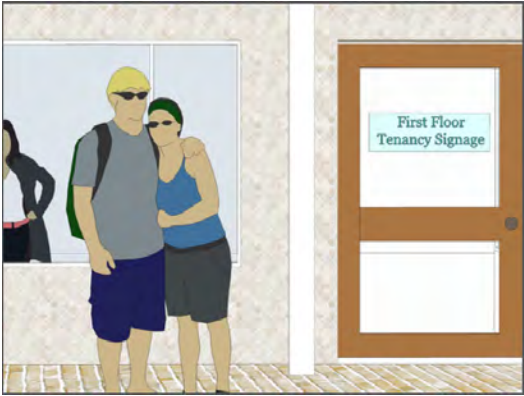
Signage Type/Location	Controls
<p>3.5.6 Lane Cove West Business Park</p>  <p><i>Figure 3.14 : Pylon signage maximum dimensions</i></p>	<p>Pylon/plinth signs are a useful form of business and building identification in business parks. One pylon/plinth signs per tenancy is permitted in the Lane Cove West Business Park.</p> <p>It is encouraged that the pylon sign reflect the scale of the building to which it relates and therefore the maximum permitted height is 8m.</p>
<p>3.5.7 Service station signage</p>	<p>Service stations may seek permission from Council for pylon signage which is a maximum height of 8m. The pylon sign may include first party signage and second party signage such as petrol prices. No third party advertising is permitted.</p>

3.6 Signage for first floor tenancies (all locations)

Objectives

The objectives of this section are:

1. To ensure first floor tenancies are able to suitably identify the type and location of the business.
2. To minimise visual clutter.
3. To encourage high quality signage for first floor tenancies.

Signage Type/Location	Controls
 <p><i>Figure 3.15 : First Floor Tenancy Signage</i></p>	<p>Where a tenancy is located on the first floor and has an access doorway at ground floor level, first party signage and signage relating to the services provided by the business is permitted at ground floor level.</p> <p>A high degree of coverage is not appropriate and where possible signage should be in the form of lettering, so the accessway behind can be seen.</p> <p>A first floor tenancy is permitted to have above awning signage in accordance with this DCP. Where there is a first floor tenancy, the ground floor tenant is not permitted to have above awning signage.</p>

3.7 Laneway signage (all locations)

Objectives

The objectives of this section are:

1. To reactivate laneways in Lane Cove LGA.
2. To create safe, vibrant and useable laneways.
3. To encourage high quality laneway signage.
4. To protect residential/commercial interface.

Signage Type/Location	Controls
3.7.1 General	Where a tenancy has a rear lane frontage which is accessible by pedestrians, some forms of signage may be appropriate.
3.7.2 Flush wall signage at first floor level	One flush wall sign per tenancy is permitted at first floor level as alternative to projected signage, refer to 3.2.1. Maximum dimensions of flush wall signage at first floor level are 0.5 H x 1.5 W The maximum dimensions of a laneway flush wall sign at ground floor level are 0.5m H x 2.5m W
3.7.3 Top hamper signs	Where a tenancy has rear lane access for pedestrians, a top hamper sign is permitted above the access doorway where appropriate. The maximum dimensions of a laneway top hamper sign are 0.5m h x 4.5m W.
3.7.4 Other signage	No other signage is permitted on rear laneways.


3.8 Outdoor Dining Signage

Cafés and restaurants with approval from Council for outdoor dining often incorporate additional signage on umbrellas and on barrier fences used to separate outdoor seating from the rest of the public domain.

Objectives

The objectives of this section are:

1. To encourage high quality signage which relates to the tenancy.
2. To provide adequate separation between uses and areas.


Signage Type/Location	Controls
<p>3.8.1 General</p>  <p><i>Figure 3.16 : Cafe signage</i></p>	<p>Barriers and umbrellas</p> <p>Signage is to be integrated onto the canvas or material of the barrier or umbrella.</p> <p>First and second part signage is permitted.</p> <p>Third party signage is not appropriate.</p>


3.9 Illuminated Signage

Objectives

The objectives of this section are:

1. To maintain the village character of Lane Cove through high quality and appropriate signage.
2. To preserve the urban character of St Leonards through high quality and appropriate signage.
3. To encourage crime prevention and public safety.
4. To preserve and enhance residential amenity.
5. To preserve existing landmark signs.

Signage Type/Location						Controls																																															
<p>3.9.1 General</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6" style="background-color: #e6f2e6;">Maximum allowable daytime luminance of illuminated advertisements</th> </tr> <tr> <th style="background-color: #e6f2e6;">Illuminated Area (sq.m)</th> <th style="background-color: #e6f2e6;">Zone 1</th> <th style="background-color: #e6f2e6;">Zone 2 (cd/sq m)</th> <th style="background-color: #e6f2e6;">Zone 3 (cd/sq m)</th> <th style="background-color: #e6f2e6;">Zone 4 (cd/sq m)</th> <th style="background-color: #e6f2e6;">Zone 5</th> </tr> </thead> <tbody> <tr> <td>up to 0.5</td> <td>no limit</td> <td>2900</td> <td>2000</td> <td>1000</td> <td>no limit</td> </tr> <tr> <td>0.5 to 2.0</td> <td></td> <td>2300</td> <td>1600</td> <td>800</td> <td></td> </tr> <tr> <td>2.0 to 5.0</td> <td></td> <td>2000</td> <td>1200</td> <td>600</td> <td></td> </tr> <tr> <td>5.0 to 10.0</td> <td></td> <td>1500</td> <td>1000</td> <td>600</td> <td></td> </tr> <tr> <td>over 10.0</td> <td></td> <td>1200</td> <td>800</td> <td>400</td> <td></td> </tr> </tbody> </table> <p>Illuminance means the objective brightness of a surface as measured by a photometer, expressed in candelas per square meter.</p> <p>Zone 1 covers areas with generally very high off-street ambient lighting, e.g. display centres similar to Kings Cross, central city locations.</p> <p>Zone 2 covers areas with generally high off street ambient lighting eg. some major shopping/commercial centres with a significant number of off street illuminated advertising devices and lights.</p> <p>Zone 3 covers areas with generally medium off-street ambient lighting e.g. small to medium shopping centres.</p> <p>Zone 4 covers areas with generally low levels of off-street ambient lighting e.g. most rural areas, many residential areas.</p> <p>Zone 5 covers areas with underground railway stations and area fully contained within station building which are visible only from within the rail corridor.</p> <p style="text-align: center;"><i>Table 1: Luminance rules</i></p>  <p><i>Figure 3.17 : Illuminated under awning signage</i></p>						Maximum allowable daytime luminance of illuminated advertisements						Illuminated Area (sq.m)	Zone 1	Zone 2 (cd/sq m)	Zone 3 (cd/sq m)	Zone 4 (cd/sq m)	Zone 5	up to 0.5	no limit	2900	2000	1000	no limit	0.5 to 2.0		2300	1600	800		2.0 to 5.0		2000	1200	600		5.0 to 10.0		1500	1000	600		over 10.0		1200	800	400		<p>An illuminated sign refers to any sign illuminated by an artificial source. Illuminated signs include variable message signs, video and/or animated signs and any conventional billboard illuminated by fluorescent and/or incandescent bulbs.</p> <p>In addition to section 2 of this DCP, the following assessment criteria are used to ensure that illumination and reflectance qualities of signs do not cause a road safety hazard.</p> <ol style="list-style-type: none"> a. Advertisements must comply with the following luminance rules shown in the Table 1. b. The maximum night-time luminance of signage must be one-quarter of the above prescribed values. c. For night time use, the sign (whether internally illuminated or lit from its exterior) must not cast a shadow on areas that were previously lit and that have a special lighting requirement, for example, pedestrian crossings. d. The light sources for illuminated signs must focus solely on the sign and: <ol style="list-style-type: none"> (i) be shielded so that glare does not extend beyond the sign; and, (ii) with the exception of neon signs, have no light source visible to passing motorists with a light output greater than that of a 65W incandescent bulb. e. The level of reflectance of an advertisement, and its content, is not to exceed the 'Minimum coefficients of Luminous intensity per unit area for Class 2A Material', as set out in Australian Standard AS/NZS 1906.1:1993. Flashing illuminated advertisements will not be approved. <p>Illuminated signage can be effective in increasing public safety in commercial areas by providing well lit areas at ground level. Illuminated signage can also add to a centre's vitality and provide a distinct urban character. Illuminated signage can also adversely impact residential properties near the interface or in mixed use areas. Where</p>					
Maximum allowable daytime luminance of illuminated advertisements																																																					
Illuminated Area (sq.m)	Zone 1	Zone 2 (cd/sq m)	Zone 3 (cd/sq m)	Zone 4 (cd/sq m)	Zone 5																																																
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Signage Type/Location	Controls
 <p><i>Figure 3.18 : Illuminated roof signage</i></p>	<p>residential amenity is affected by illuminated signage, Council may limit the hours of operation to no later than 10pm. Illuminated signage should use energy efficient lighting.</p>

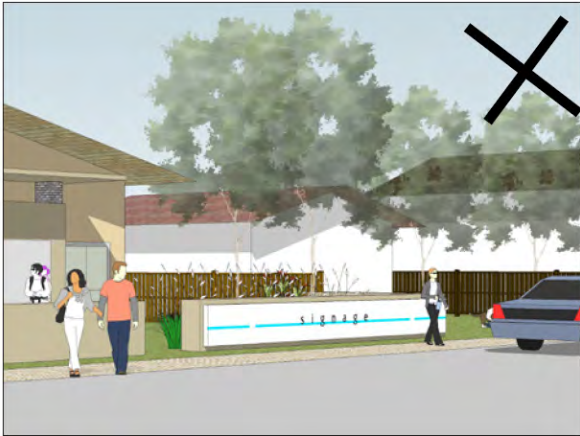

Signage Type/Location	Controls
<p>3.9.2 Lane Cove Village Town Centre</p>	<p>To enhance the village centre character of the Lane Cove Centre and safety of users, below awning signage in the Centre is permitted to be illuminated without restriction on hours of operation. In certain areas, a time limit of 11pm (only for above awning) may be enforced by Council where amenity of residents is affected. Where the amenity of existing residential properties may be affected by light spillage, illuminated signage is not appropriate.</p> <p>Illuminated signage located above awning is appropriate. Where shop-top housing is located or where signage is opposite shop-top housing, illuminated signage above awning level is not permitted after 10pm.</p>
<p>3.9.3 St Leonards</p>	<p>To enhance the safety of users, below awning signage in St Leonards commercial core is permitted to be illuminated without restriction on hours of operation. Where signage is directly adjacent or opposite the residential interface, a limit of 11pm may be enforced by Council where amenity of residents is affected.</p> <p>At roof level, illuminated signage is not appropriate unless it replaces existing approved illuminated signage. Where landmark illuminated signage currently exists along the Pacific highway at roof level, there is no restriction on hours of operation.</p>
<p>3.9.4 Other Village Centres</p>	<p>Illuminated signage is only appropriate below awning level and is not permitted after 10pm.</p>
<p>3.9.5 Innes Road</p>	<p>Illuminated signage is not permitted</p>
<p>3.9.6 Lane Cove West Business Park</p>	<p>Due to the nature and hours of operation of industrial areas, illuminated signage is generally not effective. Where there is no residential interface or where the signage is not visible from a residential area, illuminated signage may be permitted.</p>

3.10 Signage in residential zones

Objectives

The objectives of this section are:

1. To maintain residential amenity and the aesthetic quality of Lane Cove.
2. To ensure business signs in residential areas are of an appropriate scale and nature for the surrounding residential uses.
3. To allow businesses in residential areas to show their location.
4. To ensure business signage in residential areas is discreet and consistent with the Lane Cove Local Environmental Plan 2009.
5. To permit display of community information by not for profit organizations such as schools, churches and community groups

Signage Type/Location	Controls
 <p><i>Figure 3.19 : Undesired signage in residential areas</i></p>	<p>Signage in residential zones is to respect the residential nature of the area and be of a scale which does not detract from the streetscape or the property on which the sign is located.</p> <p>Illuminated signage is not permitted in residential areas.</p> <p>Medium and high density residential apartments may include a building identification sign at ground floor level which is integrated into the architectural design of the building and is of an appropriate size and scale for a residential area.</p> <p>Refer to figure 3.20 for the preferred scale and nature of signage in residential areas.</p>
 <p><i>Figure 3.20 : Preferred signage in residential areas</i></p>	

Part O

Stormwater Management



- O.1 Introduction
- O.2 Submission Requirements
- O.3 Property Drainage Systems
- O.4 Disposal of Stormwater
- O.5 Stormwater Disposal Systems
- O.6 Rain Water Tanks
- O.7 On-site Stormwater Detention
- O.8 Construction Activities
- O.9 Hydrology & Hydraulics
- O.10 Stormwater Inundation
- O.11 Silt & Sediment Control
- O.12 Drainage Easements
- O.13 Restrictions & Covenants

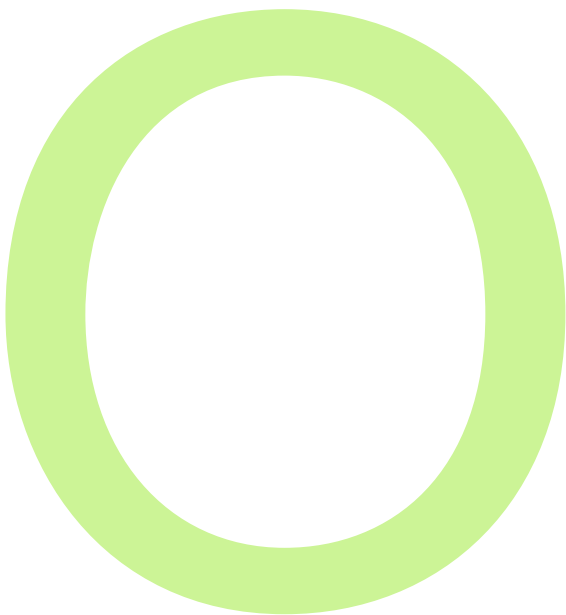


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O.1 Introduction

This DCP outlines the basic requirements for the inclusion of drainage plans for all development on private and public land within the Lane Cove Council Municipality.

The aims of this DCP are to ensure public health and safety is maintained and water quality within the Lane Cove area is improved. By all developments incorporating stormwater drainage facilities to collect and convey stormwater runoff to Council's system, avoiding any adverse impact on the surrounding environment.

This will be achieved by:

- a) Providing advice to applicants in regard to water management
- b) Increasing Ecologically Sustainable Development and catchment management
- c) Providing better site water management as a consequence of development
- d) Ensuring adequate detention/retention of stormwater is provided either on site or within an approved water management scheme
- e) Integrating quality treatment wherever possible
- f) Setting out minimum requirements to be provided with any application for development
- g) Ensuring no net increase (and where reasonable a reduction) in the frequency and adversity of flooding arising directly from development within Lane Cove.

O.2 Submissions Requirements

A drainage plan must accompany a Development Application in accordance with the requirements of this DCP. Detailed drainage plans and supporting calculations of the proposed property drainage system must be certified by the Principal Certifying Authority prior to any Construction Certificate being issued. Any overland flow issues must be addressed at the Development Application stage.

A suitably qualified engineer must prepare the design and upon completion certify that the works have been constructed in accordance with the approved drainage plans.

Council will consider the merits of any alternative innovative water management techniques to achieve the DCP's objectives.

Stormwater drainage from all developments shall operate under gravity. It is the responsibility of the Applicant to demonstrate entitlement to connect to an existing or proposed interallotment drainage system and that all necessary easements have been created.

A drainage plan must show the proposed method of disposal of stormwater from the development, complying with the following requirements:

- a) The location of the connection to Council's drainage system is to be shown on the drainage plan.
- b) Where it is proposed to drain the development against the natural grade of the land, the application is to be accompanied by a report and a drainage study.
- c) Where the property drains away from the street the stormwater from the property should drain through an interallotment drainage system. If no such system exists and an easement

needs to be created. The property owner is required to approach the down stream property owners for the acquisition of a drainage easement.

- d) Where stormwater is proposed to be discharged into an interallotment drainage system, the location of the existing interallotment drainage easement is to be shown on the plan and evidence is to be provided proving that the property benefits from the easement.
- e) Single dwelling-houses and duplexes on properties that do not have access to a suitable interallotment or Council drainage pipeline, may under certain conditions be permitted to discharge stormwater runoff into an on-site absorption system.
- f) Pumps may only be used to drain seepage from underground basement areas.

2.1 Detailed Stormwater Plans

The plans for the development site and any drainage lines required external to the development site shall be prepared at a 1:100 scale, and include all the following items:

- a) The location of all buildings, driveways, and impervious surfaces.
- b) The location, trunk diameter and canopy size (drip line) of any trees on the site or adjoining properties which may be affected by the development.
- c) The location of all downpipes, surface channels, kerbs, pits, pipes, and sub-surface drainage.
- d) Location of any watercourse or bushland passing through or adjacent to the property.
- e) The size and class of all pipes and the dimensions, grades, invert levels and finished surface levels of all pits and pipes.
- f) Finished levels and cross-sectional details of any catch drains or swales.
- g) Finished floor/ground levels of buildings, garages, paved areas and unpaved areas.
- h) Contours at 0.5m intervals of the existing ground levels to AHD.
- i) Any overland flowpaths which drain through the property.
- j) The location, size and depth of easements or drainage pipelines.

O.3 Property Drainage Systems

The drainage system shall be designed to include the following:

- a) Water reuse where practical
- b) Suitable sub-surface drainage to protect structures, mitigate long term surface water ponding, and prevent concentrating flows upon adjacent properties
- c) Means to collect and convey surface water runoff that will prevent water damaging any structures, erosion, adverse impacts on adjoining properties and maintain public safety.
- d) A system of detaining stormwater where required by this DCP.
- e) Overland flowpaths to provide protection of structures on both the subject property and adjoining.
- f) Suitable means to ensure that the quality of stormwater leaving the site shall have a minimal impact upon the receiving waters.

3.1 Design Average Recurrence Intervals

Drainage systems shall be designed to provide both minor and major flow conveyance systems as detailed in Australian Rainfall and Runoff (AR&R).

Element of Stormwater System	Design ARI
All pipes and associated components for:	
single occupancy developments	20 Year
Residential flat buildings, commercial and industrial developments	50 Year
Overland flowpaths	100 Year

Longer recurrence interval design storms need to be used in instances where the level of danger to persons or risk of significant property damage warrants such an approach. This would include most development adjacent to major watercourses (flow > 20m³/s for the 1 in 100 year ARI storm event). Under some circumstances the PMF will need to be considered.

3.2 Sub-soil Drainage System

Sub-soil drainage systems wherever possible are to be discharged to a Council pit and not directly into the kerb and gutter. Sub-soil drainage systems are to be designed and constructed in accordance with Section 6 of AS 3500.3 - 1990.

3.3 Pipelines

3.3.1 Pipe Size and quality

The minimum pipe size shall be:

- Ø90mm UPVC for property drainage systems; and
- Ø375mm reinforced concrete for any system which drains public land or road reserves.
- The minimum pipe velocity should be 0.6m/s and a maximum velocity of 6.0m/s during the design storm.

3.3.2 Pipe Grade

The minimum pipe grade shall be 1.0% for all pipes.

Pipes with a gradient greater than 20% will require anchor blocks at the top and bottom of the inclined section; and at intervals not exceeding 3.0m.

3.3.3 Depth of Cover for Stormwater Lines

- Concrete pipe cover shall be in accordance with AS 3725-1989 Loads on buried concrete pipes, however a minimum cover of 600mm will apply.
- Minimum cover for PVC lines shall be as per the table below.

Location	Minimum Cover
Not Subject to vehicle loading	100mm single residential 300mm all other developments
Subject to Vehicle Loading	450mm where not in a road
Under a sealed road	600mm
Unsealed road	750mm
Paved Driveway	250mm

Depth of Cover for PVC Pipes

Where sufficient cover cannot be provided, the pipe shall be covered by a 50mm minimum layer of road base and then concrete encased. The concrete encasing should be a minimum 150mm thick.

3.3.4 Building near Stormwater & Subsoil Drains

Where a proposed structure is adjacent to a drainage easement all footings shall be taken below the zone of influence of the pipeline. To be located out of the zone of influence the base of all footings shall be located below a 45o angle from the base of the pipe. Refer to Figure 3-1 – Typical Footing Detail Showing the 45o Zone of Influence.

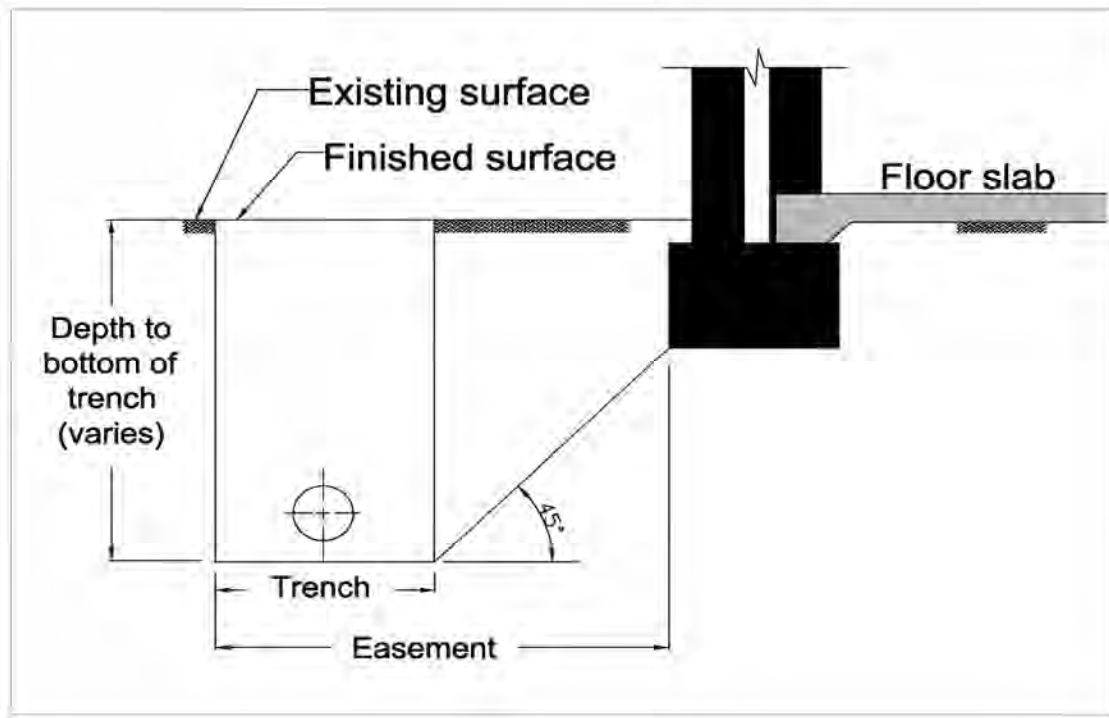


Figure 3-1 – Typical Footing Detail Showing the 45o Zone of Influence

The location and depth of the pipeline, along with the design of the footings, are to be shown on the plans. The design shall be carried out in accordance with section 3.9 of AS 3500.3 - 1990.

3.4 Pits

To facilitate maintenance of the stormwater system pits or cleaning eyes shall be installed at all junctions, bends, changes in grade and at 30m intervals on straight sections of pipe.

In medium density residential developments (villas, town houses & duplexes), the private courtyard of each residence must contain at least one 300x300mm stormwater drainage pit.

Inlet pits are to be installed at depressions to permit the entry of water to a stormwater drain. All grates are to be installed flush with the surrounding surface level.

Surface inlet pits shall be sufficiently large to accept the predicted inflow.

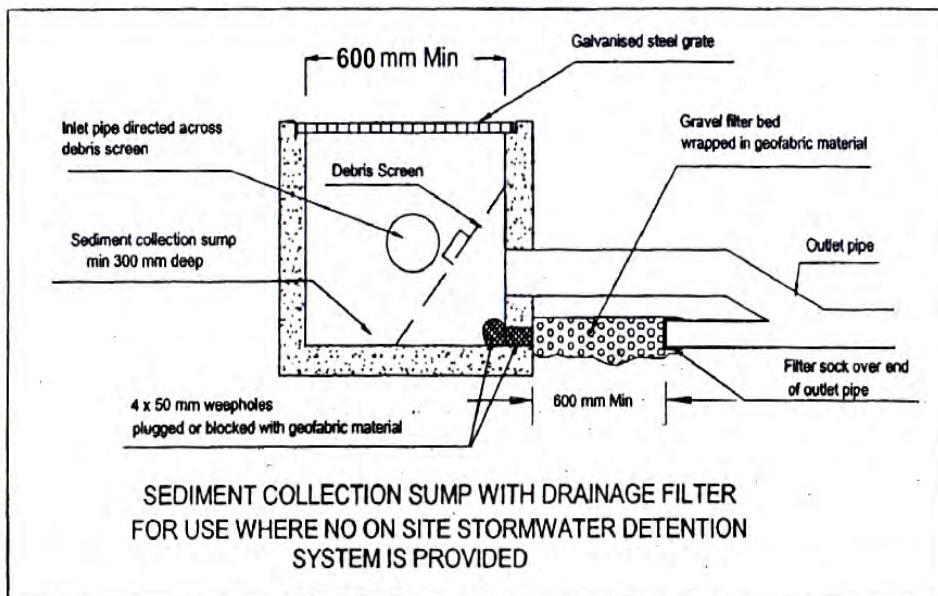
Pits and grated trench drains shall be positioned within the site to ensure:

- a) All runoff from roofed, paved and landscaped areas is collected
- b) Runoff does not enter garages or buildings
- c) Runoff does not flow over the public footway or onto adjoining properties.

3.4.1 Pollution Control Pit

Prior to connection to a Council drainage system or road a pollution control pit is to be installed at the lowest point of the drainage system and located within 1.0m from the property boundary. In the case of drainage systems that do not have an on-site detention system, this pit must contain a debris screen.

The pit is to have a minimum dimension of 600x600mm with a depth of 600mm, a debris screen and sediment collection sump.



Refer to Figure 3-2 – Pollution Control Pit.

3.4.2 Gross Pollutant Traps

GPT's are installed to remove contaminants such as sediment, oil and other pollutants from the stormwater before it discharges into the receiving system.

GPT's must be installed for the following developments:

- a) Residential developments with more than six dwellings.
- b) All Commercial Developments that may involve the use, storage or transportation of contaminants.
- c) Commercial developments on allotments greater than 5,000m².
- d) All industrial developments.

3.4.3 Standard Requirements for Stormwater System

- a) All pipes should be cut flush with the wall of the pit.
- b) Pits greater than 600mm deep to have a minimum access opening of 600x600mm.
- c) The grated covers of pits larger than 600x600mm are to be hinged.
- d) The invert of the outlet pipe is to be the same level as the base of the pit and grade of outlet pipe as per Section 5.1.

- e) Continuous trench drains should be not less than 150mm wide and 150mm deep.
- f) Pits between 1.2m and 6.0m deep are to have step irons in accordance with AS 1657. For pits greater than 6.0m other means of access must be provided.
- g) Pits greater than 450x450mm shall be constructed from concrete in accordance with Council's standard details in Appendix 5.
- h) Cast in-situ pits are to be constructed on a 150mm thick concrete base. The walls are to be designed to meet the minimum requirements of clause 4.6.3 of AS 3500.3 - 1990. Pits deeper than 1.8m to be reinforced concrete.
- i) Grates are to be galvanised steel grid type and be of heavy-duty type in areas where they may be subject to vehicle loading.
- j) All pits that will become Council's responsibility shall be poured in-situ with a minimum wall thickness of 150mm.

The following table indicates the minimum pits sizes required for various pipe diameters.

Depth to invert (mm)	Minimum Pit Size (mm)
$300 \geq D$	300x300
$600 \geq D > 300$	450x450
$900 \geq D > 600$	600x600
$1200 > D > 900$	900x900
$D > 1200$	900x900

3.5 Building Over Drainage Easements.

- a) Council will not approve the construction of any permanent structure or the placement of fill over a piped drainage system or easement that will prevent or hamper construction, reconstruction, maintenance or access to the pipeline or easement.
- b) On-ground driveways and landscaped areas will typically be permitted over an easement however the structural stability of any existing pipelines may be considered before consent is given to an application that proposes to introduce additional loading to the Council stormwater line.
- c) Reconstruction of an existing structure located over a Council drainage easement or stormwater pipeline will not be permitted.
- d) Masonry walls constructed across an easement must cross the easement at an angle of not less than 60°. The section of wall spanning the easement shall be constructed to enable its easy removal without resulting in failure of the remainder of the structure. The footings must be constructed to prevent any loading imposed on the pipe.
- e) The structure or filling must not be placed within the 1 in 100 year overland flowpath.

O.4 Disposal of Stormwater

Stormwater runoff from all impervious areas shall be collected and piped by gravity flow in accordance with this DCP. The design shall ensure that the development, during construction and upon completion does not impede or divert natural surface water so as to have an adverse impact upon adjoining properties.

Drainage systems for stormwater disposal shall comply with AS 3500-1998-National Plumbing and Drainage Code or any standard replacing that standard.

Council will generally not approve stormwater systems that drain against the natural grade of the land.

4.1 Draining to Street Kerb and Gutter

Pipes discharging to the street kerb and gutter shall comply with the following Conditions:

- a) Have a maximum flow rate of 50l/s. (Flows greater than 50l/s must be directed into an existing council drainage pipeline)
- b) Be gravity fed with a minimum fall of 1% towards the kerb and gutter.
- c) Be either PVC pipe (maximum Ø150mm) or galvanised steel rectangular hollow Sections (RHS) with dimensions 200x100mm and 6mm thick.
- d) Have a minimum 50mm clearance over the connection at the Kerb
- e) In instances where more than one connection is required they should be a minimum of 5.0m apart.
- f) A road opening permit must be lodged with Council to ensure that the kerb is restored at the point of connection to Council's satisfaction.

If necessary, a pipeline may be constructed along the footpath for a maximum length of 20m with a maximum trench depth of 1.2m. The pipeline shall not compromise existing or future vehicular access to any property or services, and trees etc.

If connection to the kerb cannot be achieved within 20m then a kerb inlet pit must be constructed at a point near the boundary of the subject property. Council's street drainage system must be extended to this pit to allow direct connection. Any extension to Council's drainage system will require a minimum Ø375mm reinforced concrete pipe. The applicant is to check with Council's Engineer with respect to the required pipe size prior to submitting their application.

4.2 Draining to RTA Roads

RTA approval must be obtained where stormwater is to be discharged to the street gutter or underground drainage system of a road that is under their control. The applicant must submit written evidence to Council of the approval for this work by the RTA, prior to the final approval of the plans by Council or an accredited certifier.

4.3 Draining to Council's Drainage System

Where an adequate trunk drainage pipeline is available, property drainage systems up to Ø150mm may be connected directly to an existing Council drainage line. A pollution control pit must be installed immediately upstream of the connection point. Refer to Appendix 5 – Connection to Council Drainage Line.

Property drainage systems greater than Ø150mm must be connected to an existing pit or to a new pit constructed to Council's specifications. Where possible, only the top of the pipe is to be cut to facilitate water inflow and/or access for maintenance. The remainder of the pipe is to be left undisturbed.

Council inspection and approval is required for connections into the trunk drainage system and only one connection is permitted.

Piping the property system across a public road is not permitted.

4.4 Draining to a River Foreshore

Discharge to river foreshore may be allowed subject to approval by Council and shall be undertaken in accordance with the following controls:

- a) The receiving river foreshore shall have sufficient capacity to cater for the additional flow without adversely affecting upstream or downstream flooding.
- b) The river foreshore is to be protected against erosion at the point of discharge. In this regard an outfall apron or energy dissipation structure is to be provided.
- c) Only a single discharge point to the river foreshore from the development will be permissible.
- d) Litter traps must be installed to prevent litter (including leaf litter) from entering the river.

4.5 Draining into Bushland

All properties that are adjacent to public bushland reserves must also address the requirements of Part H – Bushland Protection.

Urban stormwater flowing into bushland is a major factor in weed growth, erosion, siltation and pollution. For these reasons, no new points of stormwater disposal are permitted into bushland areas.

New stormwater systems for properties adjacent to bushland will be required for the following:

- a) New development,
- b) Knock down and re-build,
- c) Increase of hard surface (including hard landscaping) of >15% above the pre-existing,
- d) Swimming pools where stormwater lines need to be relocated or modified.

Where the property does not have an existing stormwater disposal point, or will have to construct a new stormwater system, an absorption or dispersal system will be required.

In order to encourage water reuse and minimise the quantity of stormwater draining into bushland, these absorption or dispersal systems will need to incorporate the following criteria:

- a) The rainwater tank is to have a minimum effective volume of 10.0m³ (10,000 l).*
- b) Rainwater draining to the tank is to drain from the roof surfaces only. No ground areas are to drain to the reuse tank.
- c) For new residential developments the entire roof area is to be connected to the rainwater tank.
- d) For alterations or additions a minimum roof area of 350m² (or the entire roof if it is less than 350m²) is to be connected to the rainwater tank.

- e) The rainwater reuse tanks are to be connected to all toilets, one outside tap and one cold water washing machine tap.
- f) Mosquito protection and a first flush device shall be fitted to the reuse tank.
- g) The overflow from the rainwater reuse tank is to drain by gravity to a Council approved stormwater system.

*To allow for a 100mm air gap at the top of the tank and another 100mm sludge zone at the bottom. A 10,000l rainwater tank may have an effective capacity of only 9,500l which would therefore not satisfy these requirements.

All areas not draining to the rainwater tank are to satisfy the drainage requirements of this DCP.

Drainage systems which incorporate rainwater tanks must comply with Part M - Rainwater Tanks.

For all existing and proposed outlets into bushland energy dissipaters, pollution control pits and/or GPTs will be required to minimise the impacts on the bushland.

Energy dissipaters reduce water velocity by directing the water stream into obstructions placed in the flowpath. Energy dissipaters are to be designed to reduce velocities to below 2.0m/s during the design storm

4.6 Piping Against the Natural Grade

The drainage system is to follow the natural fall of the land. Council will only approve charged systems for single occupancy or dual occupancy dwellings.

4.7 Overland Flowpaths

Overland flowpaths designed to contain a 1 in 100 year ARI storm event are to be provided over all pipelines. The overland flowpaths are to be kept free of obstructions and must not be landscaped with loose material that could be removed during a storm event. Refer to Section 10 – Stormwater Inundation for more detail regarding overland flowpaths.

O.5 Stormwater Disposal Systems

5.1 Charged Lines

A charged system is a sealed stormwater drainage system where part of the drainage line is below the level of the discharge outlet point and permanently holds water. Charged systems are generally used for developments which need to drain against the natural grade of the land and which cannot obtain an interallotment drainage easement.

Charged lines will be permitted under certain conditions for single occupancy residential developments only and will be subject to the following criteria:

- a) Not accepted for "Complying Developments".
- b) Documentary evidence must be submitted with the application indicating that an easement cannot be obtained at a reasonable cost from the downstream property owners.
- c) Will only be permitted if there are no drainage problems downstream in the catchment where the drainage is being directed.
- d) A full hydraulic analysis of the system including a hydraulic grade line and calculations must be submitted with the application.
- e) All gutters and pipes in the system must be designed for a 1 in 100 year ARI storm event.
- f) There must be a minimum difference in height between the roof gutter and the discharge pit at the property boundary of 1.8m.
- g) There must be a gravity flow across the footpath from a pollution control pit within the property.
- h) All services within the footpath must be located prior to submitting the plans and all details must be shown on the plans.
- i) All pipes must be a minimum of 100mm and all joints must be solvent welded.
- j) A cleaning eye must be provided at all junctions and at the low point in the system within a pit.
- k) Normal On-site Stormwater Detention requirements will still apply.
- l) Full details of the system must be submitted with the Development Application.

The following information is required to be provided with the application.

- a) All plans must be to AHD levels.
- b) A site plan clearly showing catchment areas, direction of flows in gutters, and the location and sizes of all downpipes, pipes, pits and discharge point.
- c) Details of the gutter type, capacity and gutter guard system to be used.
- d) Calculations for gutter sizing, downpipe sizing and pipeline sizing including hydraulic losses on pipe system.
- e) A longitudinal section of the pipe system showing:
 - a. Gutter levels
 - b. Cleaning eye/pit levels
 - c. Pollution control pit at boundary with invert and surface levels
 - d. Location and levels of any services in footpath
 - e. Discharge point

- f. Pipe sizes, capacity and design flows in each section.

Calculations for any on site disposal system that may be required to drain paved areas that cannot be directed to the charged system.

5.2 On-site Absorption Systems

Single dwelling-houses and duplexes on properties that cannot pipe runoff to the street or do not have access to a suitable interallotment or Council drainage pipeline, may under certain conditions be permitted to discharge stormwater runoff into an on-site absorption system. New land subdivisions will not be permitted to dispose to absorption systems.

This is the least preferred option for stormwater disposal because the majority of soils in Lane Cove are clay based and have a low infiltration rate. The following requirements must be complied with for on-site absorption:

- a) The system is to be designed to cater for the 1 in 100 year ARI storm event and where the existing soil type is known to be clay it is to be accompanied with a report by a geotechnical engineer attesting to the absorption capacity of the system and demonstrating that the proposal will not have any adverse impacts upon adjoining properties.
- b) The property must not be located within any areas identified by Council as containing soil types that are predominantly not conducive to the absorption of stormwater or likely to induce landslip. Refer to Appendix 2 – Map - Soils of Lane Cove for soil profile. (The map is only indicative and should be used as a guide only).
- c) Evidence must be supplied by the applicant that all relevant downstream property owners have been approached and are unwilling to grant a private drainage easement that will allow the piping of stormwater to a Council street or suitable pipeline.
- d) The area draining to the absorption system must be less than 35% of the total site area.
- e) An area down stream of the dwelling at least equal to the impervious area draining to it must be available in which to construct the absorption trench.
- f) On-site absorption structures are to be located as far as practicable from the downstream property boundaries (minimum 5.0m) and a minimum of 3.0m from structures. They should be located away from any large trees and construction must not damage the primary root zone.
- g) The system should not be placed under any paved surfaces and must be at least 1.0m from pavements subject to vehicular traffic. A pollution control pit shall be constructed immediately upstream of the absorption system with a capped observation riser.
- h) The area downstream is to be landscaped in a manner that will ensure a reduction of sub-soil flows into the adjoining property.

Refer to Appendix 9 – On-site Absorption Standard Detail and Calculation Sheet which maybe used for areas with favourable soil profiles.

5.3 Dispersal Trench

Where a property adjoins bushland and an absorption system is not possible, a dispersal trench may be permitted. The construction of the dispersal trench shall comply with Part H – Bushland Protection and should satisfy the requirements listed above for absorption systems.

For a standard drawing refer to Appendix 7 – Typical Detail for Stormwater Dispersal Trench.

5.4 Pump-out Systems

Mechanical pump-out drainage is only permissible where gravity drainage cannot be achieved from an underground basement area. The following controls apply to mechanical pump-out systems:

- a) The Applicant shall demonstrate that gravity drainage from the underground basement is not possible.
- b) Pumps may only be used to drain seepage and a minor amount of direct runoff from an underground basement.
- c) The area directing runoff to the pumped system shall not be greater than 10% of the total basement area.
- d) The system shall be dual alternating with level switches and activation of dual operation at top water level.
- e) The pump wet well shall have a storage capacity of at least the two hour 1 in 100 year ARI storm runoff and shall be checked for adequacy up to the 1 in 100 year ARI event by a time-area computer model or the mass-curve technique in AR&R.
- f) The water pumped from the underground basement shall be directed to the property drainage system.
- g) Direct connection of a pump out system to the kerb and gutter will not be permitted. Pump out systems are to be discharged to a Council pit as they are a constant source of moisture in dry periods.

A Positive Covenant will be required to be placed on the title of the property to inform owners of their responsibility in maintaining the pump-out system. This will be required prior to the issue of the occupation certificate. Refer to Section 13.2 – Maintenance of Pump-out Systems for more information regarding pump-out systems.

5.5 Other Water Management Systems

Many water management measures can be used to achieve water sensitive measures in the design of new homes and the renovation of existing homes.

The Applicant may wish to propose one or more alternative techniques for on-site stormwater management, stormwater disposal and water quality to those described in this DCP (i.e. Grassed Swales, Bioretention devices, Extended Detention devices, Rainwater tanks etc).

The design and construction of these devices is to be specified and supervised by a professional engineer registered as having competence in civil engineering under the National Professional Engineers Register (NPER) maintained by the Institution of Engineers Australia.

5.6 Water Conservation Measures

Lane Cove Council encourages the use of rainwater tanks to enable residents to save water. By storing rainwater runoff from roofed areas, rainwater tanks can provide a valuable water source for toilets, washing machines, gardens and outdoor use.

Further information regarding the installation and approval rainwater tanks can be found in the Rain Water Tank section of this DCP.

O.6 Rainwater Tanks

Some rainwater tanks can be undertaken as exempt or complying development. See State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, for details.

For tanks requiring development consent, the following objective and provisions apply.

Objective

The objective for rainwater tanks is for:

Water tanks designed, constructed and installed so that they will be sited and screened so as not to materially impact on the environment and amenity of the neighbourhood and to encourage water conservation.

6.1 Uses

Rainwater can provide an alternative source for the following:

- a) toilet flushing;
- b) garden irrigation;
- c) washing cars;
- d) filling ornamental ponds;
- e) washing machines;
- f) in hot water systems;
- g) filling swimming pools and spas; and
- h) fire fighting.

However, while rainwater tanks can provide good quality drinking water, in areas of heavy traffic or industry, rainwater can be subject to contamination. In line with NSW Health Department Guidelines (Document No. GL2007_009, Date 6.6.07) , Lane Cove Council does not recommend the use of rainwater tanks for drinking purposes where there is access to a reticulated potable supply.

It must be noted that indoor use of rainwater is slightly more complex than outdoor use. Indoor uses require special plumbing configuration to isolate the rainwater supply from the reticulated potable supply. If the installation of a rainwater tank (regardless of size) involves work affecting the water supply system, sewerage system, stormwater drainage system, or any part of Sydney Water's systems, then such work can only be undertaken with Sydney Water's approval.

6.2 Above ground rain water tanks

Above ground rainwater tanks must comply with the following requirements:

- a) Provide to Council in writing details of location, capacity, design and colour of tank proposed.
- b) The tank must be located behind the front alignment to the street of the building to which the tank is connected (or, in the case of a building on a corner block, the tank must be located behind both the street front and street side alignments of the building), and must be adequately screened from the adjoining properties. The tank must be located in the rear yard if it is constructed or installed on or in, or in relation to, a heritage item or a draft heritage item.

- c) All tanks located between the dwelling and side boundary fence should be below the fenceline of adjoining properties and are to be sited with a clearance of at least 450 millimetres adjacent to either boundary of the adjoining property or the subject dwelling to facilitate maintenance of the tank.
- d) The tank must not exceed 3 metres in height above ground level, including any stand for the tank.
- e) Where the tank is to exceed the height of the fenceline on the common boundary with the adjoining property, the tank is to be set back a minimum of 900mm from the boundary of the adjoining property to facilitate screening of the tank from the adjoining property. Such screening being permanent and to Council's satisfaction.

6.3 Development applications are to include:

Development application must be accompanied by four (4) sets of plans (to scale) along with seven (7) A4 size neighbour notification plans. Each plan is to include:

- a) Site plan showing the location of the tank in relation to the allotment boundaries and existing buildings;
- b) Elevation showing the height and length of the tank and relationship to adjoining buildings; and
- c) Site plan indicating overflow connection to existing stormwater system.
- d) Manufacturer's specifications outlining:
- e) Tank capacity and dimensions;
- f) Overflow disposal;
- g) Mosquito proofing;
- h) Colour;
- i) Tank support (for example: Concrete slab);
- j) Engineer's certificate of compliance;
- k) Materials of manufacture; and
- l) Proposed uses.

6.4 Installation

All tanks should comply with the following requirements:

- a) The tank must be designed to capture & store roof water from gutters/down pipes on a building.
- b) The tank must be fitted with a first flush device, being a device that causes the initial run-off of any rain to bypass the tank to reduce pollutants entering the tank.
- c) The tank must be structurally sound.
- d) The tank must be prefabricated, or be constructed from prefabricated elements that were designed and manufactured for the purpose of the construction of a rainwater tank.
- e) The water tank and any associated support structure and plumbing should be constructed of a non-reflective material.
- f) The water tank and any associated support structure and plumbing should be the same colour as the dwelling or a colour that complements the dwelling.
- g) The tank must be fully enclosed; any inlet to the tank must be screened or filtered, to prevent the entry of foreign matter or creatures.
- h) Any overflow from the tank must be directed into an existing stormwater system.

- i) The tank must be assembled and installed in accordance with the instructions of the manufacturer or designer of the tank.
- j) The tank, and any stand for the tank, must be installed and maintained in accordance with any requirements of the public authority that has responsibility for the supply of water to the premises on which the tank is installed.
- k) The installation or erection of a tank must not require a tree to be removed.
- l) The installation of the tank must not involve the excavation of more than 1 metre from the existing ground level, or the filling of more than 1 metre above the existing ground level.
- m) The tank must be installed at least 1m from any registered easement, water main or sewer main, unless it is installed in accordance with any requirements of the public authority that has responsibility for the main.
- n) The tank must not be installed over any structure or fittings used by a public authority to maintain a water or sewer main.
- o) No part of the tank or any stand for the tank may rest on a footing of any building or other structure, including a retaining wall.
- p) All tanks are to be placed on a structurally adequate base, in accordance with the manufacturer's or engineer's details.
- q) A sign must be affixed to the tank and all pipes carrying rainwater, stating that the water in the tank and/or pipe is "RAINWATER".
- r) The tank must be maintained at all times so as not to cause a nuisance with respect to mosquito breeding or overland flow of water.
- s) Any plumbing work undertaken on or for the tank that affects a water supply service pipe or a water main must be undertaken:
 1. With the consent of the public authority that has responsibility for the water supply service pipe or water main (For example: Sydney Water);
 2. In accordance with any requirements by the public authority for the plumbing work; and
 3. By a licensed plumber in accordance with the New South Wales Code of Practice – Plumbing and Drainage produced by the Committee on Uniformity of Plumbing and Drainage Regulations in New South Wales.
 4. No tank shall be permitted to have a direct connection with the potable water supply.
- t) Every 2-3 years tanks will need to be flushed and cleaned to prevent build up of sludge & debris on the bottom. Excessive sludge build up is a sign of inadequate roof and gutter maintenance.

6.5 Pumps

Any motorized or electric pump used to draw water from the tank or to transfer water between tanks must not create an offensive noise, and if permanent must be installed by a licensed electrician. Pumps attached to the development must be housed in a soundproof enclosure.

6.6 Below ground rainwater tanks

Below ground rainwater tanks must comply with setback requirements as set out for the above ground tanks detailed above, however, may protrude into the front setback area.

A below ground rainwater tank may impact upon a site's landscaped area. As per the DCP, the definition of landscaped area does not include any building structure or hard paved area and therefore site areas above a below ground rain water tank would not be included as landscaped area. In many cases this is not an issue as tanks are often placed under driveways, which are already excluded from landscaped area calculations.

O.7 On-site Stormwater Detention Systems

OSD is required to limit discharges from developments to pre-development conditions. Council's OSD requirements have been formulated to ensure there is no increase in discharges from a site for rainfall events having a 1 in 100 year ARI.

OSD systems have three main elements:

1. Temporary Storage/Pondage

This may consist of an open surface pond/tank or a closed tank. It is designed to contain the excess volume of stormwater unable to pass through the discharge control during intense rainfall conditions.

2. Discharge Control Pit

This is the means of limiting the flow from the site. This may consist of a limited orifice or other means of reducing the flow of stormwater from the site.

3. Overflow Structure (Spillway)

A spillway or emergency outlet is to be provided from the temporary storage/pondage to cater for extreme storm events or any failure of the system to direct overflows away from items, which may be adversely affected by such flows.

7.1 When is OSD Required

7.1.1 Dwelling houses and dual occupancies

OSD will be required if one or more of the following criteria are satisfied:

- a) All new residential developments where the proposed impervious area of the site exceeds 35%.
- b) All alterations or additions to residential dwellings where the impervious area (including roof area, paving, swimming pools and driveways) increases by more than 50m².
- c) All alterations or additions to residential dwellings where the impervious area (including roof area, paving, swimming pools and driveways) increases by less than 50m² and the total impervious area of the site is greater than 65% of the total site area.
- d) Where successive developments take place on a residential dwelling within a 5 year period and the cumulative increase in the built-upon site area exceeds 50m² or the total impervious area is greater than 65% of the total site area.

7.1.2 Attached dwellings, multi-dwelling housing and residential flat buildings

All developments with more than two dwellings proposed on the site and the proposed impervious area of the site exceeds 35% will require OSD.

7.1.3 Commercial and industrial developments

All commercial developments and redevelopment where the footprint of the building is altered will require OSD.

7.1.4 Subdivisions

For a subdivision OSD will be required for any existing dwelling or structure on the site where the impervious area of that lot exceeds 35%.

NOTE: Driveways constructed with gravel or "grass-crete" or similar types of pavers will be considered to be impervious for OSD calculation purposes.

7.2 Exemption from OSD for dwelling houses and dual occupancies

- a) The proposal is a one-off residential extension that contributes less than 50m² of impervious area.
- b) The total existing and proposed impervious area of the development is less than 35%.
- c) The proposed development is for a dwelling house or dual occupancy and the property is within the OSD exclusion zone as shown on Council's plan in Appendix 12 – Map - OSD Exclusion and Catchment Map.

7.3 Exemption form OSD by Installing Rainwater Tanks for dwelling houses and dual occupancies

In order to encourage water reuse and the installation of rainwater tanks, Council will allow OSD storage capacity to be replaced with rainwater tanks for dwelling houses and dual occupancies only.

To gain exemption from OSD, the rainwater tanks are to incorporate the following:

- a) The rainwater tank is to have a minimum effective volume of 10.0m³ (10,000 l) for each dwelling.
- b) Rainwater draining to the tank is to drain from the roof surfaces only. No ground areas are to drain to the reuse tank.
- c) For new residential developments the entire roof area is to be connected to the rainwater tank.
- d) For alterations or additions a minimum roof area of 350m² (or the entire roof if it is less than 350m²) is to be connected to the rainwater tank.
- e) The rainwater reuse tanks are to be connected to all toilets, one outside tap and one cold water washing machine tap.
- f) Mosquito protection and a first flush device shall be fitted to the reuse tank.
- g) The overflow from the rainwater reuse tank is to drain by gravity to a Council approved stormwater system.

This exemption applies to the effective capacity of the rainwater tank. To allow for a 100mm air gap at the top of the tank and another 100mm sludge zone at the bottom. A 10,000l rainwater tank may have an effective capacity of only 9,500l which would therefore not satisfy the requirements for this exemption.

All areas not draining to the rainwater tank are to satisfy the drainage requirements of this DCP.

Drainage systems which incorporate rainwater tanks must comply with provisions for rainwater tanks listed State Environmental Planning Policy (Exempt and Complying Development Codes) and Section O.6 – Rainwater Tanks.

7.4 Design Criteria for OSD

Sufficient storage shall be provided to ensure peak flowrates at any point within the downstream drainage system do not increase as a result of the development during storms from the 1 in 5 year to the 1 in 100 year ARI storm events.

The Permissible Site Discharge (PSD) from all developments shall not exceed one hundred and forty litres per second per hectare (140l/s/ha).

The Site Storage Requirement (SSR) shall be designed to provide for 0.025m³ for each square metre of basin catchment.

7.4.1 What Must Drain to the Detention System

Stormwater runoff from all new impervious areas should be routed through the OSD system. It is not necessary to route runoff from pervious surfaces through the detention system.

Runoff entering the site from upstream properties should not be directed into the OSD system.

7.4.2 Runoff Bypassing the Storage Facility

A portion of the new impervious areas may discharge directly to Council's system if it cannot be drained to the storage facility, provided the PSD is reduced to compensate for the bypassed flows. The extent of impervious surfaces bypassing the storage facility may not be greater than 25% of the impervious area draining to the storage facility.

7.4.3 Storage Facility

OSD systems may be based on the following:

- a) above ground storage – in a grassed, landscaped area or driveway;
- b) below ground storage;
- c) a combination of the above.

Any above ground storage for medium density developments must be located in common areas (not in private courtyards etc).

The facility shall be designed to safely convey all overflows to an adequate Council drainage system. The total blockage case is to be considered.

Below ground storage facilities should possess the following characteristics:

- a) be structurally designed to adequately withstand all service loads and provide adequate service life (50 years).
- b) be graded to drain completely dry. Long term ponding of water over the floor of the basin is not permitted.
- c) contain an overflow outlet that does not direct overflows to other private property.
- d) contain an inspection/access grate 600x600mm directly over the outlet.
- e) to facilitate cleaning of the tank it is to have a minimum of two 600x600mm access grates where the clear internal height of the tank is less than 600mm. Additional grates are to be provided if the distance between access grates exceeds 10m.

- f) contain step irons where the tank depth is in excess of 1.2m.
- g) be located outside the root zone of trees that must be retained.
- h) have a child proof locking system for the surface grate where the depth of the tank is greater than 1.2m.

Above ground storage facilities on driveways and trafficable areas should possess the following characteristics:

- a) have a ponding depth no greater than 150mm.
- b) not restrict pedestrian access from the public road to buildings.
- c) be designed in a manner minimising inconvenience caused by the basin.
- d) be totally impervious.

Above ground storage facilities in landscaped areas, should possess the following characteristics:

- a) the calculated storage volume be increased by 20% to allow for the growth of vegetation and minor variations to the ground level that will occur as part of the general maintenance.
- b) have a ponding depth of no greater than 300mm where there is a vertical step into the basin.
- c) have a ponding depth no greater than 1.2m with side slopes into the basin of less than 15%.
- d) where the depth of the basin is in excess of 300mm and the side slopes exceed 15% or the depth is in excess of 1.2m, access is to be restricted by enclosing the area with a swimming pool type fence with childproof, self closing gates.
- e) not be located across the allotment boundaries.
- f) if an earth mound is used to retain the water, the crest width is to be not less than 1.0m wide.
- g) if a structure other than earth mounds is to be used to retain water, it shall be certified by the designing engineer to be structurally adequate to retain the design volume of water.
- h) be designed in a manner which minimises inconvenience caused by the basin.

7.4.4 Sharp Edged Orifices

Orifices are to be made of minimum 200x200mm flat stainless steel, 3mm thick. The orifice plate is to be tooled to the exact dimension as calculated. Orifice plates will need to be securely fastened in a central position over the outlet pipe using four (4) bolts and are to be flush with the wall to ensure that flow does not pass between the plate and the wall.

The following formula may be used to calculate the required orifice diameter.

$$Q = C A (2 G H)^{0.5} \times 10^3$$

Where Q=(PSD) flowrate through orifice in litres per second

C=0.61

A=cross sectional area of orifice in metres squared

G=9.81

H=depth of ponding from centre line of orifice

The design of the OSD system shall be undertaken in accordance with the design sheet in Appendix 14 – OSD Calculation Sheet, ILSAX or DRAINS. OSD calculations shall account for the total development site area.

7.4.5 Spillway

A spillway or overflow outlet is to be provided in all OSD systems as part of the operation of the system to cater for system failure or extreme storm events. This is to ensure that overflows are conveyed to the downstream drainage system and away from other properties.

7.4.6 Debris Screens

All outflow controls must be enclosed by a rustproof screen or wire cage to protect them against blockage. The screen should be attached to the wall, but should be removable without the use of tools to permit cleaning and easy inspection of the outlet control.

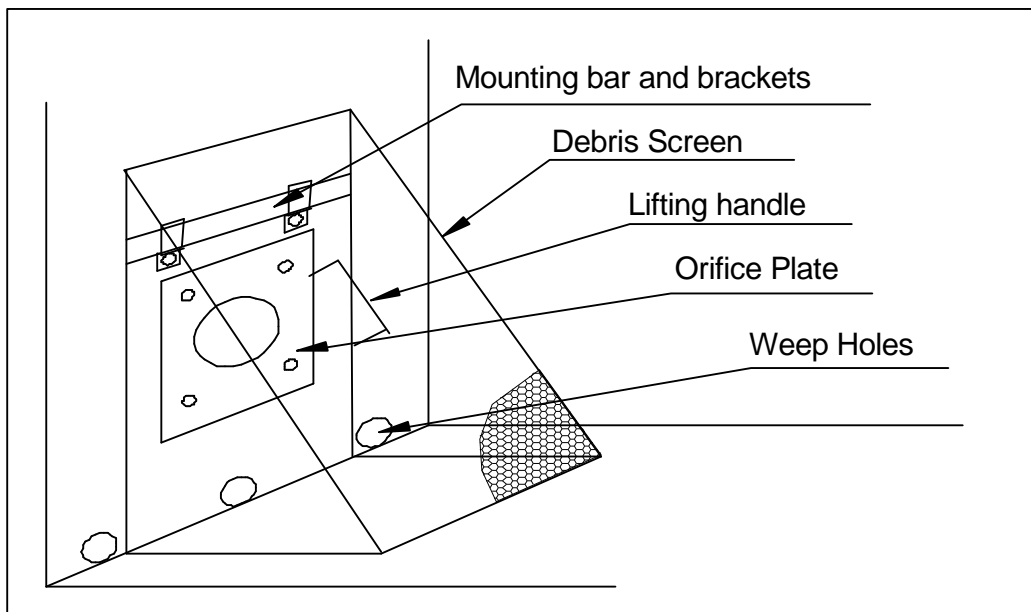


Figure 7-1 – Typical Installation of Debris Control Screen

7.4.7 Sediment Control Sumps

A sediment collection sump is to be provided below the orifice outlet to the stormwater detention system. This sump is to have a minimum depth of 200mm below the invert of the orifice. A typical sediment collection sump is shown in the figure below.

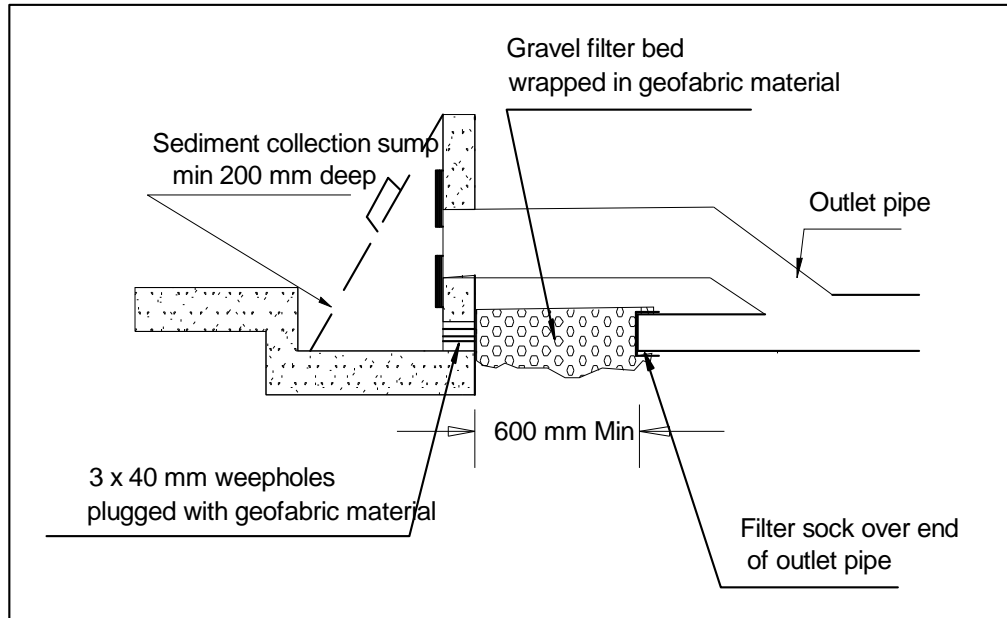


Figure 7-2 – Sediment Collection Sump with Drainage Filter

7.4.8 Marker Plates

All OSD systems are to have the following marker plate permanently attached to the wall of the tank or control pit directly above the debris screen. Marker plates can be purchased at Council's Customer Service.



7.5 Inspections

A compliance certificate must be obtained once the stormwater drainage system has been fully constructed and prior to the refund of any security deposits.

The accredited certifier shall inspect the OSD structure for the following:

- a) Pits, pipes and other drainage structures have been cleaned of any sediment and debris and all formwork has been removed.
- b) The pits, pipes and detention facility are free draining, i.e. they do not allow water to pond.
- c) A correctly sized orifice has been securely installed in the detention tank/control pit.
- d) A debris screen as per Council requirements has been installed at the outlet.
- e) The kerb has been repaired to Council's requirements where a new pipe connection has been made.
- f) The footway and any footpath paving has been fully restored to Council's standards where pipes were laid across the public footway.
- g) Certification of the system is to be made on the form supplied in Appendix 15 – OSD Certification Form
- h) A marker plate is affixed as per Council requirements.
- i) Where warning signs are required that they have been installed.

7.6 Works as Executed Drawings

A works-as-executed survey of the detention facility will need to be prepared and certified to demonstrate that the OSD system functions as per the intention of the approved design. A suitably qualified engineer must certify that the constructed system is satisfactory.

7.7 Positive Covenant for OSD Systems

A positive covenant will need to be executed and registered against the title of the property in accordance with Council's standard terms as outlined in Section 13 – Restrictions & Positive Covenants. This positive covenant must be on any linen plans for subdivision of the development. If no subdivision is proposed, the covenant shall be registered with the LPI with proof of registration provided to Council prior to the issue of an Occupation Certificate for the development.

O.8 Construction Activities

8.1 Bonds

Works that are carried out on behalf of the Applicant

- a) On Council land
- b) On Public land
- c) Council infrastructure (including assets on private land)

A bond will be required to cover the costs of potential rectification works. The value of the bond will depend on the works proposed, and will be determined by Council's Engineer.

Bonds may also be required to cover the provision of OSD, charged line systems and the creation of easements and Positive Covenants. Any bonds required will need to be paid prior to the release of the Construction Certificate.

8.2 Contractors Insurance and Road Opening Permits

Where works are to be carried out on Council land, the company carrying out the works will be required to have public liability insurance, the minimum value of such a coverage is to be \$10,000,000 or as specified in the consent. Where such works are within a public roadway, a road opening permit is to be obtained from Council before commencing works.

8.3 Inspections

Where works are to be carried out in a public roadway, or involve Council structures, then advance notice and inspections will be required at specific stages during the works to ensure compliance with any requirements or conditions. The Applicant will be required to pay for inspections in accordance with Council's Fees and Charges.

The specified stages for inspections normally are:

- a) after the excavation,
- b) prior to backfilling pipe trenches or prior to pouring of any concrete,
- c) after the completion of works.

A minimum of one (1) working days notice shall be given to arrange any inspections. Work is not to proceed until the works or activity covered by the inspection is approved.

8.4 Traffic Control and Safety

Where works are undertaken on public roads, the applicant or contractor is to provide adequate traffic control and directions to motorists. Where such measures are not satisfactorily provided, Council may provide such and recover the costs from the applicant. Traffic control is to be in accordance with AS 1742.3 – Traffic Control Devices for Works on Roads, or any directions issued by Council's Engineer during the works.

If driveway access to adjacent properties is to be disrupted, residents are to be advised in writing a minimum of two (2) working days prior to the works commencing. Access is to be restored for use by affected properties outside normal working hours.

8.5 Connection to Council System

Where drainage works are to be connected to Council's system within public roads or lands, the applicant are to ensure the site is safe at all times and satisfies the requirements of AS 1742.3 – Traffic Control Devices for Works on Roads.

Refer to Section 4.3 – Draining to a Council Drainage System for technical details regarding these connections.

8.6 Restoration

Any disturbed areas within Council land is to be restored to meet Council's current standards, including landscaping. The applicant will be required to complete a Road Opening Permit and pay the relevant road restoration fees prior to the commencement of works. All restoration costs are to be borne by the Applicant. The final restoration work will be carried out by Council.

Where other utilities or services require restoration as a result of works for the development, the restoration is to be to the relevant authority's requirements.

8.7 Kerb and Gutter

Where sections of the kerb are to be reconstructed the kerb and gutter is to be fully removed (including laybacks) and the kerb and gutter are to be reconstructed in one piece. Council will not allow the construction of kerb only. The existing concrete is to be saw cut and expansion joints provided. The minimum length of kerb and gutter to be replaced is 500mm.

8.8 Pipe Laying and Materials

All pipe laying and construction works are to comply with the requirements of any relevant Australian Standards and codes, as well as the manufacturer's specifications. All pits in public roads are to be constructed in reinforced concrete, and kerb inlet pits in accordance with the detail provided in Appendix 6 – Drawing for Standard Kerb Inlet Pit.

O.9 Hydrology and Hydraulics

9.1 Design Average Recurrence Intervals

9.1.1 Determining Flowrates

All hydrological calculations submitted to Council for approval shall be carried out in accordance with the procedures set out in Australian Rainfall and Runoff and in accordance with recognised engineering practice.

Use of the rational method for determining flowrates will be acceptable where the catchment is relatively small (<15,000m²) and the level of accuracy of the results is not critical.

Where the catchments are large (>15,000m²) and/or a reasonably accurate level of flowrate prediction is necessary, peak flowrates should be determined using a recognised runoff routing computer models such as ILSAX or DRAINS.

The following table indicates the required design capacities for various elements in a stormwater system.

Element of Stormwater System	Design ARI
All pipes and all associated components	20 year
Overland flowpaths	100 year
Outflows into unstable watercourses	20 year
Flows along an unstable watercourse	5 year

Design Average Recurrence Intervals

Runoff coefficients and times of concentration should give due consideration to likely future development within the catchment.

Calculation of the design stormwater discharge shall be made using Design Rainfall Intensities for Lane Cove, Appendix 1 – Design Rainfall Intensities and IFD Data for Lane Cove and in accordance with the procedure described in "Australian Rainfall and Runoff".

9.1.2 Hydraulic Calculations

The calculations to be submitted shall include:

- calculation sheets detailing the area and surface type of the sub-catchment for each collection point; the inlet capacity of the collection pit, the quantity of flow in the pipe, and the design pipe capacity;
- calculations to show the capacity of any swale or catch drain;
- a hydraulic grade line analysis of all pipelines in excess of 225 mm ϕ including pipe friction coefficients and local (minor) loss coefficients used;
- full details of input variables and calculations used for the design of the on-site detention system including the selection of the permitted site discharge, the sizing of storage facility, and the design of the outlet control (Note: if the system has been designed using the simplified method provided in Appendix 14 – OSD Calculation Sheet, then the form is to be completed and submitted with the application);
- all necessary information to demonstrate that the outflow from any on-site system on the property is not affected by water levels in Council's drainage system;
- "design details" for pollution control devices such as wetlands and sediment collection devices.

9.1.3 Pit Inlet Capacities

The inlet capacity of on grade and sag inlet pits shall be determined using equations given in Australian Rainfall & Runoff. Allowances shall be made for blockage in accordance with the following table.

Inlet Type	% Capacity Blockage
Side Entry	10%
Grated	+30%
Combination	100% Side Inlet Capacity only
Letterbox	50%

Pit Inlet Capacity

All new pits are to be constructed using galvanised steel type grates and kerb inlet pits are to have a minimum internal lintel width of 2.4 metres.

9.1.4 Free Surface Hydraulics

Water depths and velocities in free surface flows shall be determined using Manning's equation.

Where uniform flow is occurring, i.e. the channel cross-section, roughness and slope are constant over a reasonable distance; Manning's equation may be applied to the cross-section without consideration of upstream or downstream influences.

For most overland flow analysis the assumption of uniform flow will not be appropriate and consideration must be given to upstream and downstream controls, losses for afflux and other hydraulic losses.

9.2 Design Objectives

The objective when designing a drainage system is to:

1. provide convenience and safety for pedestrians and traffic in frequent storms by controlling flows during those storms within defined limits,
2. to ensure damage to private and public buildings located on land affected by stormwater inundation is minimised, and
3. to minimise hazard to people by overland flow during major storm events.

9.2.1 Pipe Size

- a) To facilitate cleaning and maintenance the minimum pipe size for a stormwater system draining Council land or road reserve shall be Ø375mm.
- b) Pipe velocities shall be between 0.5m/s and 7.0m/s and preferably between 1.0m/s and 5.0m/s during the design storm to ensure the flow is self-cleansing but not likely to cause scour.
- c) Pipes shall be sized to adequately convey runoff for the relevant design storms. In some circumstances, pipes may need to be size to accommodate runoff from greater intensity storms in order to ensure overland flowpaths are not hazardous during extreme storm events.

9.2.2 Depth Velocity Product

To prevent pedestrians being swept into overland flowpaths, the depth velocity product of overland flowpaths which are accessible to pedestrians should not exceed 0.4m²/s.

Where vehicles alone are effected the depth velocity product of 0.6m²/s will be permitted.

9.2.3 Pipe Grade

The minimum pipe grade shall be generally 1.0%.

9.2.4 Pit Locations

Pits or cleaning eyes shall be provided at bends, changes in grade and every 30m along the pipeline. All proposed grated drains across driveways shall be a minimum width of 150mm.

The location of the kerb inlet pits on corners, laybacks, pram ramps and in line with normal pedestrian traffic is to be avoided.

9.2.5 Changes in Direction

Due to pit energy losses and pressure changes at abrupt changes in direction all stormwater lines Ø450mm or larger are to have a maximum allowable change in direction of 45 degrees.

O.10 Stormwater Inundation

- a) Where overland flow enters a property due consideration must be given to the effects of stormwater discharges upon neighbouring properties.
- b) In situations where there is a known flooding problem, or there is a risk of stormwater inundation, a flood study of the catchment containing the development site will be required. The flood study shall be in accordance with current practice as outlined in Australian Rainfall & Runoff, and subject to the satisfaction of Council's Engineer.
- c) Development Applications to undertake any property improvements on land that is subject to overland flow, must give due consideration to the manner in which the proposed work will affect the free passage of overland flow through the property. The development is not to create or aggravate hazardous overland flow conditions.

10.1 Adverse Impacts upon Adjoining Properties

Proposed Developments must not increase the quantity of flow through an adjoining property, concentrate, redirect, create or aggravate overland flow characteristics on adjoining properties.

10.2 Adverse Effects upon Proposed Improvements

All work must be compatible with the existing constraints of the site, including the overland flow. Site improvements must be designed to ensure there will be no significant damage caused by stormwater runoff within the property.

10.3 Safety

People, particularly children, must not be placed at risk of being swept away by overland flow. Any development proposal must not modify the way in which overland flow is conveyed through a property in a way that makes it hazardous, or promote the increased use of a property (or part of a property) that has an existing stormwater inundation safety hazard. Refer to Section 9.2.2 – Depth Velocity Product

10.4 New Development

Due regard is to be given to the location and shape of proposed buildings on the land so as to remove obstruction to overland flow or to remove potential to damage structures as a consequence of flow or may cause hazard to occupants.

Building over a flowpath will not be permitted due to the potential for blockage. Areas under buildings are not to be included when calculating impacts on adjoining properties, post developed flood depths, velocities or the like.

10.5 Freeboard

Floor levels of dwellings, including garages, should be at a level that will ensure they are not subject to stormwater inundation or nuisance flooding. To prevent stormwater from entering buildings the finished floor levels must be set at least 150mm above the adjacent ground levels.

The entire outside perimeter of all buildings must have overland escape routes which will protect all finished floor levels from flooding in the event of the complete blockage of the surrounding drainage system.

Where it is proposed to build in an area known to be affected by overland flow, all spaces are to have a minimum freeboard of 300mm (except parking and storage areas which are to have a freeboard of 150mm), above the calculated top water level for the 1 in 100 year ARI storm event.

Freeboard may need to be increased to 500mm or greater where there are high flowrates, high flow depths or low confidence in the accuracy of the flood model.

10.6 Additions & Alterations to Existing Buildings

Additions to existing buildings on properties affected by overland flow will be assessed using the same criteria as for new buildings. Council may not approve an application that involves significant capital expenditure improving an existing building that does not meet current minimum standards with regard to overland stormwater management.

10.7 Vehicle Parking Areas

The maximum depth of flow through designated car parking spaces or open carports is to be 150mm.

10.8 Subdivisions on lots affected by Overland Flow

Proposed land subdivisions of lots affected by overland flow will not be approved unless the applicant can demonstrate to Council that it is possible to provide a development on the newly created lot that realises the full Floor Space Ratio (FSR) potential of the lot and provides suitable private open space while meeting the overland flow management criteria outlined in this document.

10.9 Overland Flow inspection by Consultant

In instances where the development was approved following the submission of a flood study, the consulting engineer that prepared the flood study must inspect the property following completion of all work, and certify that the development has been completed in a manner that is fully consistent with the approved overland flow management strategy.

10.10 Safety Fencing

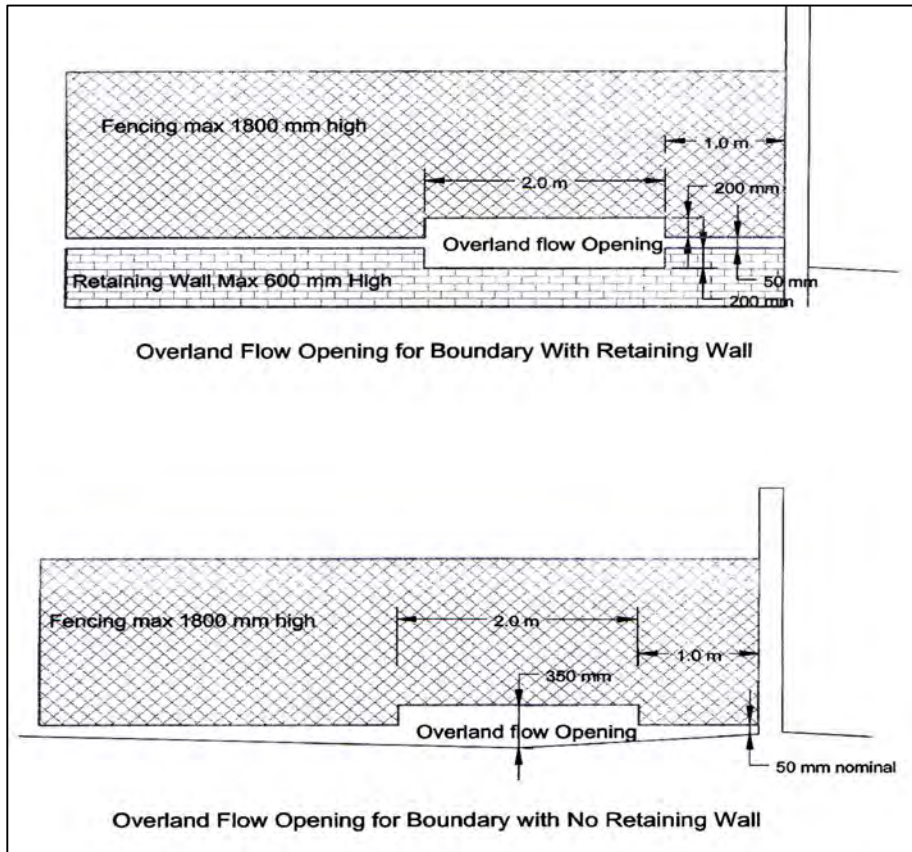
Safety fencing necessary to restrict access to areas affected by hazardous flows shall meet the minimum standards outlined in AS 1926.1-1993 Fencing for Swimming Pools.

The fenced off area will not be considered as open space for the purposes of calculating minimum private open space requirements as outlined in the relevant planning codes. Where the property is to be a strata subdivision or community title subdivision, any fenced off area of land should be nominated as common property and access should only be available from common property.

10.11 Fences

Boundary and internal fences should not obstruct the natural path of overland flow. Impermeable boundary fences where used shall be constructed in a manner so as to provide a clearance of at least 50mm between the ground and the bottom of the fence. All fences located within an overland flowpath shall be permeable in nature to at least 300mm above the calculated top water level in order to allow water to freely pass through them. In most instances, only the lower portions of the fence will need to be permeable.

No permanent structures are to be built over Council drainage easements, watercourses or pipelines over which Council has an interest. This includes brick and other fences of masonry construction.



★ NOTE: A permeable fence is one that allows water to freely pass through

Figure 10-1 - Overland Flow Openings ★

10.12 In-Ground Swimming Pools

The coping level of the pool is to be at or above the top water level of the 1 in 20 year ARI storm event. The impact of the pool structure and any associated structures on the flow characteristics will also need to be considered for overland flows up to the 1 in 100 year and 1 in 20 year ARI storm events.

O.11 Silt and Sediment Control

Erosion and Sediment Control Plan. An Erosion and Sediment Control Plan (ESCP) shall be prepared by a suitably qualified consultant in accordance with the guidelines set out in the manual "Managing Urban Stormwater, Soils and Construction" prepared by LANDCOM 'Fourth Edition 2004, Volume 1'. These devices shall be maintained and cleaned during the construction works and replaced where considered necessary.

Area of disturbance (m ²)	Nominal type of activity	Suggested type of plan
< 2,500	Any construction works where disturbance of ground will occur	ESCP addressing soil and erosion and sediment pollution
> 2,500	Large subdivisions, large medium/high density housing, large civil works	SWMP addressing soil erosion and sediment pollution, including a calculation as to the need for a sediment basin

Required Level of Silt and Sediment Control

11.1 Erosion and Sediment Control Plans (ESCPs)

The following details are to be included in drawings accompanying the Erosion and Sediment Control Plan:

- Location and design criteria of erosion and sediment control structures,
- Site access point/s and means of limiting material leaving the site
- Location of proposed vegetated buffer strips
- Means of diversion of uncontaminated upper catchment around disturbed areas
- Procedures for maintenance of erosion and sediment controls
- Details and procedures for dust control.

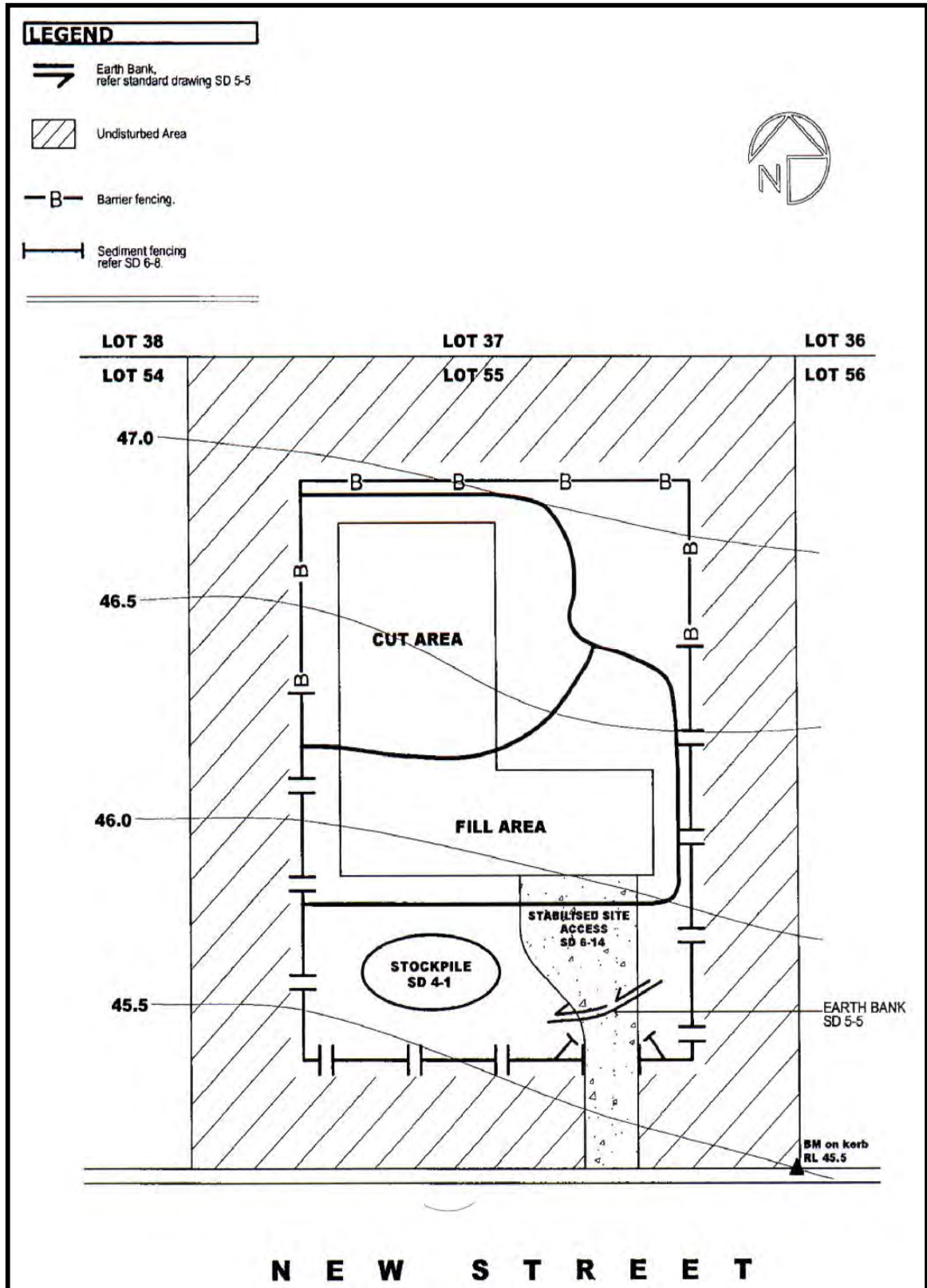


Figure 11-1 Typical Detail for a Residential Erosion and Sediment Control Plan (ESCP)

11.2 Soil and Water Management Plans (SWMPs)

Soil and water management plans are required for larger development sites for medium density and subdivision developments. The procedures for preparing these plans are quite involved and guidelines are set out in the manual prepared by the NSW Department of Housing “Managing Urban Stormwater, Soils and Construction” and must be prepared by a suitably experienced person.

The plan must incorporate (without being limited to) information on general site management, material handling practices, soil stabilisation, water control, sediment control, wind erosion control and access measures.

O.12 Drainage Easements

12.1 Width of Drainage Easements

Width of drainage easements shall be in accordance with following Table - Drainage Easement Width. All stormwater lines are to be located centrally within the easement. Existing easements that do not comply with these requirements may be required to be modified.

Nominal Pipe Diameter	Minimum Easement Width
up to 500 mm	1.8 metres
500 mm to 900 mm	2.5 metres
>900 mm	Width required for maintenance, but not less than width of conduit + 1 metre and not less than 2.5 metres.

Drainage Easement Width

12.2 Council Drainage Easements

12.2.1 Creation of a Council Drainage Easement

Council has rights under section 186 of the Local Government Act (1993) to require the creation of an easement in its favour for the purpose of undertaking any of its functions as defined in the Local Government Act.

Council drainage easements will be required over all pipes or channels that convey runoff from a public park, road reserve or other public owned land.

Where a drainage easement is to be created as a condition of development consent, all costs associated with the creation of that easement shall be borne by the applicant.

12.2.2 Existing Encroachments onto an Easement

Any time there is an existing, unsuitable encroachment onto a drainage easement, Council may take the opportunity to have that encroachment removed at no cost to Council if and when it is presented.

Where an existing building encroaches onto an easement or Council drainage line, Council will not issue a Development Approval on the property where it involves significant capital expenditure to that building or any other application on that property that may reduce or delay the opportunity being presented for Council to have the encroachment removed.

12.3 Easements to Drain Private Property

Where it is proposed to discharge collected runoff to a stormwater line that passes through an adjoining lot or to lay a new line within a drainage easement, the applicant shall submit to Council information from LPI to indicate the subject property has rights to use that drainage easement.

This information must be received before Council will issue a Development Consent.

Hydraulic calculations must also be submitted to indicate the capacity of the stormwater line and its ability to accept the additional flows. If the stormwater line has insufficient capacity it will need to be upgraded at the full cost of the applicant.

Where an interallotment drainage easement must be created, letters of agreement from all the affected property owners shall accompany the Development Application in order to demonstrate that a suitable easement can be obtained.

The subsequent Construction Certificate will not be issued until a Registered Surveyor has prepared the easement documentation and it is lodged with LPI for registration.

12.3.1 Creation of Private Drainage Easements

Where a drainage easement must be created to facilitate a development, it is the responsibility of the applicant to negotiate with affected property owners to secure an easement.

Property owners are under no legal obligation to burden their lots with an easement for interallotment drainage unless they have been required to do so under section 88K of the Conveyancing Act 1919, or required to do so by way of a condition of development consent.

Where an easement is required to allow suitable disposal of collected stormwater runoff from the property, a letter of agreement from the affected property owner shall support the Development Application to demonstrate to Council that a suitable easement can be obtained. The Construction Certificate will not be issued until the easement has been prepared by a registered surveyor and has been lodged with LPI for registration.

12.3.2 Section 88K of the Conveyancing Act 1919 (NSW)

Where a drainage easement is not able to be obtained through a negotiation process with adjoining owners it is possible to have the matter dealt with by arbitration in the Supreme Court through section 88K of the Conveyancing Act 1919 (NSW).

O.13 Restrictions and Positive Covenants

13.1 Restriction on use of Land for Overland flow

If a property is subject to overland flow, the flowpath may need to be protected against blockage. A restriction will be required as a condition of Development Consent if the proposed development is considered to be of such a nature there is a need to highlight the site constraints to future property owners.

The restriction shall be created under section 88B of the Conveyancing Act 1919 and all associated cost shall be borne by the applicant. Proof of registration of the restriction as to user will be required prior to issue of an Occupation Certificate.

Refer to Appendix 16 – Wording for the “Restriction on use of Land”

13.1.1 Land Affected by the Restriction

The path and characteristics of the overland flow through the property shall be determined by the applicant's consulting hydraulic engineer. The area of land affected by the restriction will be determined by Council having regard to existing flowpaths, flow depths and velocities.

13.1.2 Positive Covenant For On-site Detention Systems

Public positive covenants shall be created on the titles of all lots affected by an on-site detention system to protect and ensure ongoing maintenance of the system.

13.1.3 Creating the Positive Covenant

The positive covenant shall be created under section 88E of the Conveyancing Act 1919, be binding on successive owners and using the wording provided below. Proof of registration of positive covenants will be required prior to issue of an Occupation Certificate and the release of any linen plan.

Refer to Appendix 17 – Wording for the Positive Covenant for on-site detention for the wording of Positive Covenant for on-site detention.

13.2 Maintenance of Pump-out Systems

In the event that a pump out system has been approved by Council for disposal of seepage from the property, a public positive covenant will need to be executed and registered against the title of the lot requiring ongoing maintenance and repair of the pump.

Refer to Appendix 18 – Wording for the Positive Covenant for Pump-out Systems. for the wording of Positive Covenant for Pump-out Systems.

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Appendix 1 – Design Rainfall Intensities and IFD Data for Lane Cove

Rainfall Intensities in mm/hr for Lane Cove Council Municipality								
Duration		1yr	2yr	5yr	10yr	20yr	50yr	100yr
5	minutes	96.80	124.00	157.40	176.40	202.00	235.00	259.90
10	minutes	74.30	95.50	122.00	137.30	157.70	184.10	204.20
15	minutes	62.20	80.10	103.10	116.40	134.00	157.00	174.50
20	minutes	54.20	70.00	90.60	102.50	118.30	138.90	154.60
25	minutes	48.50	62.70	81.40	92.40	106.70	125.60	139.90
30	minutes	44.10	57.10	74.40	84.50	97.80	115.20	128.50
35	minutes	40.60	52.60	68.70	78.10	90.50	106.80	119.20
40	minutes	37.80	49.00	64.00	72.90	84.50	99.80	111.40
45	minutes	35.40	45.90	60.10	68.50	79.50	93.90	104.90
50	minutes	33.30	43.30	56.70	64.70	75.10	88.80	99.20
55	minutes	31.60	41.00	53.80	61.40	71.30	84.30	94.30
1	hours	30.00	39.00	51.20	58.50	67.90	80.40	89.90
2	hours	19.80	25.70	34.00	39.00	45.40	53.90	60.40
3	hours	15.40	20.00	26.60	30.40	35.50	42.20	47.30
6	hours	10.00	13.00	17.30	19.80	23.20	27.60	31.00
12	hours	6.49	8.48	11.30	13.00	15.20	18.20	20.40
1	days	4.26	5.58	7.48	8.63	10.10	12.10	13.60
2	days	2.76	3.61	4.86	5.64	6.62	7.94	8.95
3	days	2.07	2.71	3.67	4.25	5.00	6.00	6.78

PART O: STORMWATER

IFD Coefficients For Lane Cove

List of coefficients to equations of the form.

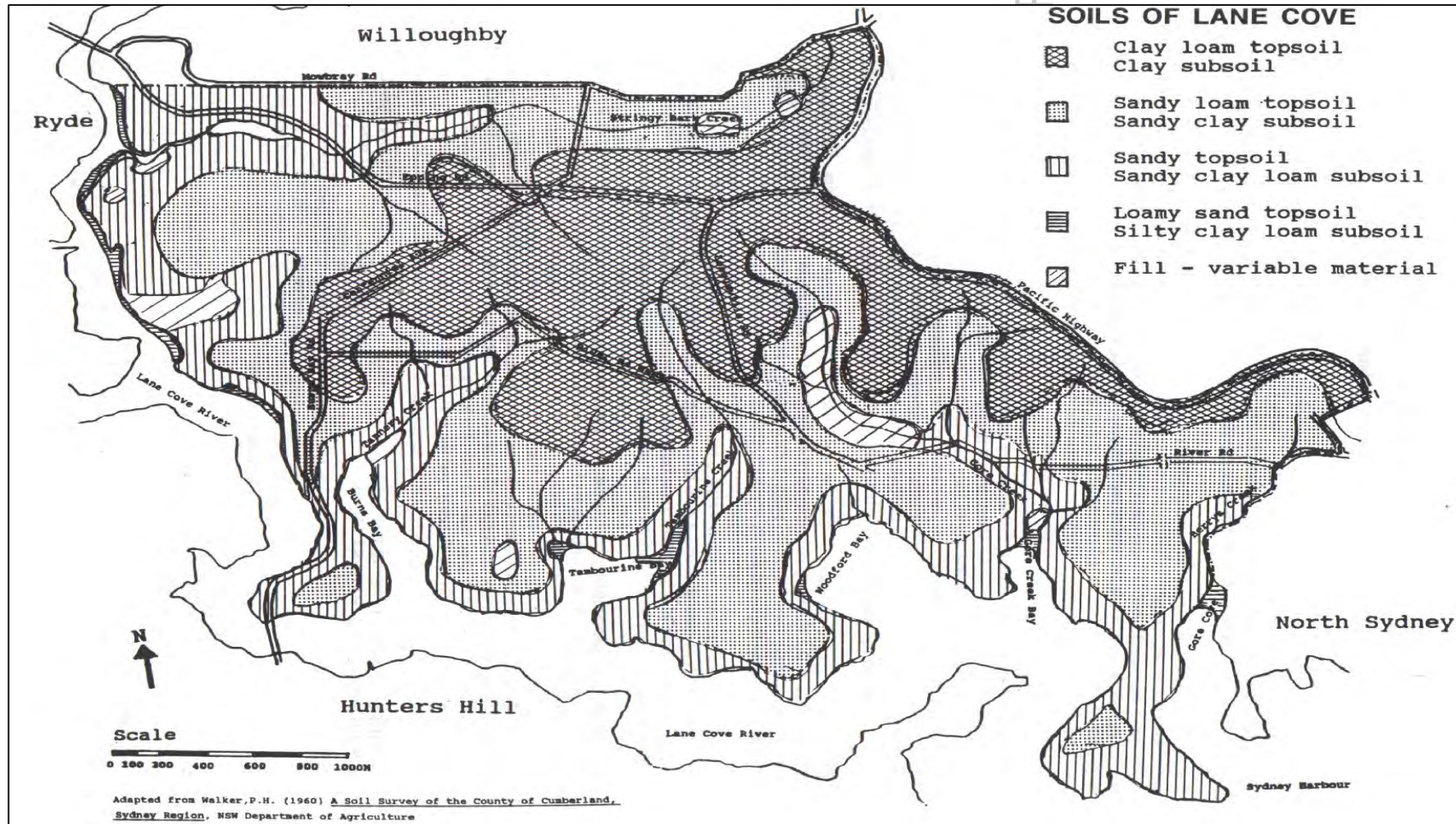
$$\ln(I) = A + B\{\ln(T)\} + C\{\ln(T)\}^2 + D\{\ln(T)\}^3 + E\{\ln(T)\}^4 + F\{\ln(T)\}^5 + G\{\ln(T)\}^6$$

T = Time (hr),

I = Intensity (mm/hr)

Return Period (years)	A	B	C	D	E	F	G
1	3.4018	-0.5821	-0.0329	0.00711	0.000829	-0.0001402	-0.0000349
2	3.6628	-0.5783	-0.0342	0.00722	0.000941	-0.0001592	-0.0000357
5	3.9363	-0.05672	-0.0376	0.00749	0.001206	-0.0002281	-0.0000304
10	4.0687	-0.5610	-0.395	-0.00730	0.001415	-0.0002196	-0.0000375
20	4.2186	-0.5565	-0.0409	0.00750	0.001524	-0.0002565	-0.0000344
50	4.3869	-0.5510	-0.0425	0.00751	0.001668	-0.0002723	-0.0000357
100	4.4991	-0.5475	-0.0433	0.00763	0.001712	-0.0002925	-0.0000330

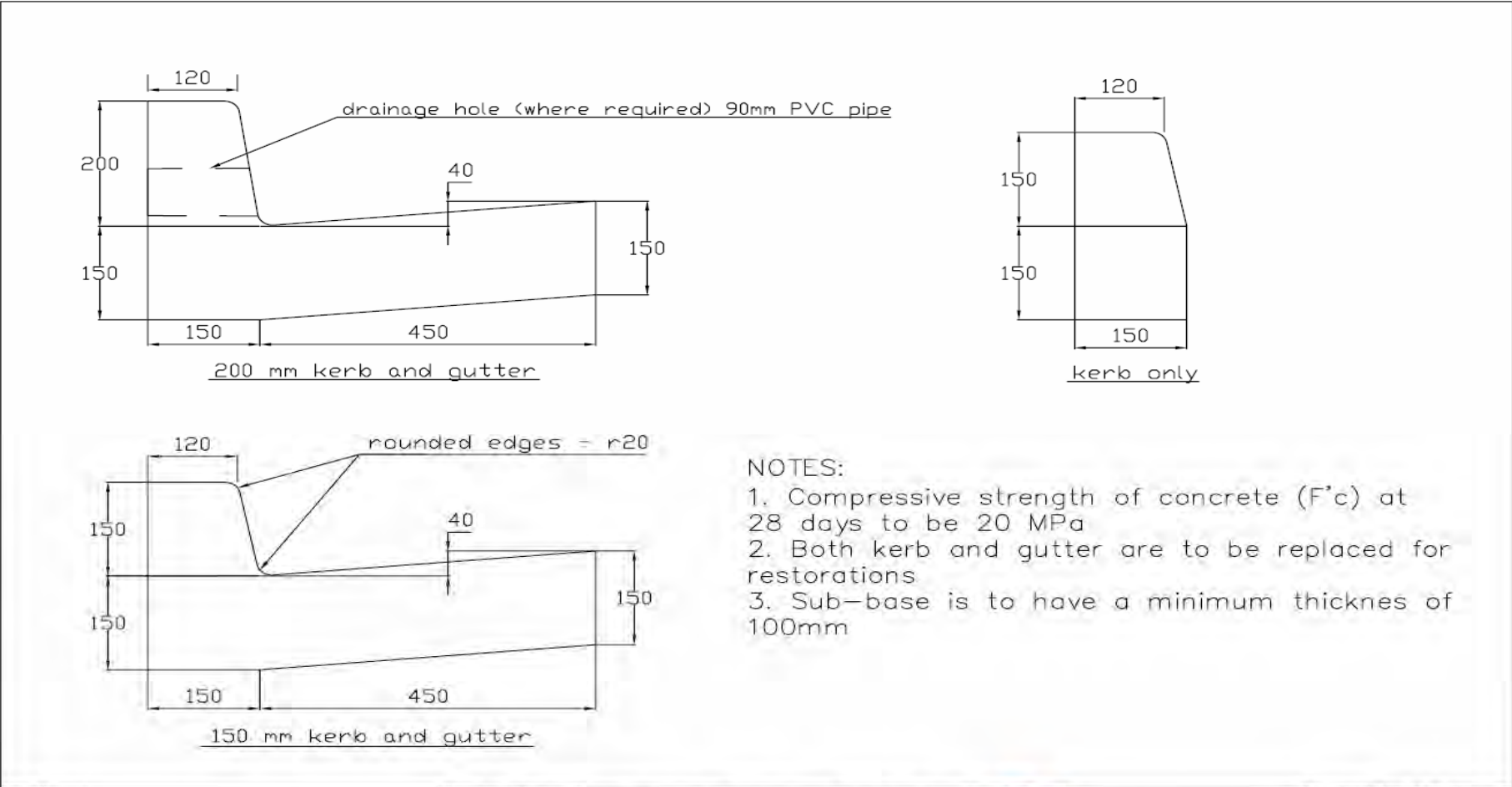
Appendix 2 – Map - Soils of Lane Cove



PART O: STORMWATER

Appendix 3 – Standard Drawings For Standard Kerb And Gutter

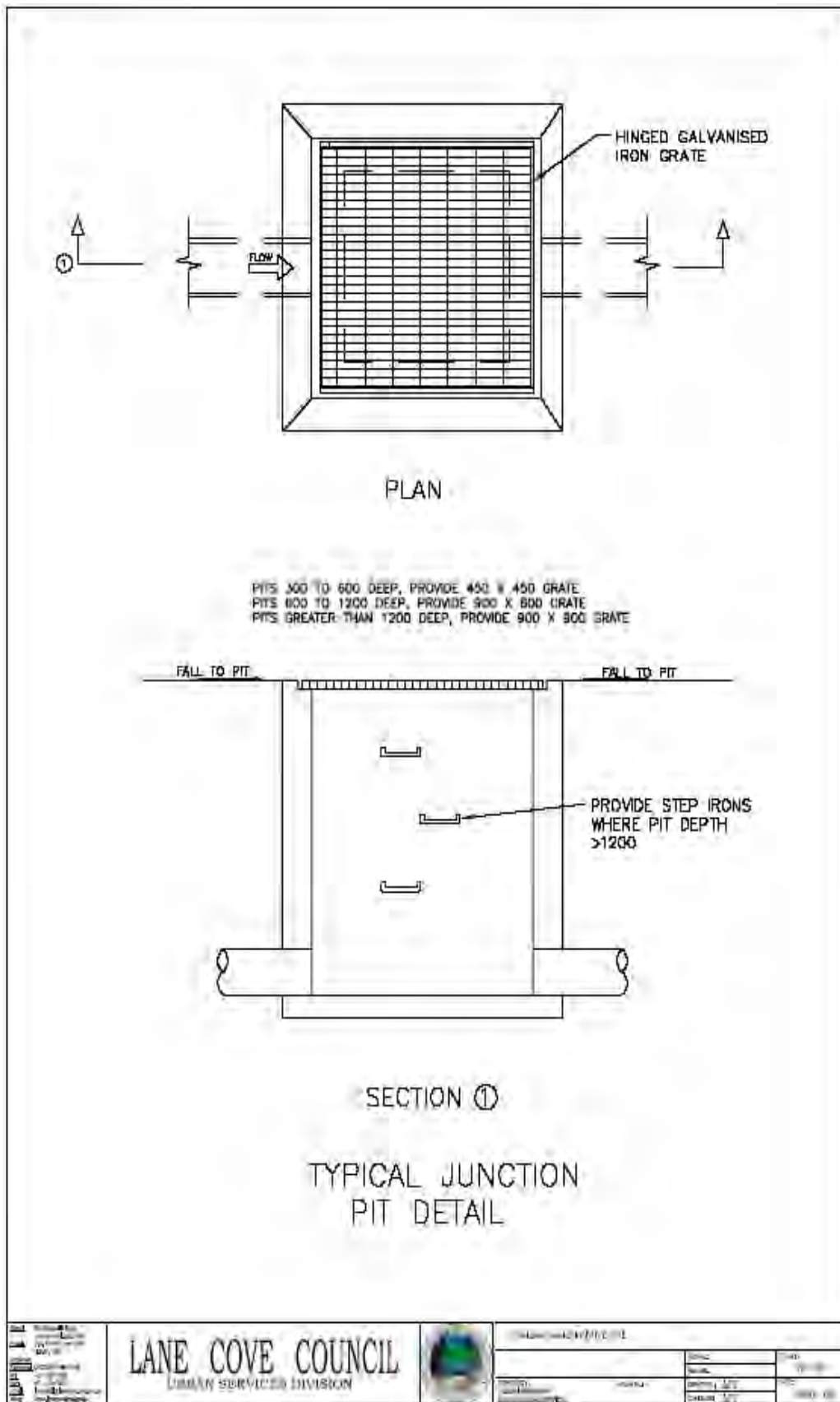
PART O: STORMWATER



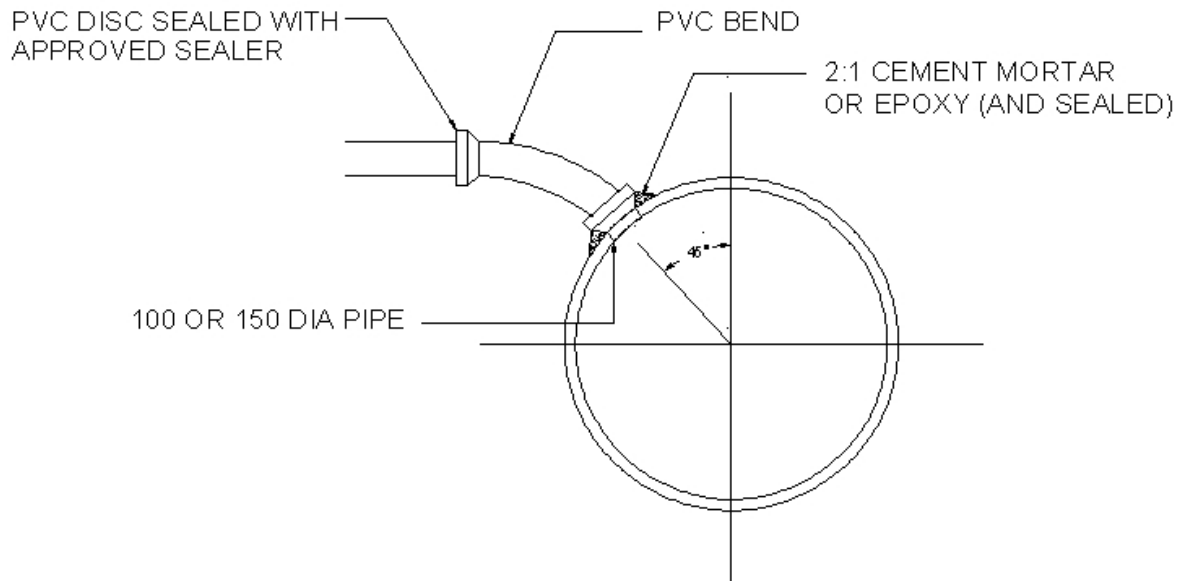
- NOTES:
1. Compressive strength of concrete (F'c) at 28 days to be 20 MPa
 2. Both kerb and gutter are to be replaced for restorations
 3. Sub-base is to have a minimum thickness of 100mm

		44 Longwood Road Lane Cove NSW 1509 PO Box 201 Lane Cove NSW 1508			Lane Cove Council URBAN SERVICES DIVISION		Standard Kerb & Gutter Details	
APPROVED: [Signature] DATE: 20/03/2010		APPROVED: [Signature] DATE: 20/03/2010			APPROVED: [Signature] DATE: 20/03/2010		DRAWN BY: RG CHECKED BY: MT DATE: MAR '05	

Appendix 4 – Drawing for Standard Junction Pit



Appendix 5 – Connection to Council Drainage Line



CONNECTION OF DRAINAGE LINES TO KERB & R.C. PIPE

THE PVC STORMWATER PIPE SHALL BE PIERCED BY A NEAT OPENING AS SHOWN TO ALLOW THE CONNECTION OF 100 Dia OR 150 Dia JUNCTION OR BEND WHICH SHALL NOT PROTRUDE BEYOND THE INNER SURFACE OF THE STORMWATER PIPE. THE INTERNAL JUNCTION SHALL BE SMOOTHLY FINISHED.

(a) CONNECTIONS TO BE MADE AT 45 DEGREES WHERE POSSIBLE.

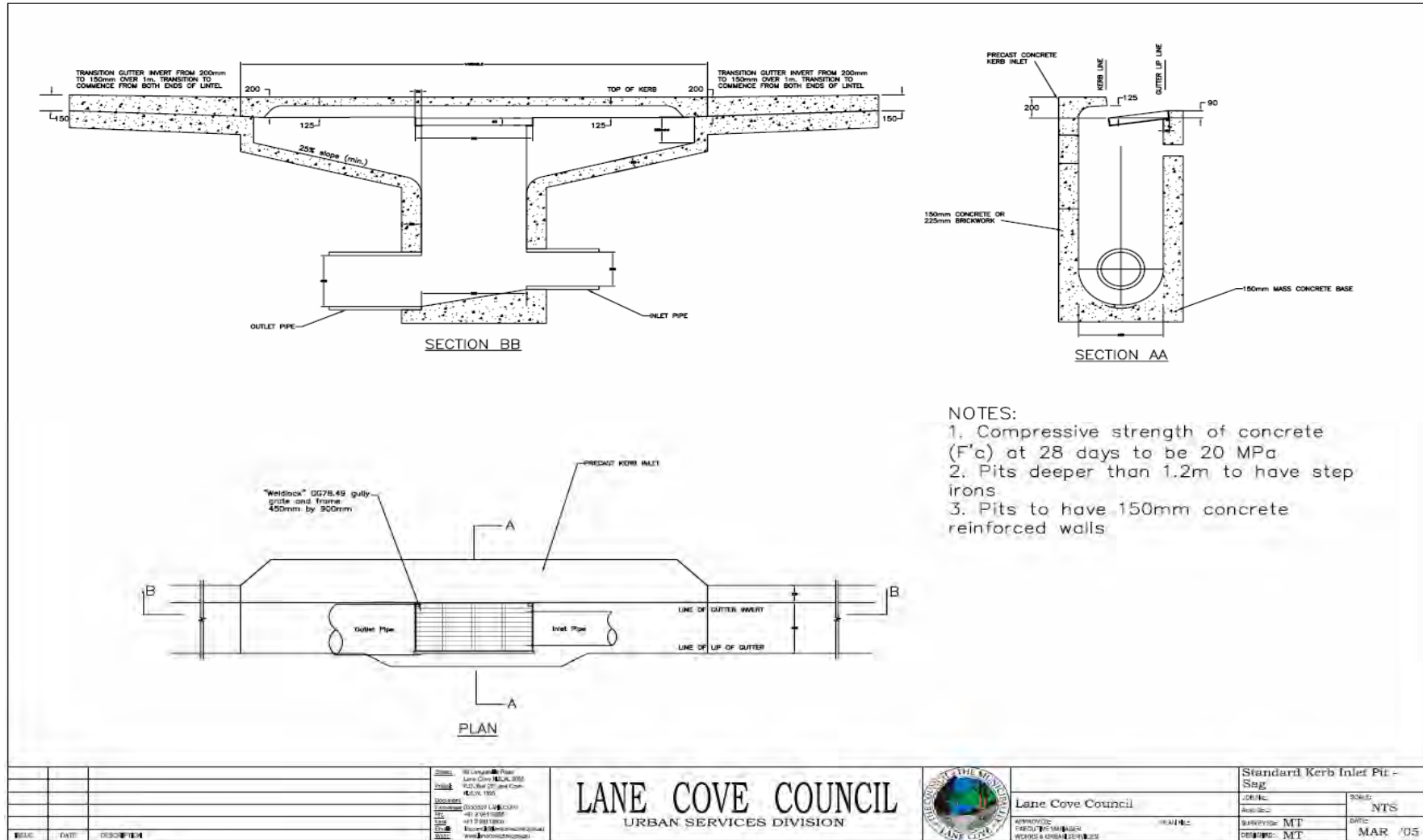
(b) STANDARD BELL TYPE CONNECTIONS ARE THE PREFERRED METHOD OF CONNECTION.

(c) COUNCIL SHALL INSPECT AND APPROVE THE EXPOSED CONNECTION POINT PRIOR TO CONNECTION.



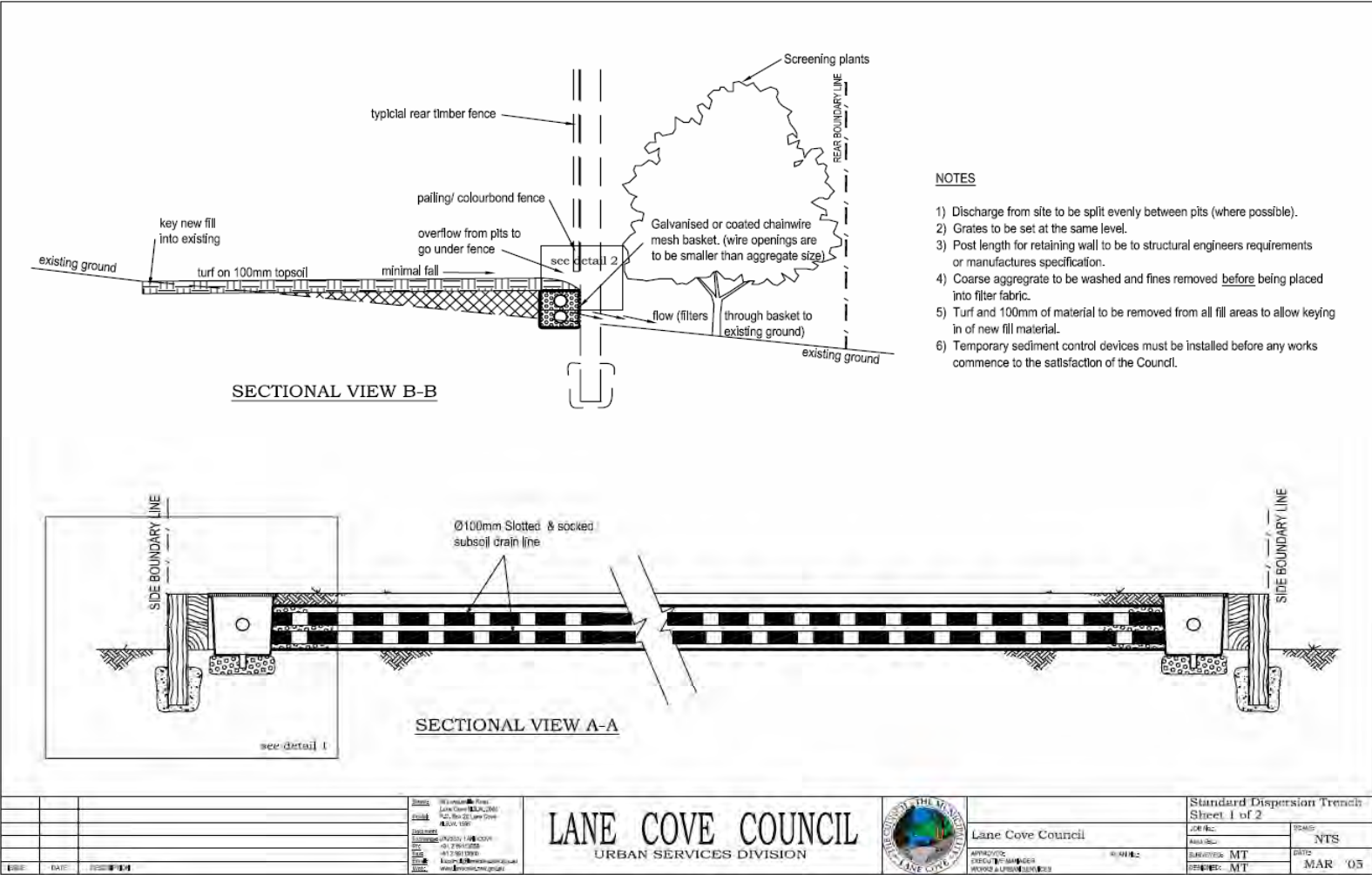
(d) STANDARD INSPECTION FEE SHALL BE MADE PRIOR TO APPROVAL.

Appendix 6 – Drawing for Standard Kerb Inlet Pit

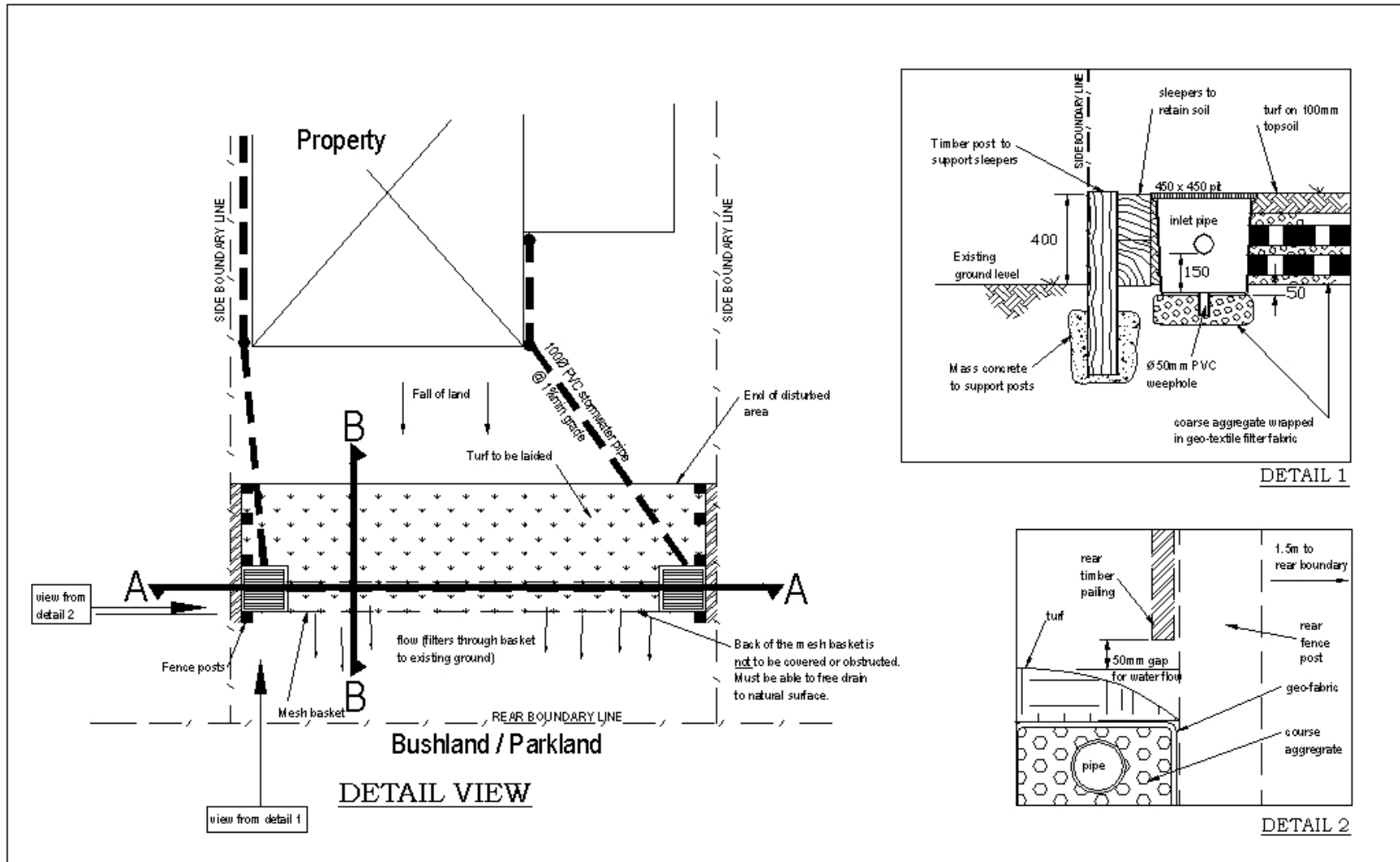


PART O: STORMWATER

Appendix 7 – Typical Detail for Stormwater Dispersal Trench



PART O: STORMWATER

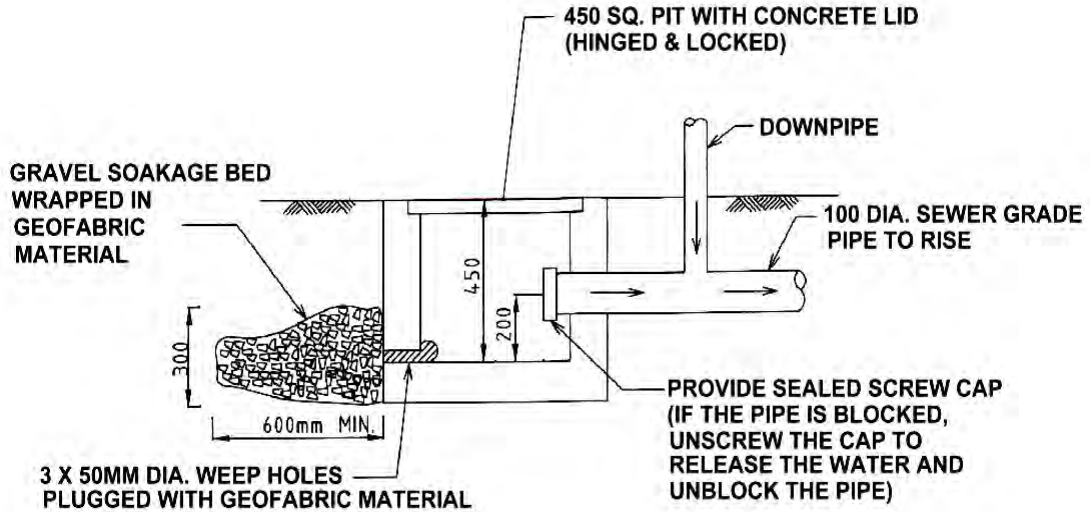


NO	DATE	DESCRIPTION

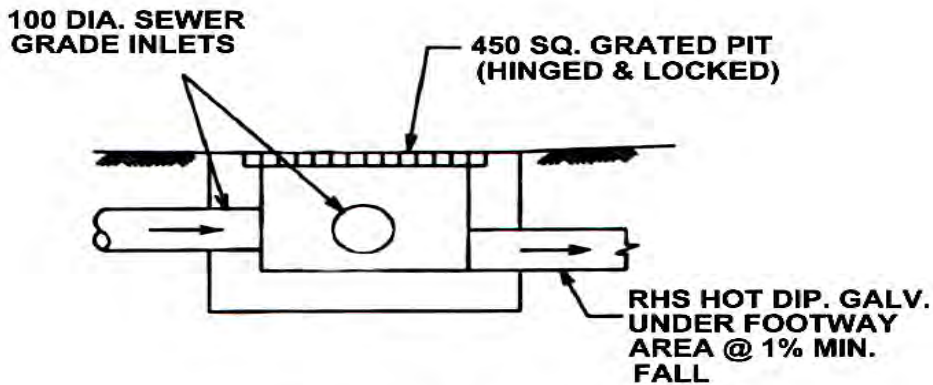
LANE COVE COUNCIL
URBAN SERVICES DIVISION

Standard Dispersion Trench Sheet 2 of 2	
APPROVED: CITY COUNCIL MEMBER -URBAN SERVICES	DATE: MAR '08
DESIGNED: DMT	CHECKED: DMT
PROJECT NO: LANE COVE DEVELOPMENT	SCALE: N.T.S.

Appendix 8 – Typical Details for Cleaning Eye and Isolation Pit



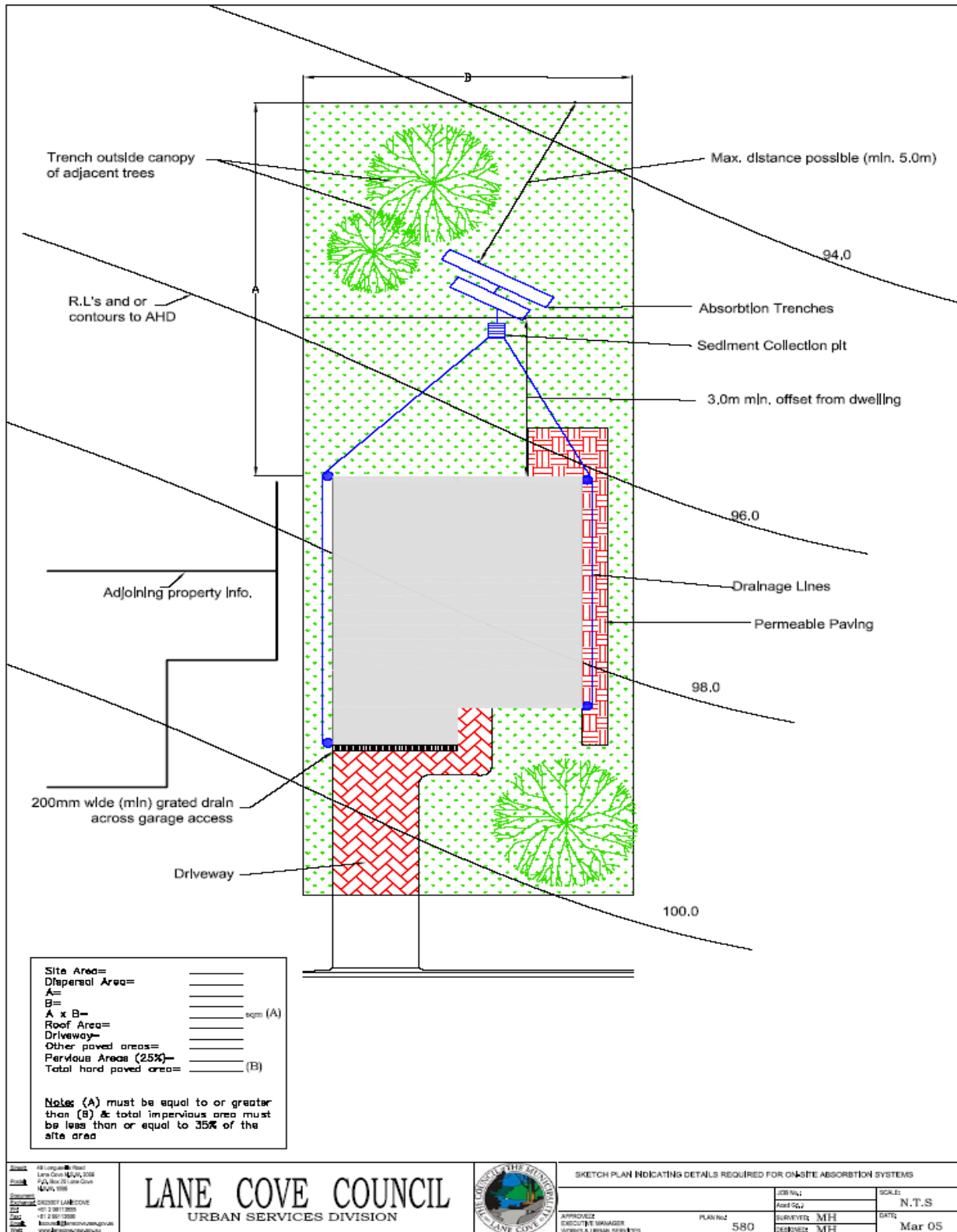
TYPICAL DETAIL OF CLEANING EYE PIT



ISOLATION PIT

PART O: STORMWATER

Appendix 9 – On-site Absorption Standard Detail and Calculation Sheet

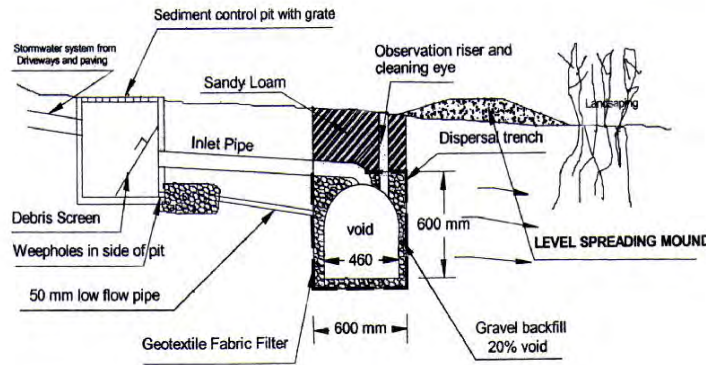




**LANE COVE COUNCIL
CALCULATION SHEET FOR ON-SITE ABSORPTION**

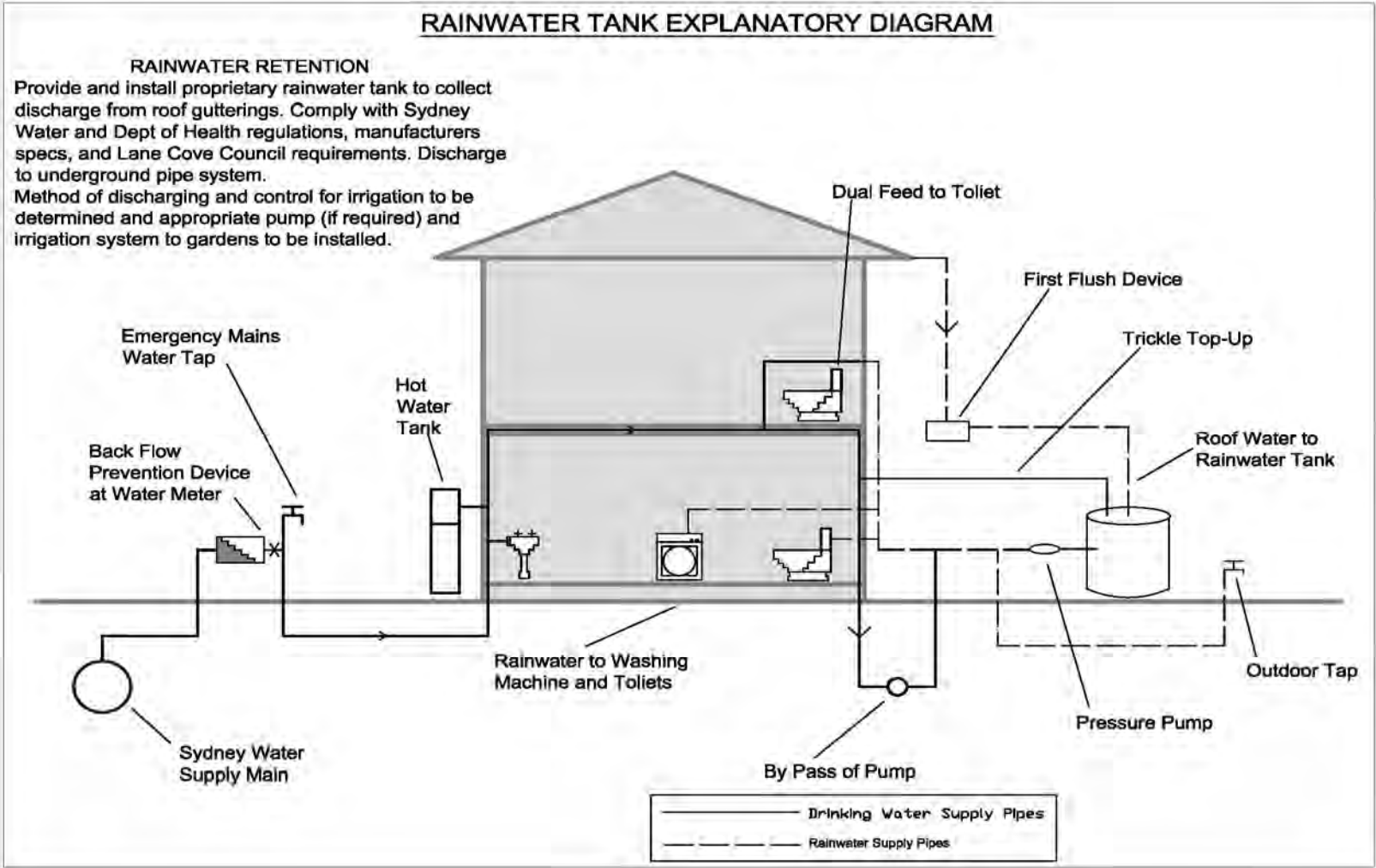
ADDRESS: _____

Total Site Area	<input type="text"/>	m² (a)
Area Draining to Dispersal Trench	<input type="text"/>	m² (b)
Area Percentage <small>b/a x 100 (Must be less than 35% of site area unless combined absorption / charged line drainage system)</small>	<input type="text"/>	%
Area available for dispersal <small>(Must be 3 metres from dwelling and a Minimum of 5 metres from down-slope boundary)</small>	<input type="text"/>	m²
Rainfall Intensity		
For 1 in 5 year 20 min Storm All zones 90.6 mm/h (30.2) mm	<input type="text" value="30.2"/>	mm (c)
Volume of Runoff (b) x (c)	<input type="text"/>	L (d)
Storage Required (d) / 1000	<input type="text"/>	m³ (e)
Length of Trench required Volume of 410 Jumbo = 0.175m ³ Volume of gravel in 600 x 600 trench with 20% void = 0.013 m ³ /m Total area available volume of trench	<input type="text" value="0.212"/>	m³/m (f)
Length of Trench (e) / (f)	<input type="text"/>	m



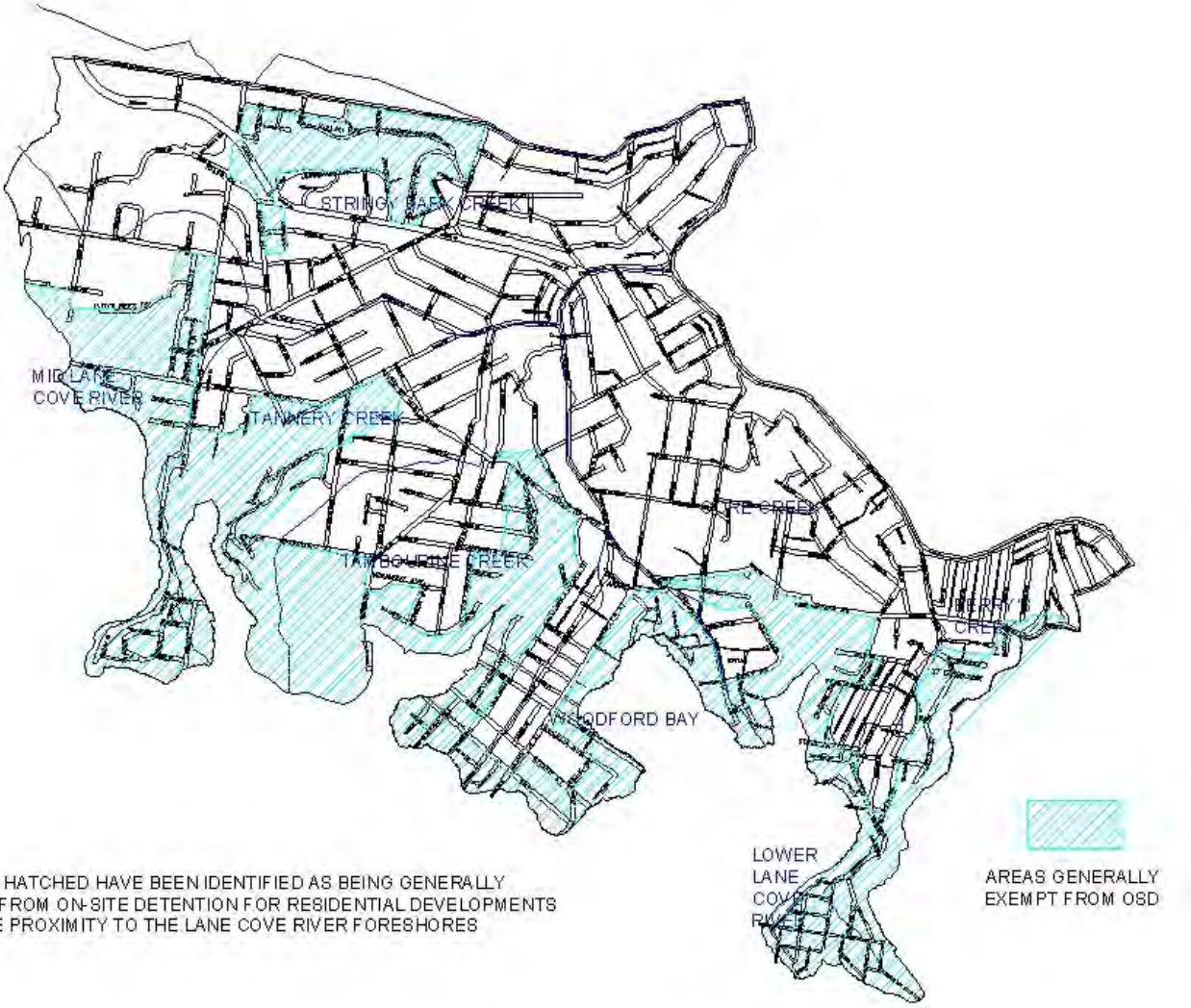
Typical detail of dispersal trench sediment control and level spreader

Appendix 10 – Rainwater Tank Diagram



PART O: STORMWATER

Appendix 12 – Map - OSD Exclusion and Catchment Map



PART O: STORMWATER

Appendix 13 – OSD Checklist for DA Submission

ON-SITE STORMWATER DETENTION CHECKLIST



This form is to be used to determine if OSD will be required for residential developments and must be completed before the submission of any application.

PART A. Address and type of proposed development

Street No.....Street Name.....
 Lot No..... DP No..... Suburb.....

Type of development (tick relevant box).

- | | |
|--|--|
| <input type="checkbox"/> Duplex Residential Building | <input type="checkbox"/> Multiple Occupancy Residential (villa, flats etc) |
| <input type="checkbox"/> Extensions | <input type="checkbox"/> Single Residential |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> Garages |
| <input type="checkbox"/> Other..... | |

PART B. Exemption for discharge directly to Lane Cove River

Is the site within the designated exclusion zone along the foreshore of the Lane Cove River. (tick one only).
 (Confirm with Council’s Urban Services Division).

- No Yes

If yes, OSD is not required, If no go to part C

PART C. Exemption for minimum allowable size of site impervious area

- | | |
|--|----------------|
| (a) Site Area | m ² |
| (b) Existing impervious area to be removed | m ² |
| (c) Existing impervious to be retained | m ² |
| (d) Proposed new impervious area: | |
| (d1) Roof area | m ² |
| (d2) Driveways | m ² |
| (d3) Other paved area | m ² |
| (d4) Supplementary areas (i.e Pervious paving area x 25%) | m ² |
| (e) Total proposed NEW impervious area (d1) + (d2) + (d3) + (d4) – (b) = | m ² |
| (f) Total post development impervious area (c) + (d1) + (d2) + (d3) + (d4) = | m ² |
| (g) Post development impervious area (f) x 100 / (a) = | % |

OSD will not be required if one or more of the following are satisfied

- (e) is less than 50m² increase in site cover and (f) is less than 65% of the total site area.
 (only applicable for alterations and additions)
- (g) is less than 35% of site area

Note: If OSD is not required, then the collected stormwater runoff is to be directed to a 600x600mm environmental pollution control pit with sediment collection sump and drainage filter, prior to discharging to an approved outlet. The control pit is to be designed as a gross pollutant trap to remove pollutants from the stormwater flow.

PART D. Special Consideration

Where the applicant believes that special consideration should be given for exemption from OSD, even though Parts A, B, C, or D are not satisfied, they may request exemption from OSD. Consideration may only be given on reasonable grounds and should be discussed with Council’s Development Engineer.

Appendix 14 – OSD Calculation Sheet



ON-SITE DETENTION CALCULATION SHEET

DEVELOPMENT TYPE: _____

ADDRESS: _____

Site Area (m²) _____ (A)

Total Impervious Area (roofs, driveways, hardstand etc) (m²) _____ (B)

Total Area draining to the Storage Facility (m²) (impervious and pervious areas) _____ (C)

New Impervious Area bypassing the Storage Facility _____ (D)

$$\frac{(B)+(D)}{(B)} = 1. \underline{\hspace{2cm}} \quad (E)$$

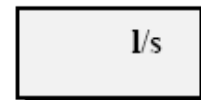
cannot be greater than 1.25.

Permitted Site Discharge (PSD) rate per m²

If (D) = 0 then PSD = 0.014 l/sec/m²

If (D) ≠ 0 then PSD = 0.014x(E)^{-1.37} l/sec/m² _____ (F)

PERMITTED SITE DISCHARGE (l/s) (C) x (F)

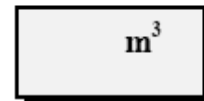


Storage Volume per m²

(G) = 0.0255 m³/m² for all Catchments

0.0255 (G)

SITE STORAGE REQUIREMENT (m³) ((C) + (D)) x (G)



OUTLET CONTROL - using a Sharp Edged Orifice Plate

Height Difference between top water level and Centre of Orifice (m) _____ (H)

ORIFICE DIAMETER (mm)

$$\underline{\hspace{2cm}} \text{ mm} = 21.9 \sqrt{\frac{PSD}{\sqrt{H}}}$$

Should pipe and pit losses be used to control outflow, the calculations are to be attached.

PART O: STORMWATER

Appendix 15 – OSD Certification Form



LANE COVE COUNCIL

ON-SITE STORMWATER DETENTION CERTIFICATION SHEET

Address DA Number
 Required Volumem³ Permissible Site Dischargel/sec

Type of Detention System

Tank	Surface Basin
Description Buffa tank, circular concrete Precast concrete, Brick or block wall Other	Description, Grassed, Landscaped, Paved, Retaining walls:- sleeper, brick, pine log, fill Other

Dimensions Lengthm Width m Average lengthm Av Widthm
 Depthm Average Depthm Max Depthm

If over 1.2 m deep are step irons provided yes/no Has adequate fencing been provided yes/no
 Access to tank grate lid other
 (can it be easily lifted) yes/no

Actual Volume Attained m³

Overflow type: Pipe Weir Surface grate
 Where is it directed

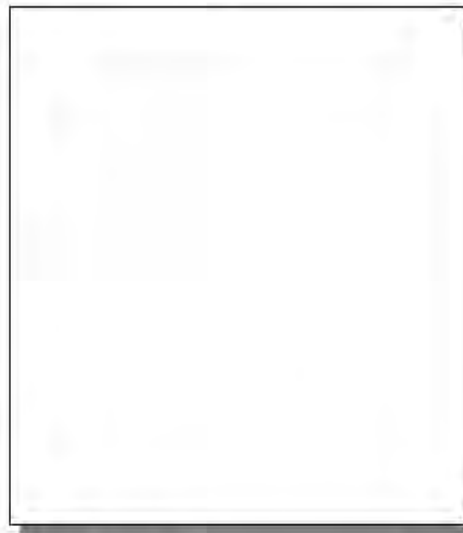
Outlet Control Stainless Steel orificemm dia
 Galvanised plate orificemm dia
 Othermm dia

Depth from centre of orifice to overflow..... mm

Outflow Attainedl/sec

Outlet Pipe: Where is it directed, kerb, pipe
 Other.....

Is connection in accordance with Council
 Requirements yes/no



Debris Screen Maximesh Is a handle provided yes/no
 Other..... Is it readily removable without tools yes/no
 Is screen fitted exclusively over outlet yes/no

Silt Trap Dimensions Widemm; Longmm Deepmm Weepholes yes/no
 Has subsoil drainage been provided to outlet line yes/no

Is there any uncontrolled flow from the impervious areas on the site - yes/no if yesm²
 Can access be easily gained to the system for inspection purposes yes/no

COMMENTS

I HEREBY CERTIFY THE ABOVE ON-SITE DETENTION STORAGE FACILITY HAS BEEN
 CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS

NAME:SIGNATURE:DATE

QUALIFICATIONS:

PART O: STORMWATER

Appendix 16 – Wording for the “Restriction on use of Land”

Full and free right for the Council of the Lane Cove Council to convey stormwater in any quantity across the surface of the land being the site of the restriction hereby created (hereinafter called “the said land”) and the registered proprietor from time to time of the lot herein burdened (hereinafter referred to as “the proprietor” which expression where herein used shall be deemed to include the successors and assigns of the proprietor) WILL NOT:

- a) Erect, construct or place upon the said land any fence except a fence of a permeable nature without the prior consent in writing of the Lane Cove Council; nor
- b) Erect, construct or place upon the said land or permit or suffer to be erected constructed or placed upon the said land any building, structure, retaining wall or rockery nature without the prior consent in writing of the Lane Cove Council; nor
- c) Otherwise alter or permit or suffer any alteration to the surface level of the said land nature without the prior consent in writing of the Lane Cove Council.

NAME OF THE BODY EMPOWERED TO RELEASE, VARY OR MODIFY THE
RESTRICTION REFERRED TO IN THE ABOVE-MENTIONED PLAN LANE COVE COUNCIL.

Appendix 17 – Wording for the Positive Covenant for on-site detention

Terms of positive covenant referred to in the abovementioned plan.

The proprietors of the lots burdened will in respect to the on site stormwater detention system (which expression shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater, as detailed on the plans approved by Council Development Consent Number:) (hereinafter called the system):

- a) Permit stormwater to be temporarily detained by the system.
- b) Keep the system clean and free from silt, rubbish and debris.
- c) Maintain and repair the system so that it functions in a safe and efficient manner.
- d) Replace, repair, alter and renew the whole or parts of the system within the time and in the manner specified in a written notice issued by the Council.
- e) Carry out the matters referred to in paragraphs (b), (c) and (d) at the proprietor's expense.
- f) Not make any alterations to the system or elements thereof without prior consent in writing of the Council.
- g) Permit the Council or its authorised agents from time to time upon giving reasonable notice (but at any time and without notice in the case of an emergency) to enter and inspect the land for compliance with the requirements of this clause.
- h) Comply with the terms of any written notice issued by the Council in respect of the requirements of this clause within the time stated in the notice.

In the event of the proprietor failing to comply with the terms of any written notice served in respect of the matters in clause 1 of the Council or its authorised agents may enter with all necessary equipment and carry out any work required to ensure the safe and efficient operation of the system and recover from the proprietor the cost of carrying out the work, and if necessary, recover the amount due by legal proceedings (including legal costs and fees) and entry of a covenant charge on the lot/s burdened under section 88F of the Conveyancing Act 1919,. In carrying out any work under this clause, the Council shall take reasonable precautions to ensure that the land is disturbed as little as possible.

NAME OF AUTHORITY EMPOWERED TO RELEASE, VARY OR MODIFY ALL

OF THE EASEMENTS AND COVENANT REFERRED TO IN THE ABOVE-MENTIONED PLAN.
LANE COVE COUNCIL

Appendix 18 – Wording for the Positive Covenant for Pump-out Systems.

The Registered Proprietor will at his own expense well and sufficiently maintain and keep in good and substantial repair and working order in accordance with dimensions approved by Lane Cove Council any pump out drainage system (which expression shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, fittings, tanks, chambers and pumps designed to control water) (herein after called “the system”) which exists from time to time on the land.

The maintenance shall include the checking of the condition of the pumps by pumping water for at least 5 minutes every 6 months and maintaining a log book of these periodic checks.

Permit officers of Lane Cove Council to enter the land to view the logbook and the condition of the pumps twice a year following two days notice.

Where the Registered Proprietor of the burdened lot fails to maintain the system in accordance with the above and fails to comply with any written request of Lane Cove Council within such reasonable time as nominated in said respect, the Registered Proprietor shall meet any reasonable costs incurred by Lane Cove Council in carrying out works necessary to reinstate satisfactory performance of the system.

The term “Registered Proprietor” shall include the Registered Proprietor of the land from time to time, and all his heirs, executors, assigns and successors in title to the land and where there are two or more registered proprietors of the land the terms of this covenant shall bind all those registered proprietors jointly and severally.

NAME OF AUTHORITY EMPOWERED TO RELEASE, VARY OR MODIFY ALL
OF THE EASEMENTS AND COVENANT REFERRED TO IN THE ABOVE-MENTIONED PLAN.
LANE COVE COUNCIL

Part P Telecommunications Facilities



P

- P.1 Introduction
- P.2 Where does this plan apply?
- P.3 To what facilities does this plan apply?
- P.4 What is the purpose of this plan?
- P.5 What are the objectives of this plan?
- P.6 How does this plan relate to other plans/legislation?
- P.7 Does your proposal need council consent?
- P.8 Making an application
- P.9 Public notification/consultation
- P.10 Design Controls
- P.11 Conditions of DA Approval
- P.12 Acknowledgements

Appendix 1

Appendix 2

Appendix 3

Appendix 4

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1 Introduction

This DCP applies to telecommunications and radio communications infrastructure (including broadcasting infrastructure covered under the Telecommunications Act 1997 and the Radio communications Act 1992).

Council is the consent authority for facilities that require development consent under the terms of the Environmental Planning and Assessment Act 1979. These are the facilities that are referred to as “not low-impact facilities”.

Council does not have regulatory control over “low-impact facilities”. These are facilities described in the Telecommunications (Low-impact Facilities) Determination 1997 (LIF Determination - see Appendix 1) which exempts low-impact facilities from State and Territory planning and environmental laws.

This DCP provides:

- controls for the siting, design and installation of telecommunications and radio communications facilities that require development consent from Council, and
- guidelines for telecommunications carriers for the siting, design and installation of “low-impact” facilities.

2 Where does this plan apply?

This plan applies to all land within the Lane Cove Municipality.

3 To what facilities does this plan apply?

This plan applies to any fixed transmitter, its supporting infrastructure and ancillary development under the following legislation:

- Telecommunications (Low-impact Facilities) Determination 1997 [LIF Determination];
- Telecommunications Act 1997, and
- Radiocommunications Act 1992.

The DCP does not apply to temporary emergency services.

For guidance on the nature of facilities classified as “Low-impact” under the LIF Determination 1997, see Appendix 1.

4 What is the purpose of this plan?

The purpose of this plan is:

- a) to provide a consistent and integrated planning framework that addresses the community's interests in the effective and efficient provision of telecommunications and radiocommunications infrastructure so that it achieves environmental, economic and social sustainability in the short, medium and long term;
- b) to provide a consistency of approach which benefits carriers, community and councils;
- c) to balance the needs of different stakeholders, including the community/industry/local, state and federal governments, and
- d) to provide guidance to carriers about council's requirements for:
 - I. site selection
 - II. lodging an application
 - III. conducting community consultation.

5 What are the objectives of this plan?

The objectives of this plan are:

Social

- 1 to apply a precautionary approach to the deployment of radiocommunications infrastructure;
- 2 to minimise EMR exposure to the public;
- 3 to avoid community sensitive locations;
- 4 to ensure that the general public and local communities have access to telecommunications technology;
- 5 to achieve equity for the various stakeholders by endeavouring to balance their various needs;
- 6 to enable members of the public to adequately identify infrastructure and the agencies responsible for them;
- 7 to provide mechanisms by which information can be disseminated to ensure that the community is adequately informed and empowered to participate in the planning/decision-making process.

Environmental

1. to help implement principles of urban design in respect to telecommunications and radiocommunications infrastructure;
2. to promote good industrial design of infrastructure;
3. to provide infrastructure that is visually compatible with surrounding character and locality/visual context with particular regard to heritage buildings/areas and cultural

icons;

4. to minimise adverse impacts on the natural environment;
5. to assess whether the proposed infrastructure is consistent with the amenity of the area;
6. to restore the site after discontinuation or removal of infrastructure;

Economic

- 1 to identify the type of land use areas suitable for infrastructure in a local government area;
- 2 to accommodate the planning requirements of new technology;
- 3 to provide equitable availability of locations to carriers;
- 4 to assess whether the proposed infrastructure is consistent with permitted development in adjacent areas;
- 5 to ensure reasonable access to telecommunications technology;
- 6 to provide certainty for stakeholders and a consistent approach to the implementation/assessment of telecommunications infrastructure, and

Administrative

- 1 to ensure that Council obtains information about existing and proposed infrastructure to assist with strategic planning.

6 How does this plan relate to other plans/legislation?

6.1 Commonwealth legislation

Telecommunications Act 1997

The Telecommunications Act establishes a regime for Carriers' rights and responsibilities when inspecting, maintaining or installing telecommunications facilities.

This DCP clarifies the expectations of Council on carriers who operate under the Act.

Radiocommunications Act 1992

The Radiocommunications Act 1992 regulates radiocommunications transmitters. It provides for the licensing of radiocommunications equipment and applies mandatory standards to its use.

his DCP clarifies the expectations of Council on carriers who operate under the Act.

Telecommunications Code of Practice 1997

The Telecommunications Code of Practice 1997 establishes obligations on carriers in

land-access situations such as when inspecting land, installing low-impact facilities and maintaining facilities. It also requires carriers to comply with recognised industry codes and standards.

This DCP clarifies and standardises the expectations of Council in respect to land-access situations.

Telecommunications (Low-impact Facilities) Determination 1997

The Telecommunications (Low-impact) Facilities Determination 1997 exempts telecommunications infrastructure classified as “low-impact” from compliance with state and local government regulations. This classification relates primarily to visual appearance and size, rather than emissions.

This DCP applies to all telecommunications facilities. While the DCP does not have the authority to override the LIF Determination, it nevertheless provides advice to carriers about the expectations of Council and requests their voluntary co-operation.

ACIF C564:2004 Deployment of Mobile Phone Network Infrastructure Industry Code (ACIF, 2004)

This Code (Appendix 2) derives its authority from the Telecommunications Act 1997 and applies only to telecommunications carriers and their infrastructure. It does not apply to other broadcasters, councils or other agencies. It requires carriers to apply a precautionary approach to site selection and the design and operation of infrastructure; to consult with councils and communities regarding siting; to provide information to the public and to implement a complaints handling procedure. It applies to both low-impact and not-low-impact facilities.

This DCP broadens the scope of the ACIF Code by applying consistently not only to carriers and their agents, but also to builders and operators of all EMR-emitting infrastructure, including those operating under the Radiocommunications Act 1992.

6.2 New South Wales State Government

Environmental Planning and Assessment (EPA) Act 1979 (as amended)

The EPA Act 1979 sets out Council's obligations to achieve environmental, economic and social sustainability.

Local Government Act 1993 (as amended)

This DCP assists Council to fulfil its obligations under the Local Government Act 1993 by having regard to the principles of ecologically sustainable development, including application of the precautionary principle.

Department of Planning Draft Telecommunications Guidelines

The Department of Planning has Draft Telecommunications Guidelines on exhibition. The purpose of these guidelines is to provide advice on appropriate and consistent planning controls for telecommunications facilities across the state. This Section of the DCP will be reviewed when the Department of Planning adopts these guidelines.

6.3 New South Wales Local Government

Council's planning instruments, codes, policies and statutory requirements

Under Lane Cove Local Environmental Plan 2009, consent for certain types of telecommunications and radiocommunications facilities is required.

6.4 Relevant Australian Standards

Facilities are required under this DCP to comply with relevant Australian standards.

7 Does your proposal need council consent?

By law, new infrastructure requires Council approval unless it is exempted by other legislation such as the LIF Determination (refer to appendix 1), State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 or State Environmental Planning Policy (Infrastructure) 2007.

Development consent is not required for low-impact facilities. However, as part of a carrier's consultation obligations, Council requires a written submission demonstrating compliance with the relevant sections of the ACIF Code and provision of the information listed in the checklist at Appendix 3.

8 Making an application

8.1 Lodgement Requirements

- a) The infrastructure provider is to provide information as requested by Council about the applicant's existing infrastructure in the area to assist with consideration of this application.
- b) The applicant is to provide Council with:
 - I. its rationale for deciding whether the proposal is a 'low-impact' facility;
 - II. the estimated number of users local to Lane Cove who will benefit from the facility
 - III. the number of calls to improve service in the area of the facility
 - IV. the call drop-out rate for services in the area
 - V. an EMR assessment in accordance with the ARPANSA prediction methodology and report format as described in the ACIF Code;
 - VI. a 360o prediction map of exposure levels at 1.5m above publicly accessible surfaces within 300m and listed as a likely community sensitive location at 5.1(c) in the ACIF Code, or for other sites upon request.
 - VII. the information listed in the checklist (see Appendix 3);
 - VIII. photomontage of the proposed facility in context of the location.
 - IX. the results of any community consultation process, consistent with requirements in the ACIF Code for a low-impact facility

- X. statement of environmental effects
- XI. site and locality analysis.
- c) Upon request, the applicant is to provide extra documentation such as a heritage report/impact statement, should the site be identified as located within an area of environmental significance.
- d) The Mobile providers must provide compliance evidence that indicates that exposure details contained in the application are true and accurate, consistent with the ACIF Code. Other radiocommunication infrastructure providers must provide an EMR compliance certificate as to exposure details in the application.

8.2 Site and Locality Analysis

A site and locality analysis establishes the development context by showing graphically the constraints and opportunities of the proposed site in relation to existing land uses and existing buildings in the immediate surroundings and the environment generally. It should influence the suitability of the proposed location and the design.

A site and locality analysis plan is to be submitted with all applications and should indicate in relation to the proposed site for a radius of 300 metres:

- existing vegetation
- site boundaries and dimensions
- topography
- location of existing buildings
- views to and from the proposed site; and
- location of any sensitive land use within the adjacent area.

The site and locality analysis must be to scale.

8.3 Statement of Environmental Effects

A written statement is to be prepared and must explain how the proposed radiocommunications or telecommunications facility has responded to the site analysis and the objectives of this DCP.

This statement is to demonstrate how the precautionary principle has been applied in the siting, design and operation of the proposed facility, included in Sections 5.1, 5.2 and 5.7 of the ACIF Code.

9 Public notification/consultation

- a) Development applications are to comply with Council's requirements on notification and signage.
- b) For facilities covered by the LIF Determination, the carrier is to consult with affected community, irrespective of Council boundaries, as required by the ACIF Code.

- c) The applicant is to consult with Council about a consultation strategy.
- d) Consultation must be commensurate with the anticipated impact of the facility.
- e) The applicant must make reasonable endeavours to conduct consultation in such a way that local ethnic communities are informed about the proposal and able to comment on it.
- f) For each facility, a permanent and legible weatherproof sign must be publicly visible in the immediate proximity of the facility and visible to the general public, to identify the name and contact details of the operator or site manager, consistent with the ACIF Code.
- g) For each facility, a sign must be erected notifying the intention of the carrier to erect infrastructure on site and providing the name and contact details of the carrier, consistent with the ACIF code.
- h) The applicant must provide council and any other interested party with the results of its community consultation undertaken for facilities covered by the LIF Determination.

10 Design Controls

10.1 Visual amenity

- a) Carriers are to design antennas and supporting infrastructure in such a way as to minimise or reduce the visual and cumulative visual impact from the public domain and adjacent areas.
- b) Within the local context, the infrastructure design must take account of:
 - I. colour;
 - II. texture;
 - III. form;
 - IV. bulk and scale.
- c) Infrastructure must:
 - I. be well-designed;
 - II. be integrated with the existing building structure unless otherwise justified in writing to Council;
 - III. have concealed cables where practical and appropriate;
 - IV. be unobtrusive where possible,
 - V. be consistent with the character of the surrounding area, and
 - VI. be landscaped to screen facilities where possible, using native and/or endemic floral species.

A discussion on facility design can be found in Low Impact Facilities for Better Visual Outcomes that can be accessed at www.mcf.amta.org.au

- Infrastructure must be removed when no longer being used.
- The site must be restored following construction of the infrastructure.

10.2 Co-location

- a) Co-location is the practice of locating a number of different telecommunication facilities, often owned by different carriers, on one facility or structure.
- b) Co-location may not always be a desirable option where:
 - I. cumulative emissions are a consideration;
 - II. it may be visually unacceptable;
 - III. there are physical and technical limits to the amount of infrastructure that structures are able to support, or
 - IV. the required coverage cannot be achieved from the location.
- c) Carriers are to demonstrate a precautionary approach and effective measures to minimise the negative impacts of co-location.

10.3 Location

- a) The applicant is to demonstrate that, in selecting a site, it has adopted a precautionary approach in regards to minimising EMR exposures consistent with Section 5.1 of the ACIF Code.
- b) Preferred land uses (as determined by this council) include:
 - I. industrial areas;
 - II. council properties;
 - III. low-use open space, and
 - IV. commercial centres, other than neighbourhood centres.
- c) The applicant is to demonstrate particular consideration of likely sensitive land uses. Sensitive land uses may include areas:
 - I. where occupants are located for long periods of time (e.g. residences);
 - II. that are frequented by children (eg schools, child care centres), and
 - III. where there are people with particular health problems (eg hospitals, aged care facilities).

Further information can be found in the [ACIF Code](#) at Section 5.1.4.

10.4 Heritage and Environment

- a) Infrastructure proposed for areas of environmental significance (as defined in LIF Determination) require:
 - I. development consent under the LIF Determination and Council's LEP;
 - II. the applicant to avoid or minimise the visual impact of any proposed facility on the heritage significance of adjacent/adjoining/surrounding heritage items and conservation areas;
 - III. the applicant to provide a heritage report/impact statement in accordance with Council's LEP/DCP, and
 - IV. the applicant to avoid or minimise the physical impact of any proposed facility on endemic flora and fauna.

10.5 Facility physical design controls

- a) Infrastructure must be of high quality design and construction.
- b) Proposals should consider the range of available alternate infrastructure including new technologies, to minimise unnecessary or incidental EMR emissions and exposures, as required under Section 5.2.3 of the ACIF Code.
- c) The plan for the facility must include measures to restrict public access to the antenna(s). Approaches to the antenna(s) must contain appropriate signs warning of EMR and providing contact details for the facility(ies) owner/manager.
- d) The minimum requisites that shall apply where relevant are the BCA for purposes of construction and the relevant exposure levels as directed by the Australian Communications Authority (ACA). The applicant must provide Council with certification about the standards with which the facility will comply.

10.6 Facility health controls

- a) The applicant is to demonstrate the precautions it has taken to minimise EMR exposures to the public.
- b) The applicant is to provide documentation to show that the proposed facility complies with the relevant Australian exposure standard as specified by the ACA.
- c) The applicant is to provide a mapped analysis of cumulative EMR effect of the proposal (as per Section 9.0 - Making an Application).

11 Conditions of DA approval

The applicant is advised that the approval may be subject to a number of conditions, including but not restricted to the following:

- a) the applicant is responsible for the maintenance and upgrading of infrastructure and the maintenance of the site;
- b) the applicant, should any emissions other than electromagnetic radiation arise from the installation and operation of the infrastructure, is to notify Council and the EPA and to recommend a preferred strategy of amelioration;
- c) infrastructure must be removed when it is no longer in use;
- d) For each facility, a permanent and legible weatherproof sign must be publicly visible in the immediate proximity of the facility to identify the name and contact details of the operator or site manager.

12 Acknowledgements

Lane Cove Council would like to acknowledge the work of Sutherland Shire Council for the production of their Telecommunications and Radiocommunications Development Control Plan 2002, on which this plan was based.

Appendix 1 Telecommunications (Low impact Facilities) Determination 1997



Telecommunications (Low-impact Facilities) Determination 1997

as amended

made under subclause 6 (3) of Schedule 3 of the

Telecommunications Act 1997

This compilation was prepared on 14 July 2004
taking into account amendments up to Telecommunications (Low-impact
Facilities) Determination 1997 (Amendment No. 1 of 1999)

Prepared by the Office of Legislative Drafting,
Attorney-General's Department, Canberra

Part 1 Preliminary

1.1 Citation [see Note 1]

This determination may be cited as the Telecommunications (Low-impact Facilities) Determination 1997.

1.2 Commencement

This determination commences on 1 July 1997.

Background to determination

Part 1 of Schedule 3 to the Telecommunications Act 1997 authorises a carrier to enter on land and install a facility if the facility is a low-impact facility.

Under subclause 6 (3) of Part 1, the Minister may, by written instrument, determine that a specified facility is a low-impact facility.

Under subclauses 6 (4), (5) and (7), certain facilities cannot be low-impact facilities:

- designated overhead lines
- a tower that is not attached to a building
- a tower attached to a building and more than 5 metres high
- an extension to a tower that has previously been extended
- an extension to a tower, if the extension is more than 5 metres high.

A facility cannot be a low-impact facility unless it is specified in this determination. Therefore, overhead cabling and new mobile telecommunications towers are not low-impact facilities.

Also, a facility will be a low-impact facility only if it is installed in particular areas identified in this determination. The areas have an order of importance, based on zoning under State or Territory laws, so that any area only has its “highest” possible zoning. The order of priority is:

- area of environmental significance
- residential areas
- commercial areas
- industrial areas
- rural areas.

One effect of this determination is that a facility in an area of environmental significance cannot be a low-impact facility.

Rules for the installation and maintenance of a low-impact facility can be found in Schedule 3 to the Telecommunications Act and the Telecommunications Code of Practice 1997.

Simplified outline of determination

The determination has 3 Parts.

Part 2 identifies areas in which a facility may be installed, by reference to zoning arrangements under State and Territory planning laws.

Part 3 and the Schedule identify the low-impact facilities.

Definitions for words and expressions used in this determination are to be found in section 1.3.

1.3 Definitions

In this determination:

Aboriginal person has the same meaning as in Schedule 3 to the Act.

Act means the Telecommunications Act 1997.

area of environmental significance has the meaning given by section 2.5.

co-located facilities means one or more facilities installed on or within:

- (a) an original facility; or
- (b) a public utility structure.

commercial area has the meaning given by section 2.1.

emergency, for the installation of a facility, means circumstances in which the facility must be installed without delay to protect:

- (a) the integrity of a telecommunications network or a facility; or
- (b) the health or safety of persons; or
- (c) the environment; or

- (d) property; or
- (e) the maintenance of an adequate level of service.

emergency services organisation has the same meaning as in subsection 265 (11) of the Act.

Note At the commencement of this determination, the emergency service organisations were:

- a police force or service
- a fire service
- an ambulance service
- a service specified in the numbering plan (see Act, s 455) as an emergency services organisation
- a service for despatching the force or service.

in-building subscriber connection equipment means a facility installed within a building with the aim of managing and maintaining the supply of carriage services to a customer of a carrier.

industrial area has the meaning given by section 2.2.

installation, for a facility, has the same meaning as in Part 1 of Schedule 3 to the Act.

Note Installation includes:

- construction of the facility
- attachment of the facility to a building or other structure
- any activity ancillary to installation.

listed international agreement has the same meaning as in Schedule 3 to the Act.

Note Listed international agreements are agreements specified in the regulations.

Nature Conservation Director means the Director of National Parks and Wildlife under the National Parks and Wildlife Conservation Act 1975.

original facility means the original structure that is currently used, or intended to be used, for connection to a telecommunications network where the original structure was:

- (a) in place on the date on which the Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 1999) took effect; or
- (b) installed after that date by means other than in accordance with Part 7 of the Schedule.

planning law, for an area, means a law of the State or Territory where the area is located dealing with land use, planning or zoning.

principal designated use, for an area, has the meaning given by section 1.4.

public utility has the same meaning as in Schedule 3 to the Act.

public utility structure means a structure used, or for use, by a public utility, for the provision to the public of:

- (a) reticulated products or services, such as electricity, gas, water, sewerage or drainage; or
- (b) carriage services (other than carriage services supplied by a carriage service provider); or
- (c) transport services; or
- (d) a product or service of a kind that is similar to a product or service covered by paragraph (a), (b) or (c).

relevant local government authority, for land in a State or Territory, means an authority of the State or Territory responsible for the local government of the area where the land is located.

residential area has the meaning given by section 2.3.

rural area has the meaning given by section 2.4.

significant environmental disturbance means significant interference with the relationship between a species or community and its immediate environment or habitat and includes, for example, significant interference with identified flora and fauna, ecological communities, geological features, wilderness values or scientific values within an area.

subscriber connection means an installation for the sole purpose of connecting premises to a telecommunications network.

Torres Strait Islander has the same meaning as in Schedule 3 to the Act.

tower means a tower, pole or mast.

Note A number of other words and expressions used in this determination are defined in the Telecommunications Act 1997 (see s 7), including 'carrier' and 'facility'.

volume means the apparent volume of materials that constitute:

- (a) co-located facilities; or
- (b) an original facility; or
- (c) a public utility structure;

where the materials are visible from a point outside the co-located facilities, original facility or public utility structure.

1.4 Principal designated use

- (1) If an area is described, under a planning law, as having a sole or principal use, the use is the principal designated use of the area.

- (2) If an area is described, under a planning law, as having 2 or more uses, in terms that show that 1 of the uses is the predominant, preferred or most likely use, the use is the principal designated use of the area.
- (3) If an area is described, under a planning law, as having 2 or more principal uses, without any indication of the predominant, preferred or most likely use, the principal designated use of the area is determined on the following basis:
 - (a) if the uses include residential purposes, the principal designated use is for residential purposes;
 - (b) if the uses include commercial purposes, but not residential purposes, the principal designated use is for commercial purposes;
 - (c) if the uses include industrial purposes, but neither residential nor commercial purposes, the principal designated use is for industrial purposes.
- (4) If a carrier proposes to engage in a low-impact facility activity in an area under Chapter 4 of the Telecommunications Code of Practice 1997, the principal designated use of the area is to be determined by reference to the time when the carrier proposes to issue the first notice to the owner or occupier of land in the area under Part 5 of that Chapter.

Note Areas of environmental significance are identified in accordance with section 2.5, not by reference to planning laws.

The effect of this determination is that an area may be an area of environmental significance, and also a residential, commercial, industrial or rural area identified by reference to planning laws. However, the area's status as an area of environmental significance is more important for the identification of low-impact facilities.

Part 2 Areas

2.1 Commercial area

An area is a commercial area if its principal designated use is for commercial purposes.

Note The use of an area is to be assessed at the time mentioned in subsection 1.4 (4).

2.2 Industrial area

An area is an industrial area if its principal designated use is for industrial purposes.

Note The use of an area is to be assessed at the time mentioned in subsection 1.4 (4).

2.3 Residential area

- (1) An area is a residential area if its principal designated use is for residential purposes.
- (2) A part of a built-up area is a residential area if it cannot otherwise be described as a commercial, industrial or rural area.

Note The use of an area is to be assessed at the time mentioned in subsection 1.4 (4).

2.4 Rural area

- (1) An area is a rural area if its principal designated use is for rural purposes.
- (2) An area that is not part of a built-up area is a rural area if it cannot otherwise be described as a commercial, industrial or residential area.

Note The use of an area is to be assessed at the time mentioned in subsection 1.4 (4).

2.5 Area of environmental significance

- (1) An area is an area of environmental significance if it is identified property for section 3A of the World Heritage Properties Conservation Act 1983.
- (2) An area is an area of environmental significance if it is an identified property (within the meaning of section 3A of the World Heritage Properties Conservation Act 1983).
- (3) An area is an area of environmental significance if it is a place that Australia is required to protect by the terms of a listed international agreement.

- (4) An area is an area of environmental significance if, under a law of the Commonwealth, a State or a Territory:
 - (a) it is designated as a reserve for nature conservation purposes; and
 - (b) the principal purpose of the designated reserve is for nature conservation.
- (5) An area is an area of environmental significance if it is an area that, under a law of the Commonwealth, or a State or Territory, is protected from significant environmental disturbance.
- (6) An area is an area of environmental significance if it is entered in the Register of the National Estate or the Interim List for that Register.
- (7) An area is an area of environmental significance if, under a law of the Commonwealth, a State or a Territory, it consists of a place, building or thing that is entered in a register relating to heritage conservation.
- (8) An area is an area of environmental significance if, under a law of the Commonwealth, a State or a Territory, it is:
 - (a) entered in a register; or
 - (b) otherwise identified;
as being of significance to Aboriginal persons or Torres Strait Islanders, in accordance with their traditions.

Part 3 Low-impact facilities

3.1 Facilities

- (1) A facility described in column 2 of an item in the Schedule is a low-impact facility only if it is installed, or to be installed, in an area mentioned in column 3 of the item.
- (2) However, the facility is not a low-impact facility if the area is also an area of environmental significance.
- (3) For subsection (1), trivial variations for a facility mentioned in column 2 are to be disregarded.
- (4) A facility that is ancillary to a facility covered by subsection (1) is also a low-impact facility only if it is installed, or to be installed, solely to ensure the protection or safety of:
 - (a) the low-impact facility; or
 - (b) persons or property in close proximity to the low-impact facility.

Schedule Facilities and areas

(section 3.1)

Part 1 Radio facilities

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	Subscriber connection deployed by radio or satellite terminal antenna or dish: (a) not more than 1.2 metres in diameter; and (b) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local authority	Residential Commercial Industrial Rural
1A	Subscriber connection deployed by radio or satellite terminal antenna or dish: (a) not more than 1.8 metres in diameter; and (b) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local government authority	Industrial Rural
2	Panel, yagi or other like antenna: (a) flush mounted to an existing structure; and (b) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local authority	Residential Commercial Industrial Rural
3	Panel, yagi or other like antenna: (a) not more than 2.8 metres long; and (b) if the antenna is attached to a structure — protruding from the structure by not more than 3	Residential Commercial Industrial Rural

Column 1 Item no.	Column 2 Facility	Column 3 Areas
	metres; and	
	(c) either:	
	(i) colour-matched to its background; or	
	(ii) in a colour agreed in writing between the carrier and the relevant local authority	
4	An omnidirectional antenna or an array of omnidirectional antennas:	Industrial Rural
	(a) not more than 4.5 metres long; and	
	(b) not more than 5 metres apart; and	
	(c) if the array is attached to a structure — protruding from the structure by not more than 2 metres	
5	Radiocommunications dish:	Residential Commercial Industrial Rural
	(a) not more than 1.2 metres in diameter; and	
	(b) either:	
	(i) colour-matched to its background; or	
	(ii) in a colour agreed in writing between the carrier and the relevant local government authority; and	
	(c) if attached to a supporting structure, the total protrusion from the structure is not more than 2 metres	
5A	Radiocommunications dish:	Industrial Rural
	(a) not more than 1.8 metres in diameter; and	
	(b) either:	
	(i) colour-matched to its background; or	
	(ii) in a colour agreed in writing between the carrier and the relevant local government authority	
6	Microcell installation with:	Residential Commercial Industrial Rural
	(a) a cabinet not more than 1 cubic metre in volume; and	
	(b) a separate antenna not more than 1 metre long	

Column 1 Item no.	Column 2 Facility	Column 3 Areas
7	In-building coverage installation: (a) to improve cellular coverage to mobile phone users operating inside a building; and (b) wholly contained and concealed in a building	Residential Commercial Industrial Rural
8	Equipment installed inside a structure, including an antenna concealed in an existing structure	Commercial Industrial Rural
9	An extension to a tower if: (a) the height of the extension does not exceed 5 metres; and (b) there have been no previous extensions to the tower	Industrial Rural

Part 2 Underground housing

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	Pit with surface area of not more than 2 square metres	Residential Commercial Industrial Rural
2	Manhole with surface area of not more than 2 square metres	Residential Commercial Industrial Rural
3	Underground equipment shelter or housing with surface area of not more than 2 square metres	Residential Commercial Industrial Rural

Part 3 Above ground housing

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	Pillar: (a) not more than 2 metres high; and	Residential Commercial Industrial

Column 1 Item no.	Column 2 Facility	Column 3 Areas
	(b) with a base area of not more than 2 square metres	Rural
2	Roadside cabinet: (a) not more than 2 metres high; and (b) with a base area of not more than 2 square metres	Residential Commercial Industrial Rural
3	Pedestal: (a) not more than 2 metres high; and (b) with a base area of not more than 2 square metres	Residential Commercial Industrial Rural
4	equipment shelter: (a) not more than 2.5 metres high; and (b) with a base area of not more than 5 square metres; and (c) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local authority	Residential Commercial Industrial Rural
5	equipment shelter: (a) used solely to house equipment used to assist in providing a service by means of a facility mentioned in Part 1; and (b) not more than 3 metres high; and (c) with a base area of not more than 7.5 square metres; and (d) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local authority	Residential Commercial Industrial Rural
6	In-building subscriber connection equipment	Residential Commercial Industrial Rural
7	Solar panel with a base area of not more than 7.5 square metres	Rural

Part 4 Underground cable facilities

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	<p>Underground conduit or cable deployed by:</p> <p>(a) narrow trench not more than:</p> <p style="padding-left: 20px;">(i) 450 millimetres wide; or</p> <p style="padding-left: 20px;">(ii) 650 millimetres wide if intended to be used by more than one carrier; or</p> <p>(b) direct burial; or</p> <p>(c) bore or directional drill hole at least 600 millimetres below the surface;</p> <p>where:</p> <p>(d) access to business premises is not restricted between the hours of 8 am and 6 pm, Monday to Friday, or such other hours agreed to by the relevant local government authority; and</p> <p>(e) in relation to residential areas, not more than 100 metres of excavation is left open at any time and vehicle access to each property is not lost for more than 8 hours in total</p>	<p>Residential</p> <p>Commercial</p> <p>Industrial</p> <p>Rural</p>
2	<p>Conduit or cabling to be laid in:</p> <p>(a) an existing trench; or</p> <p>(b) a trench created by a developer, relevant local government authority, public utility or carrier.</p>	<p>Residential</p> <p>Commercial</p> <p>Industrial</p> <p>Rural</p>
3	Cable location marking post or sign	<p>Residential</p> <p>Commercial</p> <p>Industrial</p> <p>Rural</p>

Part 5 Public payphones

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	Public payphone cabinet or booth: (a) used solely for carriage and content services; and (b) not designed for other uses (for example, as a vending machine); and (c) not fitted with devices or facilities for other uses; and (d) not used to display commercial advertising other than advertising related to the supply of standard telephone services	Residential Commercial Industrial Rural
2	Public payphone instrument: (a) used solely for carriage and content services; and (b) not designed for other uses (for example, as a vending machine); and (c) not fitted with devices or facilities for other uses; and (d) not used to display commercial advertising other than advertising related to the supply of standard telephone services or displayed as part of the supply of a content service	Residential Commercial Industrial Rural

Part 6 Emergency facilities

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	A temporary facility installed: (a) in an emergency; and (b) to provide assistance to an emergency services organisation	Residential Commercial Industrial Rural

Part 7 Co-located facilities

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	Facility mentioned in: (a) Part 1, 5 or 6; or (b) item 3 of Part 4; installed on or within: (c) an original facility; or (d) a public utility structure	Industrial Rural
2	Facility mentioned in: (a) Part 1, 5 or 6; or (b) item 3 of Part 4; installed on or within: (c) an original facility; or (d) a public utility structure; where: (e) the total volume of the co-located facilities is no more than 25 per cent greater than the volume of the original facility or the original infrastructure; and (f) the levels of noise that are likely to result from the operation of the co-located facilities are less than or equal to the levels of noise that resulted from the operation of the original facility or the public utility structure	Residential Commercial

Notes to the Telecommunications (Low-impact Facilities) Determination 1997

Note 1

The Telecommunications (Low-impact Facilities) Determination 1997 (in force under subclause 6 (3) of the Telecommunications Act 1997) as shown in this compilation is amended as indicated in the Tables below.

Table of Instruments

Title	Date of notification in Gazette	Date of commencement	Application, saving or transitional provisions
Telecommunications (Low-impact Facilities) Determination 1997	30 June 1997 (see Gazette 1997, No. S250)	1 July 1997	
Telecommunications (Low-impact Facilities) Determination 1997 (Amendment No. 1 of 1999)	17 Aug 1999 (see Gazette 1999, No. S377)	17 Aug 1999	—

Table of Amendments

ad. = added or inserted am. = amended rep. = repealed rs. = repealed and substituted

Provision affected	How affected
Part 1	
S. 1.3	am. 1999 No. 1
Part 2	
S. 2.5	am. 1999 No. 1
Part 3	
S. 3.1	am. 1999 No. 1
Schedule	
Part 1	
Part 1	am. 1999 No. 1
Part 3	
Part 3	am. 1999 No. 1
Part 4	
Part 4	am. 1999 No. 1
Part 5	
Part 5	am. 1999 No. 1
Part 7	
Part 7	am. 1999 No. 1

Appendix 2 ACIF Industry for Deployment Of Mobile Phone Network Infrastructure 2004

Australian Government

The code can be found at the Australia Communications and Media Authority website: www.acma.gov.au Please navigate to > Industry > Codes section of the website for a fact sheet or a copy of the code.

For further information or a copy of the code please send an email to: Industry.codes@acma.gov.au

Communication Alliance Ltd

The industry body for communications was formed with the merger of the Australian Communications Industry Forum (ACIF) and the Service Providers Association Inc (SPAN) in 2006. For a copy of the code please see their website at: www.acif.org.au Please navigate to > ACIF Documents > Codes.

Appendix 3 Compliance Checklist

	Required	Supplied
Making an application		
Has the proponent provided council with its information on infrastructure in this council's jurisdiction?		
Is the proposal low impact or not low impact?		
<ul style="list-style-type: none"> • Has adequate justification been provided for this decision? 		
<ul style="list-style-type: none"> • Has the proponent provided a map of predicted exposure levels at 1.5m above publicly accessible surfaces within 300m and listed as a likely community sensitive location at 5.1© in the ACIF Code? 		
Has the proponent provided cross sectional diagrams?		
Has the proponent provided a photomontage of the facility in context of the location?		
Has the proponent provided a community consultation proposal where required		
Has the proponent provided a heritage report/impact statement in accordance with		
Has the proponent provided professional certification that exposure details contained		
Site analysis		
<p>Has the proponent submitted a scaled site and adjacent locality analysis plan showing:</p> <ul style="list-style-type: none"> • Existing vegetation; • Site boundaries and dimensions • Topography • location of existing buildings; 		
Public notification/consultation		
Has the proponent consulted with affected adjoining councils (where relevant)?		
Has the proponent consulted with council about how best to conduct community consultation?		
Does the application provide for visible permanent signage on site?		
Has the proponent advised relevant community groups?		
Has the proponent placed an advertisement in the local paper (if appropriate)?		
Has the proponent conducted a public meeting (if appropriate)?		

Has the proponent provided council with the results of its community consultation		
Has the proponent adequately considered the issue of ethnic language?		
Has the proponent erected a sign on site notifying of its intention to construct that		
Design Controls/Council's requirements		
1. Visual amenity		
Has the facility been designed so as to minimise visual impact from the public		
Does the design minimise or reduce the cumulative visual impact from the public		
Does the design take account of <ul style="list-style-type: none"> • colour; • texture; • form; • bulk and scale? 		
Is the infrastructure: <ul style="list-style-type: none"> • well designed; • integrated with existing building structure; • incorporating concealed cables; • integrating the shelters with building structure; • unobtrusive; • consistent with the character of the surrounding area? 		
Does the plan include removal of the infrastructure when it is redundant?		
Does the plan include restoration of the site following construction of the infrastructure?		
2. Co-location		
Does the plan require co-location? If so, <ul style="list-style-type: none"> • Does it result in an unacceptable visual impact? 		
<ul style="list-style-type: none"> • Does it minimise cumulative emissions for neighbouring residents or other sensitive land 		
3. Location		
Has the proponent demonstrated that, in selecting a site, it has adopted a precautionary		
Is the facility in a preferred land use area?		
If the facility is in a sensitive area has it considered ACIF 5.1.4?		
4. Environment and heritage		
Is the infrastructure in a heritage area/on a heritage building/in the vicinity of heritage items		
Have measures been implemented to reduce visual impact on the heritage item or conservation area?		
Has the proponent provided a heritage report/impact statement?		
Has the proponent considered minimising physical impact on flora & fauna?		
Are any emissions other than electromagnetic expected?		

5. Facility physical design controls		
Has the carrier demonstrated that the infrastructure is of high quality design and construction?		
Does the plan include measures to restrict public access to the antenna(s)?		
Does the facility comply with the Building Code of Australia (not relevant for facilities covered by the LIF Determination) and other relevant Australian standards?		
6. Facility health controls		
Has the proponent demonstrated the measures it has taken to minimise EMR exposures in the adjacent area?		
Has the proponent provided a statement that the proposed facility complies with the relevant Australian exposure standard?		

Appendix 4 Further Information

For more information

Australia

Contact	Issue / Role of Organisation	Information
Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)	EME exposure standard.	www.arpansa.gov.au
	How EME standard has been developed.	eme.committee@health.gov.au
	Health concerns regarding the impact of EME ie base stations and health.	Telephone 03 9433 2211 Fax 03 9432 1835
Department of Communications, Information Technology and the Arts	The Department provides policy advice and program support to the Australian Government, on arts, information technology, communications and sport portfolio issues.	www.dcita.gov.au
		Telephone 02 6277 7480 Fax 02 6273 4154
		www.acma.gov.au
Australian Communications and Media Authority	Complaints about ACIF Code compliance. Carrier regulatory compliance.	Telephone 02 6219 5451 Fax 02 6219 5133 ACIF Code Compliance Projects Team Telephone 02 6219 5555 Fax 02 6219 5288
		Carriers Powers and Immunities-Community and National Interests Team Telephone 02 6219 5555 Fax 02 9963 6979

Contact	Issue / Role of Organisation	Information
Mobile Carriers Forum (MCF)	<p>The Mobile Carriers Forum (MCF) is an industry group comprising the four mobile phone carriers in Australia: Hutchison, Optus, Telstra and Vodafone.</p> <p>The MCF's agenda is to deal specifically with social and environmental issues within the policy, regulatory and operational environment associated with the deployment and operation of mobile phone networks. The MCF aims to ensure that the mobile carrier's industry as a whole, addresses community and Government expectations.</p> <p>The MCF has Regional Forums in each State which can be contacted via the MCF web-site.</p>	<p>www.mcf.amta.org.au</p> <p>Telephone 02 9279 0533</p> <p>Fax 02 9279 3566</p>
Telecommunications Industry Ombudsmen	<p>The Telecommunications Industry Ombudsmen (TIO) is independent of the government and consumer organisations.</p> <p>The TIO is authorised to investigate complaints about the provision or supply telephone or internet services.</p> <p>The role and powers of the TIO are included in the Telecommunications (Consumer Protection and Service Standards) Act 1999.</p>	<p>www.tio.com.au</p> <p>Free call 1800 062 058</p> <p>Free fax 1800 630 614</p>

International

World Health Organisation	Health Communications and Public Relations Provides fact sheets and independent information on mobile phones, base stations and health.	www.who.int email info@who.int
International Commission on Non-Ionising Radiation Protection (ICNIRP)	ICNIRP is the International Commission on Non-Ionizing Radiation Protection and addresses the issues of possible adverse effects on human health of exposure to nonionising radiation.	www.icnirp.de



Part Q

Waste Management and Minimisation



Q

Q.1 Introduction

Q.2 Application Requirements

Q.3 Assessment Criteria/Controls for all
Development

Q.4 Development Specific Assessment
Criteria/Controls

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Q.1 Introduction

1.1 Acknowledgment

This Development Control Plan acknowledges and is based on the “Waste Not DCP” document, a model Development Control Plan developed by the Department of Environment and Climate Change.

1.2 Site Waste Minimisation and Management

Waste and resource consumption is a major environmental issue and a priority for all levels of government within Australia. This is particularly the case as landfill sites become scarce and the environmental and economic costs of waste generation and disposal rise. Government and society alike are exposed to the issue of managing the increasingly large volumes of waste generated by our society.

Sustainable resource management and waste minimisation has emerged as a priority action area and a key in the quest for Ecologically Sustainable Development (ESD). Critical actions in this regard include the following (moving from most desirable to least desirable):

- a) avoiding unnecessary resource consumption
- b) recovering resources for reuse
- c) recovering resources for recycling or reprocessing
- d) disposing of residual waste (as a last resort).

The building and construction industry in particular is a major contributor to waste, much of which is still deposited to landfill. The implementation of effective waste minimisation strategies has the potential to significantly reduce these volumes.

Effective waste planning and management can also benefit the builder/developer. Some of the benefits of good waste planning and management include:

- a) reduced costs
- b) improved workplace safety
- c) enhanced public image
- d) compliance with legislation such as the Protection of the Environment Operation Act 1997 that requires waste to only be transported to a place that can lawfully accept it.

1.3 Purpose of Part Q – Waste Management & Minimisation

Aims

This Part of the DCP aims to facilitate sustainable waste management within the Lane Cove LGA in a manner consistent with the principles of ESD.

Objectives

The objectives in pursuit of sustainable waste management include:

- 1 Waste minimisation
 - a. To minimise resource requirements and construction waste through reuse and recycling and the efficient selection and use of resources.
 - b. To minimise demolition waste by promoting adaptability in building design and focussing upon end of life deconstruction.
 - c. To encourage building designs, construction and demolition techniques in general which minimise waste generation.
 - d. To maximise reuse and recycling of household waste and industrial/commercial waste.
- 2 Waste management
 - a. To assist applicants in planning for sustainable waste management, through the preparation of a site waste minimisation and management plan.
 - b. To assist applicants to develop systems for waste management that ensures waste is transported and disposed of in a lawful manner.
 - c. To provide guidance in regards to space, storage, amenity and management of waste management facilities.
 - d. To ensure waste management systems are compatible with collection services.
 - e. To minimise risks associated with waste management at all stages of development.

1.4 Types of Development Covered

This Part of the DCP applies to the following types of development that may only be carried out with development consent or a complying development certificate.

- a) demolition
- b) construction
- c) change in use

1.5 The Development Approval Process

Development that Requires Consent

When assessing a development application under Section 79C of the Environmental Planning and Assessment Act, 1979 (as amended) (The Act), Council must consider the contents of this Part of the DCP.

Compliance with the minimum provisions herein does not, however, necessarily mean that an application will be approved, as each application will be considered on its merits.

It is accepted that optimum waste minimisation and management will necessitate site specific and sometimes unique solutions. As a result, Council may approve on its merits an application that proposes a variation to the controls, provided it can be demonstrated that the objectives herein will be achieved.

Complying Development

Preparation of a Site Waste Minimisation and Management Plan (SWMMP) is not required for complying development. However, persons carrying out complying development are encouraged to minimise the generation of waste in the construction and operation of any such use or activity and deal with any waste generated in accordance with the objectives herein.

Exempt Development

Preparation of a Site Waste Minimisation and Management Plan (SWMMP) is not required for exempt development. However, persons carrying out exempt development are encouraged to minimise the generation of waste in the construction and operation of any such use or activity and deal with any waste generated in accordance with the objectives herein.

State Significant Development/Major Projects

The Major Projects State Environmental Planning Policy establishes the Minister (or by delegation the Department of Planning) as the consent authority for development categorised as Major Projects/State Significant Development.

Council will liaise with the Department of Planning (representing the Minister for Planning) to ensure appropriate outcomes in respect of waste minimisation and management.

The minimum requirements for such forms of development will be compliance with the aims and objectives of this Part of the DCP.

Departures from the Controls of this Part of the DCP

Council may approve variations to the provisions herein in accordance with the principles of merit-based assessment.

Any request for variation to the provisions must be in writing and comprise part of the application. The request shall clearly demonstrate that:

- a) the aims and objectives are met, and
- b) compliance with the relevant provisions is unreasonable or unnecessary in the circumstances of the case.

1.6 Enforcement

This Part of the DCP is enforced through the development assessment and approval process of Section 79 of The Act.

Subsequent non-compliance with approvals is pursued under Section 121B, Part 6 of the Act, by way of the issue of relevant orders requiring compliance and subsequent legal action for non-compliance.

1.7 The Responsible Authority

Council or an accredited certifier (as defined under the Environmental Planning and Assessment Amendment Act, 1979) is responsible for enforcing the observance of the provisions of this Part of the DCP.

1.8 Use and Interpretation of this Part of the DCP

This section outlines how to interpret and apply the provisions herein for the planning and designing of site waste minimisation and management.

Abbreviations

A list of abbreviations has been adopted. The relevant abbreviations are detailed below.

BCA	Building Code of Australia
CC	Construction Certificate
DA	Development Application
DCP	Development Control Plan
EPA	Environment Protection Authority
ESD	Ecologically Sustainable Development
SEE	Statement of Environmental Effects
SMA	Sydney Metropolitan Area
The Act	Environmental Planning and Assessment Act, 1979 (as amended)
SWMMP	Site Waste Minimisation and Management Plan

Summary Guide to Using This Part of the DCP

This Part of the DCP shall be generally used as follows:

Read Section 1 – Introduction

This section provides a background to waste minimisation and management, details aims and objectives of waste minimisation and management associated with local development and the application of the Part of the DCP.

Read Section 2 – Submission Requirements

This section provides specific advice in respect of information to accompany submission of a Development Application (DA) and highlights the requirements of a Site Waste Minimisation and Management Plan.

Read Section 3 and 4 – Assessment Criteria/Controls

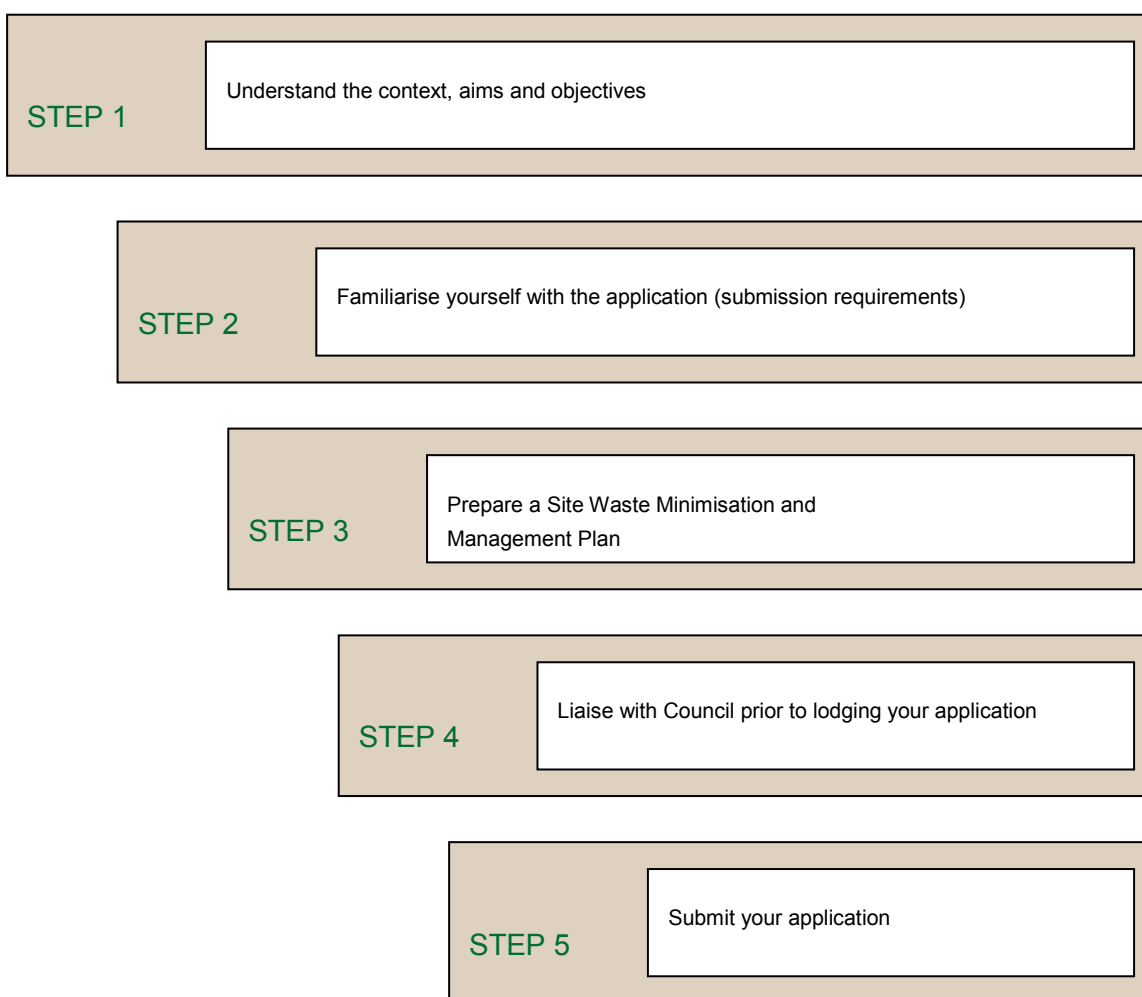
These sections detail the criteria/controls Council will consider in assessing the adequacy of the Site Waste Minimisation and Management Plan, in addressing the principles of sustainable waste management. Section 3 details general criteria and controls for all demolition and all constructions, while Section 4 adds additional criteria and controls for specific types of constructions.

Read the Appendices — Further Information

This section provides useful information in interpreting this Part of the DCP, understanding the waste minimisation and management environment and documenting the central submission requirement – a Site Waste Minimisation and Management Plan.

Steps in the Preparation and Submission of an Application

The actions involved in preparing and submitting a development application, which satisfactorily addresses waste minimisation and management obligations are summarised in the following chart.



Q.2 Application Requirements

2.1 Documentation to be submitted to Comply with the Requirements of this Part of the DCP

All applications for development, including demolition, construction and the ongoing use of a site/premise, must be accompanied by a Statement of Environmental Effects (SEE). This Statement is to include a SWMMP as the central document of compliance with this Part's requirements.

In addition to submission of a SWMMP (as part of the SEE), the waste management facilities proposed as part of the development, shall be clearly illustrated on the plans of the proposed development, accompanying the development application (DA).

2.2 Site Waste Minimisation and Management Plans

A Site Waste Minimisation and Management Plan (SWMMP) outlines measures to minimise and manage waste generated during:

- demolition
- construction
- ongoing use of the site/premises.

In doing so, the SWMMP nominates:

- volume and type of waste and recyclables to be generated
- storage and treatment of waste and recyclables on site
- disposal of residual waste and recyclables
- operational procedures for ongoing waste management once the development is complete.
- The SWMMP highlights the method of recycling or disposal and the waste management service provider.

Appendix A provides a template for the compilation of a SWMMP.

2.3 Submission of a SWMMP

Development Generally

A SWMMP must be submitted for all types of development including demolition, construction and ongoing use of the site/premises; including local development, integrated development and state significant/major project development (as defined by the Environmental Planning and Assessment Act and Amendments). More details are required in SWMMPs for larger and more complex developments. The amount of supporting information and diagrams also increases.

Where a DA is required, with or without the need for a Construction Certificate (CC), a SWMMP must be submitted at development application stage. Where only a CC is required, a SWMMP shall be submitted at the construction certificate stage. Maximum waste minimisation and management benefits are achieved when the SWWP is considered from the earliest stages of the development.

It is for this reason that a SWMMP is required with the earliest approval application.

Complying Development

A Site Waste Minimisation and Management Plan (SWMMP) is required for development identified as Complying Development in accordance with State Environmental Planning Policy (Exempt & Complying Codes) 2008 criteria. Site waste minimisation and management must be carried out in accordance with an approved SWMMP, and weighbridge dockets or invoices retained on site to show to where any construction and or demolition waste has been transported.

Exempt Development

A SWMMP is not required in association with Exempt Development carried out in accordance with State or Council criteria.

However, a person carrying out exempt development should seek to minimise the generation of waste in the construction and operation of any such use or activity and deal with any waste generated in accordance with the objectives herein.

2.4 Waste/Recycling Generation Rates

In the absence of project specific calculations, the rates specified in Appendix B Waste/Recycling Generation Rates and Council's current rate of provision of services to residential properties can be used to inform the compilation of a SWMMP.

Q.3 Assessment Criteria/Controls for All Development

3.1 Demolition of Buildings or Structures

General

The demolition stage provides great scope for waste minimisation. Proponents are actively encouraged to consider possible adaptive reuse opportunities of existing buildings/structures, reuse of materials or parts thereof.

Aim

The principal aim of managing this activity is to maximise resource recovery and minimise residual waste from demolition activities.

Objectives

- 1 Optimise adaptive reuse opportunities of existing building/structures.
- 2 Maximise reuse and recycling of materials.
- 3 Minimise waste generation.
- 4 Ensure appropriate storage and collection of waste.
- 5 Minimise the environmental impacts associated with waste management.
- 6 Avoid illegal dumping.
- 7 Promote improved project management.

Controls/Requirements

- a) A completed Site Waste Minimisation and Management Plan (SWMMP) must accompany any demolition application.
- b) Pursue adaptive reuse opportunities of buildings/structures.
- c) Identify all waste likely to result from the demolition, and opportunities for reuse of materials. Refer to Figure 1.
- d) Facilitate reuse/recycling by using the process of 'deconstruction', where various materials are carefully dismantled and sorted.
- e) Reuse or recycle salvaged materials onsite where possible.
- f) Allocate an area for the storage of materials for use, recycling and disposal (giving consideration to slope, drainage, location of waterways, stormwater outlets, vegetation, and access and handling requirements).
- g) Provide separate collection bins or areas for the storage of residual waste.
- h) Clearly 'signpost' the purpose and content of the bins and storage areas.

- i) Implement measures to prevent damage by the elements, odour and health risks, and windborne litter.
- j) Minimise site disturbance, limiting unnecessary excavation.

When implementing the SWMMP the applicant must ensure:

- Footpaths, public reserves, street gutters are not used as places to store demolition waste or materials of any kind without Council approval.
- Any material moved offsite is transported in accordance with the requirements of the Protection of the Environment Operations Act (1997).
- Waste is only transported to a place that can lawfully be used as a waste facility.
- Generation, storage, treatment and disposal of hazardous waste and special waste (including asbestos) is conducted in accordance with relevant waste legislation administered by the EPA and relevant Occupational Health and Safety legislation administered by WorkCover NSW.
- Evidence such as weighbridge dockets and invoices for waste disposal or recycling services are retained.

Note: Materials that have an existing reuse or recycling market should not be disposed of in a landfill. Figure 1 provides a list of some potential reuse/recycling options. Reuse and recycling opportunities are decreased when asbestos is not carefully removed and segregated from other waste streams.

Figure 1

• Material	• Reuse/recycling potential
• Concrete	• Reused for filling, leveling or road base
• Bricks and Pavers	• Can be cleaned for reuse or rendered over or crushed for use in landscaping and driveways
• Roof Tiles	• Can be cleaned and reused or crushed for use in landscaping and driveways
• Untreated Timber	• Reused as floorboards, fencing, furniture, mulched or sent to second hand timber suppliers
• Treated Timber	• Reused as formwork, bridging, blocking and propping, or sent to second hand timber suppliers
• Doors, Windows, Fittings	• Sent to second hand suppliers
• Glass	• Reused as glazing or aggregate for concrete production
• Metals (fittings, appliances and wiring)	• Removal for recycling
• Synthetic Rubber (carpet underlay)	• Reprocessed for use in safety devices and speed humps
• Significant Trees	• Relocated either onsite or offsite
• Overburden	• Power screened and used as topsoil
• Garden Waste	• Mulched, composted
• Carpet	• Can be sent to recyclers or reused in landscaping
• Plasterboard	• Removal for recycling, return to supplier

Figure 1: Examples of demolition materials and potential reuse/recycling opportunities (based on the Combined Sydney Regional Organisation of Councils Model DCP 1997)

3.2 Construction of Buildings or Structures

General

Attention to design, estimating of materials and waste sensitive construction techniques and management practices can achieve significant rewards in managing waste.

Aim

The principal aim of managing this activity is to maximise resource recovery and minimise residual waste from demolition activities.

Objectives

- 1 Maximise reuse and recycling of materials.
- 2 Minimise waste generation.
- 3 Ensure appropriate collection and storage of waste.
- 4 Minimise the environmental impacts associated with waste management.
- 5 Avoid illegal dumping.
- 6 Promote improved project management.
- 7 Optimise adaptive reuse opportunities of existing building/structures.

Controls / Requirements

- a) A completed Site Waste Minimisation and Management Plan (SWMMP) shall accompany the application.
- b) Note: The type of construction determines whether a development application, construction certificate or complying development statement is required. In all cases a SWMMP must be completed. Maximum waste minimisation and management benefits are achieved when the SWMMP is considered from the earliest stages of the development.
- c) Estimate volumes of materials to be used and incorporate these volumes into a purchasing policy so that the correct quantities are purchased. For small-scale building projects see the rates in Appendix B Waste/Recycling Generation Rates for a guide.
- d) Identify potential reuse/recycling opportunities of excess construction materials.
- e) Incorporate the use of prefabricated components and recycled materials.
- f) Arrange for the delivery of materials so that materials are delivered 'as needed' to prevent the degradation of materials through weathering and moisture damage.
- g) Consider organising to return excess materials to the supplier or manufacturer.
- h) Allocate an area for the storage of materials for use, recycling and disposal (considering slope, drainage, location of waterways, stormwater outlets and vegetation).
- i) Arrange contractors for the transport, processing and disposal of waste and recycling. Ensure that all contractors are aware of the legal requirements for disposing of waste.
- j) Promote separate collection bins or areas for the storage of residual waste.

- k) Clearly 'signpost' the purpose and content of the bins and storage areas.
- l) Implement measures to prevent damage by the elements, odour and health risks, and windborne litter.
- m) Minimise site disturbance and limit unnecessary excavation.
- n) Ensure that all waste is transported to a place that can lawfully be used as a waste facility.
- o) Retain all records (i.e. weighbridge dockets or invoices) demonstrating lawful disposal of waste and keep them readily accessible for inspection by regulatory authorities such as council, DECC or WorkCover NSW.

Q.4 Development-Specific Assessment Criteria/Controls

4.1 Single Dwellings and Dual Occupancies

General

The design of waste and recyclables storage areas within the home and property affect ease of use, amenity, the movement and handling of waste for the life of the development.

Aim

To encourage source separation of waste, reuse, and recycling by ensuring appropriate storage and collection facilities for waste, and quality design of waste facilities.

Objectives

- 1 Maximise reuse and recycling of materials.
- 2 Minimise waste generation.
- 3 Ensure appropriate collection and storage of waste.
- 4 Minimise the environmental impacts associated with waste management.
- 5 Avoid illegal dumping

Controls/Requirements

A completed Site Waste Minimisation and Management Plan (SWMMP) shall accompany the application.

Note: The type of construction determines whether a development application, construction certificate or complying development statement is required. In all cases a SWMMP must be completed. Maximum waste minimisation and management benefits are achieved when the SWMMP is considered from the earliest stages of the development.

Plans submitted with the SWMMP must show:

- a) The location of an indoor waste/recycling cupboard (or other appropriate storage space) for each dwelling.
- b) The location of an onsite waste/recycling storage area for each dwelling, that is of sufficient size to accommodate Council's waste, recycling and garden waste bins. Indicative bin sizes are shown in Appendix C Indicative Bin Sizes.
- c) An identified onsite location for a compost container.
- d) An identified kerbside collection point for the collection and emptying of Council's waste, recycling and garden waste bins.

- e) Waste containers are to be stored in a suitable location so as to avoid vandalism, nuisance and adverse visual impacts.
- f) A designated area for composting that should not impact on adjoining properties.
- g) Where possible, the waste/recycling storage area should be located in the rear yard and minimise the distance of travel to the collection point.
- h) The waste storage area is to be easily accessible and have unobstructed access to Council's usual collection point.
- i) There should be sufficient space within the kitchen (or an alternate location) for the interim storage of waste and recyclables.
- j) The placement of bins for collection at the nominated collection point should ensure adequate traffic and pedestrian safety is maintained.

Note: It is the responsibility of dwelling occupants to move bins to the identified collection point no earlier than the evening before collection day and to then return the bins to their storage area no later than the evening of collection day. Bins are to remain in their on-site storage area at all other times.

4.2 Multi-Unit Dwellings (Town Houses and Villas)

General

The design of waste and recycling storage areas within the unit and property affects ease of use, amenity, movement and handling of waste for the life of the development. Multiple households within the property increase challenges with regard to waste volumes, ease of access and operation of waste sorting and removal systems.

Aim

To encourage source separation of waste, reuse, and recycling by ensuring appropriate storage and collection facilities for waste, and quality design of waste facilities.

Objectives

- 1 Ensure appropriate waste storage and collection facilities.
- 2 Maximise source separation and recovery of recyclables.
- 3 Ensure waste management systems are as intuitive for occupants as possible and are readily accessible.
- 4 Ensure appropriate resourcing of waste management systems, including servicing.
- 5 Minimise risk to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.
- 6 Minimise adverse environmental impacts associated with waste management.
- 7 Discourage illegal dumping by providing on site storage, and removal services.

Controls/Requirements

Plans submitted with a development application must show:

- a) The location of an indoor waste/recycling cupboard (or other appropriate storage space) for each dwelling.
- b) The location of individual waste/recycling storage areas (such as for townhouses and villas) or a communal waste/recycling storage room(s) able to accommodate Council's waste, recycling and garden waste bins.
- c) The location of any garbage chute(s) and interim storage facilities for recyclable materials.
- d) The location of any service rooms (for accessing a garbage chute) on each floor of the building.
- e) The location of any waste compaction equipment.
- f) An identified location for individual compost containers or communal compost container.
- g) An identified collection point for the collection and emptying of Council's waste, recycling and garden waste bins.
- h) The path of travel for moving bins from the storage area to the identified collection point (if collection is to occur away from the storage area).
- i) The on-site path of travel for collection vehicles (if collection is to occur on-site a Deed of indemnity will be required), taking into account accessibility, width, height and grade.
- j) Systems should be designed to maximise source separation and recovery of recyclables.
- k) Waste management systems should be designed and operated to prevent the potential risk or injury or illness associated with the collection, storage and disposal of wastes.

The following minimum collection and storage facilities shall be provided:

- a) Each dwelling unit should be provided with an indoor waste/recycling cupboard (or other appropriate storage space) for the interim storage of a minimum one day's garbage and recycling generation.
- b) Multi-unit housing in the form of townhouses and villas must include either individual waste/recycling storage areas for each dwelling or a communal facility in the form of a waste/recycling storage room (or rooms) designed in accordance with Appendix D Waste Recycling/Storage Rooms in Multi-Unit Dwellings.
- c) Space must be provided for an individual compost container for each dwelling (such as in townhouse and villa developments) or for a communal compost container; the siting of which will have regard to potential amenity impacts.
- d) The waste/recycling storage area(s) or room(s) must be of a size that can comfortably accommodate separate garbage, recycling and garden waste containers at the rate of Council provision.
- e) For developments that include ten or more dwellings, a dedicated room or caged area must be provided for the temporary storage of discarded bulky items which are awaiting removal. The storage area must be readily accessible to all residents and must be located close to the main waste collection point.

The following location and design criteria shall apply to collection and storage facilities:

- a) In townhouse and villa developments with individual waste/recycling storage areas, such areas should be located and designed in a manner which reduces adverse impacts upon neighbouring properties and upon the appearance of the premises.
- b) There must be an unobstructed and Continuous Accessible Path of Travel (as per Australian Standard 1428 Design for Access and Mobility - 2001) from the waste/recycling storage area(s) or room(s) to:
 - I. the entry to any Adaptable Housing (as per Australian Standard 4299 Adaptable Housing - 1995)
 - II. the principal entrance to each premises
 - III. the point at which bins are collected/emptied.
- c) In instances where a proposal does not comply with these requirements, Council will consider alternative proposals that seek to achieve a reasonable level of access to waste/recycling storage area(s) or room(s).
- d) Communal waste storage areas should have adequate space to accommodate and manoeuvre Council's required number of waste and recycling containers.
- e) Where site characteristics, number of bins and length of street frontage allow, bins may be collected from a kerbside location. In instances where kerbside bin collection is not appropriate, bins must be collected onsite. Bins that are collected onsite are to be collected either from their usual storage point or from an onsite temporary holding area located inside the property boundary and close to a property entrance. Where bins are to be collected onsite, a Deed of indemnity will be required.
- f) Where bins cannot be collected from a kerbside location or from a temporary holding area located immediately inside the property boundary, the development must be designed to allow for on-site access by garbage collection vehicles (of dimensions detailed at Appendix E Garbage Truck Dimensions for Residential Waste Collection). In these instances, the site must be configured so as to allow collection vehicles to enter and exit the site in a forward direction and so that collection vehicles do not impede general access to, from or within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles.

Note: As a minimum requirement for collection vehicle access, Council will require indemnity against claims for loss or damage to the pavement or other driving surface and indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service. In all cases, a hazard assessment will need to be conducted prior to Council agreeing to undertake the service.

Should a collection vehicle be required to enter a property, access driveways and internal roads must be designed in accordance with Australian Standard 2890.2 Parking Facilities – Off-Street Commercial Vehicle Facilities – 2002.

If Council waste collectors and/or waste collection vehicles are required to enter a site for the purpose of emptying bins, then site specific arrangements must be in place.

If bins need to be moved from normal storage areas to a different location for collection purposes, it is the responsibility of individual owners or agents of the owners' corporation to move the bins to the collection point no earlier than the evening before collection day and to then return the bins to their storage areas no later than the evening of collection day. Bins are to remain in their on-site storage areas at all other times.

Residents should have access to a cold water supply for the cleaning of bins and the waste storage areas. Storage areas should be constructed and designed to be weather proof and easy to clean, with wastewater discharged to sewer.

The design and location of waste storage areas/facilities should be such that they compliment the design of both the development and the surrounding streetscape.

The following management responsibilities shall be addressed:

- a) Agents of the owners' corporation must take responsibility for the management of waste and recyclable materials generated upon the site. Arrangements must be in place in regards to the management, maintenance and cleaning of all waste/recycling management facilities.

4.3 Residential Flat Buildings

General

The design of waste and recycling storage areas within the unit and property affects ease of use, amenity, movement and handling of waste for the life of the development. Multiple households within the property increase challenges with regard to waste volumes, ease of access and operation of waste sorting and removal systems.

Aim

To encourage source separation of waste, reuse, and recycling by ensuring appropriate storage and collection facilities for waste, and quality design of waste facilities.

Objectives

- Ensure appropriate waste storage and collection facilities.
- Maximise source separation and recovery of recyclables.
- Ensure waste management systems are as intuitive for occupants as possible and are readily accessible.
- Ensure appropriate resourcing of waste management systems, including servicing.
- Minimise risk to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.
- Minimise adverse environmental impacts associated with waste management.
- Discourage illegal dumping by providing on site storage, and removal services.

Controls/Requirements

A completed Site Waste Minimisation and Management Plan (SWMMP) shall accompany the development application. The following minimum collection and storage facilities must be provided:

Indoor Waste & Recycling Facilities

- Each dwelling unit should be provided with an indoor waste/recycling cupboard (or other appropriate storage space) for the interim storage of a minimum one day's garbage and recycling generation.

Garbage Chutes

- Residential Flat Buildings containing four or more storeys must be provided with garbage chute system(s) for the transportation of general waste from each storey to the main waste storage/collection room(s). This is also desirable in Mixed Use developments where possible, depending on design and land uses.
- The garbage chutes must be designed in accordance with Appendix F: Garbage Chutes and the Building Code of Australia. Garbage chutes are not suitable for recyclable materials and must be clearly labeled to discourage improper use.
- A dedicated service room on each floor must be designed to include a garbage chute and 2x240L recycling bins for the storage of recyclable materials.
- The service room(s) must be located for convenient access by users and must be well ventilated and well lit.

Waste & Recycling Rooms

- Residential flat buildings must include communal or main waste/recycling storage facilities in the form of a waste/recycling storage room (or rooms) designed in accordance with Appendix D Waste Recycling/Storage Rooms in Multi-Unit Dwellings.
- The design of the main waste & recycling storage room (or rooms) must be of size that can comfortably accommodate separate garbage, recycling and garden waste containers in accordance to Appendix C: Council's Standard Bin Sizes And Access Requirements and Appendix D: Waste Recycling/Storage Rooms in Residential Flat Buildings. The room(s) must also include for necessary garbage chute(s) compacting device(s)
- Communal waste storage areas should have adequate space to accommodate and manoeuvre Council's required number of waste and recycling containers.
- The main waste and recycling storage/collection room (s) must be located for convenient access by users and must be well ventilated and well lit

Bulky Waste Storage Rooms

- For residential flat buildings that include ten or more dwellings, a dedicated room or caged area must be provided for the temporary storage of discarded bulky items which are awaiting removal. The storage area must be readily accessible to all residents and must be located close to the main waste storage room or area.
- Bulky waste storage rooms must be designed to the following minimum sizes:

- 1-10 units - 10m²;
 - 11-20 units - 20m²;
 - >21 units - 30m².
- Doors to bulky waste storage rooms must have a minimum opening width of 1700mm.

Waste Collection Point

- All bins must be collected onsite from either their usual storage point or from an onsite temporary holding area located inside the property boundary.
- If a temporary holding area is proposed as an on-site collection point for garbage and recycling bins, the area must be located inside the property boundary and close to the property vehicular entrance (<10m).
- If bins need to be moved from normal storage areas to a different location for collection purposes, it is the responsibility of agents of the owners' corporation to move the bins to the collection point no earlier than the evening before collection day and to then return the bins to their storage areas no later than the evening of collection day. Bins are to remain in their on-site main waste & recycling storage rooms at all other times.
- An open air on-site collection point for bulky waste presentation including the path of travel from the storage area to the collection point is required as larger trucks are used to collect bulky waste.
- Agents of the owners' corporation must take responsibility for the management of waste and recyclable materials generated upon the site. Arrangements must be in place in regards to the management, maintenance and cleaning of all waste/recycling management facilities.
- The design and location of the waste storage and collection areas/facilities should be such that they compliment the design of both the development and the surrounding streetscape.

Communal Composting/Worm Farming

- Space must be provided for a communal compost container; the siting of which will have regard to potential amenity impacts.

On-Site Access

- There must be an unobstructed and Continuous Accessible Path of Travel (as per Australian Standard 1428 Design for Access and Mobility - 2001) from the waste/recycling storage area(s) or room(s) to:
 - the entry to any Adaptable Housing (as per Australian Standard 4299 Adaptable Housing - 1995)
 - the principal entrance to each residential flat building
 - the point at which bins are collected/emptied.

- The development must be designed to allow for on-site access by garbage collection vehicles (of dimensions detailed at Appendix E Garbage Truck Dimensions for Residential Waste Collection). In these instances, the site must be configured so as to allow collection vehicles to enter and exit the site in a forward direction and so that collection vehicles do not impede general access to, from or within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles.
- When a collection vehicle is required to enter a property, access driveways and internal roads must be designed in accordance with Australian Standard 2890.2 Parking Facilities – Off-Street Commercial Vehicle Facilities – 2002.
- As a minimum requirement for collection vehicle access, Council will require indemnity against claims for loss or damage to the pavement or other driving surface and indemnity against liabilities, losses, damages and any other demands arising from any on-site collection service. In all cases, a hazard assessment will need to be conducted prior to Council agreeing to undertake the service.

Site Waste Minimisation and Management Plan (SWMMP)

Plans submitted with a development application must show:

- The location of an indoor waste/recycling cupboard (or other appropriate storage space) for each dwelling.
- The location of communal waste/recycling storage room(s) able to accommodate Council's waste, recycling and garden waste bins.
- The location of garbage chute(s) and interim storage facilities for recyclable materials.
- An identified location for bulky waste storage room(s).
- The location of any waste compaction equipment.
- An identified location for individual compost containers or communal compost container.
- An identified collection point for the collection and emptying of Council's waste, recycling and garden waste bins.
- An identified open collection point for bulky waste removal.
- The path of travel for moving bins from the storage areas to the identified collection point (if collection is to occur away from the storage area).
- The on-site path of travel for collection vehicles (including swept paths), taking into account accessibility, width, height and grade.
- Systems should be designed to maximise source separation and recovery of recyclables.
- Waste management systems should be designed and operated to prevent the potential risk or injury or illness associated with the collection, storage and disposal of wastes.

The design and location of waste storage areas/facilities should be such that they compliment the design of both the development and the surrounding streetscape.

4.4 Commercial Developments and Change of Use (Shops, Offices, Food Premises, Hotels, Motels, Licensed Clubs, Education Establishments, Entertainment Facilities and Hospitals)

General

A range of non-residential uses present an array of unique waste minimisation opportunities and management requirements. Flexibility in size and layout is often required to cater for the different needs of multiple tenants as well as future changes in use.

Note: Storage and disposal of liquid waste, such as oils and chemicals, are not covered by Part Q - Waste Management & Minimisation.

Aim

To ensure new developments and changes to existing developments are designed to maximise resource recovery (through waste avoidance, source separation and recycling); and to ensure appropriate well-designed storage and collection facilities are accessible to occupants and service providers.

Objectives

- 1 Ensure appropriate waste storage and collection facilities.
- 2 Maximise source separation and recovery of recyclables.
- 3 Ensure waste management systems are as intuitive for occupants as possible and readily accessible to occupants and service providers.
- 4 Ensure appropriate resourcing of waste management systems, including servicing.
- 5 Minimise risk to health and safety associated with handling and disposal of waste and recycled material and ensure optimum hygiene.
- 6 Minimise adverse environmental impacts associated with waste management.
- 7 Discourage illegal dumping by providing on site storage and removal services.

Controls/Requirements

A completed Site Waste Minimisation and Management Plan (SWMMP) shall accompany the application.

Note: The nature of the development or change in use will determine whether a development application or construction certificate is required. In all cases a SWMMP must be completed. Maximum waste minimisation and management benefits are achieved when the SWMMP is considered from the earliest stages of the development.

Plans submitted with the SWMMP must show:

- a) The location of the designated waste and recycling storage room(s) or areas, sized to meet the waste and recycling needs of all tenants.
- b) The location of temporary waste and recycling storage areas within each tenancy. These are to be of sufficient size to store a minimum of one day's worth of waste.
- c) An identified collection point for the collection and emptying of waste and recycling bins.
- d) The path of travel for moving bins from the storage area to the identified collection point (if collection is to occur away from the storage area).
- e) The on-site path of travel for collection vehicles (if collection is to occur on-site).

There must be convenient access from each tenancy to the waste/recycling storage room(s) or area(s). There must be step-free access between the point at which bins are collected/emptied and the waste/recycling storage room(s) or area(s).

Every development must include a designated waste/recycling storage area or room(s) (designed in accordance with Appendix G Commercial/Industrial Waste and Recycling Storage Areas).

Depending upon the size and type of the development, it may be necessary to include a separate waste/recycling storage room/area for each tenancy.

All commercial tenants must keep written evidence on site of a valid contract with a licensed waste contractor for the regular collection and disposal of the waste and recyclables that are generated on site.

Between collection periods, all waste/recyclable materials generated on site must be kept in enclosed bins with securely fitting lids so the contents are not able to leak or overflow. Bins must be stored in the designated waste/recycling storage room(s) or area(s).

Arrangements must be in all parts of the development for the separation of recyclable materials from general waste. Arrangements must be in all parts of the development for the movement of recyclable materials and general waste to the main waste/recycling storage room/area. For multiple storey buildings, this might involve the use of a goods lift.

The waste/recycling storage room/area must be able to accommodate bins that are of sufficient volume to contain the quantity of waste generated (at the rate described in Appendix B Waste/Recycling Generation Rates) between collections.

The waste/recycling storage room/area must provide separate containers for the separation of recyclable materials from general waste. Standard and consistent signage on how to use the waste management facilities should be clearly displayed.

The type and volume of containers used to hold waste and recyclable materials must be compatible with the collection practices of the nominated waste contractor.

Waste management facilities must be suitably enclosed, covered and maintained so as to prevent polluted wastewater runoff from entering the stormwater system.

Where possible, waste/recycling containers should be collected from a rear lane access point. Consideration should be given to the time of day at which containers are collected so as to minimise adverse impacts upon residential amenity, pedestrian movements and vehicle movements.

The size and layout of the waste/recycling storage room/area must be capable of accommodating reasonable future changes in use of the development.

A waste/recycling cupboard must be provided for each and every kitchen area in a development, including kitchen areas in hotel rooms, motel rooms and staff food preparation areas. Each waste/recycling cupboard must be of sufficient size to hold a minimum of a single day's waste and to hold separate containers for general waste and recyclable materials.

Premises that discharge trade wastewater must do so only in accordance with a written agreement from the local sewer authority. In the Sydney Metropolitan Area (SMA) this is Sydney Water. Sydney Water defines trade wastewater as "any liquid, and any substance contained in it, which may be produced at the premises in an industrial and commercial activity, but does not include domestic wastewater (e.g. from hand-basins, showers and toilets)."

Premises which generate at least 50 litres per day of meat, seafood or poultry waste must have that waste collected on a daily basis or must store that waste in a dedicated and refrigerated waste storage area until collection.

Arrangements must be in place regarding the regular maintenance and cleaning of waste management facilities. Tenants and cleaners must be aware of their obligations in regards to these matters.

Any garbage chutes must be designed in accordance with the requirements of Appendix F Garbage Chutes, the Building Code of Australia.. Garbage chutes are not suitable for recyclable materials and must be clearly labelled to discourage improper use.

4.5 Mixed Use Developments (Residential/Non-Residential)

General

Where residential and commercial land uses occur within the one building or development waste management will necessitate a balancing of variable demands, including preservation of residential amenity.

Aim

To ensure new developments and changes to existing development are designed to maximise resource recovery (through waste avoidance, source separation and recycling) and to ensure appropriate, well-designed storage and collection facilities are accessible to occupants and service providers.

Objectives

- 1 Ensure appropriate waste storage and collection facilities.
- 2 Maximise source separation and recovery of recyclables.
- 3 Ensure waste management facilities are safely and easily accessible to occupants and service providers.

- 4 Ensure appropriate resourcing of waste management systems, including servicing.
- 5 Minimise risk to health and safety associated with handling and disposal of waste and recycled material and ensure optimum hygiene.
- 6 Minimise adverse environmental impacts associated with waste management.
- 7 Discourage illegal dumping by providing on site storage, and removal services.

Controls/ Requirements

A completed Site Waste Minimisation and Management Plan (SWMMP) shall accompany the application.

The controls at Section 4.2 Residential Flat Buildings apply to the residential component of mixed-use development.

The controls at Section 4.3. Commercial Developments apply to the non-residential component of mixed-use development.

Mixed Use development must incorporate separate and self-contained waste management systems for the residential component and the non-residential component. In particular, the development must incorporate separate waste/recycling storage rooms/areas for the residential and non-residential components. Commercial tenants must be prevented (via signage and other means), from using the residential waste/recycling bins and vice versa.

The residential waste management system and the non-residential waste management system must be designed so that they can efficiently operate without conflict. Conflict may potentially occur between residential and non-residential storage, collection and removal systems, and between these systems and the surrounding land uses. For example, collection vehicles disrupting peak residential and commercial traffic flows or causing noise issues when residents are sleeping.

4.6 Industrial

General

Industrial developments typically produce a diverse range of waste products. Some of these waste products may be hazardous and require compliance with established laws/protocols that are additional to this Part of the DCP. Other waste products are similar in nature to commercial and domestic waste streams. Mixing waste products limits potential reuse and recycling opportunities and may distribute toxic material through a larger volume of wastes.

Aim

To ensure new developments and changes to existing developments are designed to maximise resource recovery (through waste avoidance, source separation and recycling) and to ensure appropriate, well-designed storage and collection facilities are accessible to occupants and service providers.

Objectives

- 1 Ensure appropriate waste storage and collection facilities.
- 2 Maximise source separation and recovery of recyclables.
- 3 Ensure waste management facilities are as intuitive for occupants as possible and readily accessible to occupants and service providers.
- 4 Ensure appropriate resourcing of waste management systems, including servicing.
- 5 Minimise risk to health and safety associated with handling and disposal of waste and recycled material and ensure optimum hygiene.
- 6 Minimise adverse environmental impacts associated with waste management.
- 7 Discourage illegal dumping by providing on site storage, and removal services.

Controls/Requirements

A completed Site Waste Minimisation and Management Plan (SWMMP) shall accompany the application.

Plans submitted with the SWMMP must show:

- a) The location of designated waste and recycling storage room(s) or areas sized to meet the waste and recycling needs of all tenants. Waste should be separated into at least 4 streams, paper/cardboard, recyclables, general waste, industrial process type wastes.
- b) The on-site path of travel for collection vehicles.
- c) Evidence of compliance with any specific industrial waste laws/protocols. For example, those related to production, storage and disposal of industrial and hazardous wastes as defined by the Protection of the Environment Operations Act 1997.
- d) There must be convenient access from each tenancy and/or larger waste producing area of the development to the waste/recycling storage room(s) or area(s). There must be step-free access between the point at which bins are collected/emptied and the waste/recycling storage room(s) or area(s).
- e) Every development must include a designated general waste/recycling storage area or room(s) (designed in accordance with Appendix G Commercial/Industrial Waste & Recycling Storage Areas), as well as designated storage areas for industrial waste streams (designed in accordance with specific waste laws/protocols).
- f) Depending upon the size and type of the development, it might need to include separate waste/recycling storage room/area for each tenancy and/or larger waste producing areas.
- g) All tenants must keep written evidence on site of a valid contract with a licensed waste contractor for the regular collection and disposal of all the waste streams and recyclables which are generated on site.
- h) Between collection periods, all waste/recyclable materials generated on site must be kept in enclosed bins with securely fitted lids so the contents are not able to leak or overflow. Bins must be stored in the designated waste/recycling storage room(s) or area(s).
- i) Arrangements must be in place in all parts of the development for the separation of recyclable materials from general waste. Arrangements must be in place in all parts of the development for the movement of recyclable materials and general waste to the main waste/recycling storage room/area.

- j) The waste/recycling storage room/areas must be able to accommodate bins that are of sufficient volume to contain the quantity of waste generated between collections.
- k) The type and volume of containers used to hold waste and recyclable materials must be compatible with the collection practices of the nominated waste contractor.
- l) Waste management storage rooms/areas must be suitably enclosed, covered and maintained so as to prevent polluted wastewater runoff from entering the stormwater system.
- m) A waste/recycling cupboard must be provided for each and every kitchen area in the development. Each waste/recycling cupboard must be of sufficient size to hold a minimum of a single day's waste and to hold separate containers for general waste and recyclable materials.
- n) Premises that discharge trade wastewater must do so only in accordance with a written agreement from the local sewer authority. In the Sydney Metropolitan Area this is Sydney Water. Sydney Water defines trade wastewater as 'any liquid, and any substance contained in it, which may be produced at the premises in an industrial and commercial activity, but does not include domestic wastewater (e.g. from hand-basins, showers and toilets).'
- o) Arrangements must be in place regarding the regular maintenance and cleaning of waste management facilities. Tenants and cleaners must be aware of their obligations in regards to these matters.
- p) Production, storage and disposal of hazardous wastes (such as contaminated or toxic material or products) require particular attention. The appropriate laws and protocols should be observed.

Appendix A: Site Waste Minimisation and Management Plan Template

Site Waste Minimisation and Management Plan

You are exempt from submitting a Site Waste Minimisation and Management Plan only if your development fits the following criteria:

- Complying development
- Exempt development

*NOTE: Persons carrying out complying or exempt development are encouraged to minimise the generation of waste in the construction and operation of any such use or activity and deal with any waste generated in accordance with the objectives of the Part Q of the DCP.

This plan must be submitted before the development assessment can be completed

Applicant and Project Details (All Developments)	
Applicant Details	
Application No.	
Name	
Address	
Phone number(s)	
Email	
Project Details	
Address of development	
Existing buildings and other structures currently on the site	
Description of proposed development	
This development achieves the waste objectives set out in the Part Q of the DCP. The details on this form are the provisions and intentions for minimising waste relating to this project. All records demonstrating lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, DECC	

or WorkCover NSW.	
Name	
Signature	
Date	

Demolition (All Types of Developments)

Address of development: _____

Refer to Section 3.1 of Part Q of the DCP for objectives regarding demolition waste.

most favourable ←  least favourable

	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Specify method of on site reuse, contractor and recycling outlet and /or waste depot to be used
Excavation material				
Timber (specify)				
Concrete				
Bricks/pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				

Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste e.g. asbestos (specify)				
Other (specify)				

Construction (All Types of Developments)

Address of development: _____

Refer to Section 3.2 Part Q of the DCP for objectives regarding construction

most favourable ← least favourable

	Reuse	Recycling	Disposal	
Type of waste generated	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Estimate Volume (m3) or Weight (t)	Specify method of on site reuse, contractor and recycling outlet and/or waste depot to be used
Excavation material				
Timber (specify)				
Concrete				
Bricks				
Tiles				
Metal (specify)				
Glass				
Plasterboard (offcuts)				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste (specify)				

Construction Design (All Types of Developments)

Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development (refer to Section 3.2 of the DCP):
Materials
Lifecycle
Detail the arrangements that would be appropriate for the ongoing use of waste facilities as provided in the development. Identify each stage of waste transfer between residents' units/commercial tenancies and loading into the collection vehicle, detailing the responsibility for and location and frequency of, transfer and collection.

Ongoing Operation (Residential, Multi Unit, Commercial, Mixed Use and Industrial)

Address of development: _____

Show the total volume of waste expected to be generated by the development and the associated waste storage requirements.

	Recyclables		Compostable	Residual waste*	Other
	Paper/ cardboard	Metals/ plastics/glass			
Amount generated (L per unit per day)					
Amount generated (L per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number and size of storage bins required					
Floor area required for storage bins (m ²)					
Floor area required for manoeuvrability (m ²)					
Height required for manoeuvrability (m)					

* Current “non-recyclables” waste generation rates typically include food waste that might be further separated for composting.

Plans and Drawings (All Developments)

- The following checklists are designed to help ensure SWMMs are accompanied by sufficient information to allow assessment of the application.
- Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclables during:
 - Demolition
 - construction
 - ongoing operation.

Demolition

Refer to Section 3.1 of Part Q of the DCP for specific objectives and measures.

Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

Construction

Refer to Section 3.2 of Part Q of the DCP for specific objectives and measures.

Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

Ongoing Operation

Refer to Section 4 of Part Q of the DCP for specific objectives and measures.

Do the site plans detail/indicate:

	Tick Yes
Space	
Size and location(s) of waste storage areas including <ul style="list-style-type: none"> ■ Main garbage and recycling storage rooms ■ Garbage and recycling interim storage rooms with chute access point in each floor ■ Individual waste & recycling cupboards in each dwelling ■ Bulky waste storage room 	
Space provided for access to and the maneuvering of bins/equipment	
Any additional facilities	
Access	
Access route(s) to deposit waste in storage room/area	
Access route(s) to collect waste from storage room/area	
Bin carting grade	
Location of final collection point including <ul style="list-style-type: none"> ■ Path of travel ■ Provision of off-street collection 	
Clearance, geometric design and strength of internal access driveways and roads	
Direction of traffic flow for internal access driveways and roads	
Amenity	
Aesthetic design of waste storage areas	
Signage – type and location	
Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc)	

Appendix B: Waste/Recycling Generation Rates

1.1 Construction Waste

'Rule of Thumb' for renovations and small home building:

- Timber 5-7% of material ordered
- Plasterboard 5-20% of material ordered
- Concrete 3-5% of material ordered
- Bricks 5-10% of material ordered
- Tiles 2-5% of material ordered

Source: Waste Planning Guide for Development Application, Inner Sydney Waste Board, 1998

1.2 Ongoing Operation

• Premises type	• Waste generation	• Recyclable material generation
• Backpackers' Hostel	• 40L/occupant space/week	• 20L/occupant space/week
• Boarding House, Guest House	• 60L/occupant space/week	• 20L/occupant space/week
<ul style="list-style-type: none"> • Food premises: • Butcher • Delicatessen • Fish Shop • Greengrocer • Restaurant, Café • Supermarket • Takeaway food shop 	<ul style="list-style-type: none"> • 80L/100m² floor area/day • 80L/100m² floor area/day • 80L/100m² floor area/day • 240L/100m² floor area/day • 10L/1.5m² floor area/day • 240L/100m² floor area/day • 80L/100m² floor area/day 	<ul style="list-style-type: none"> • Variable • Variable • Variable • 120L/100m² floor area/day • 2L/1.5m² floor area/day • 240L/100m² floor area/day • Variable
• Hairdresser, Beauty Salon	• 60L/100m ² floor area/week	• Variable
• Hotel, Licensed Club, Motel	<ul style="list-style-type: none"> • 5L/bed space/day • 50L/100m² bar area/day • 10L/1.5m² dining area/day 	<ul style="list-style-type: none"> • 1L/bed space/day • 50L/100m² bar area/day • 50L/100m² dining area/day
• Offices	• 10L/100m ² floor area/day	• 10L/100m ² floor area/day
<ul style="list-style-type: none"> • Shop less than 100m² floor area • Shop greater than 100m² floor area 	<ul style="list-style-type: none"> • 50L/100m² floor area/day • 50L/100m² floor area/day 	<ul style="list-style-type: none"> • 25L/100m² floor area/day • 50L/100m² floor area/day
• Showroom	• 40L/100m ² floor area/day	• 10L/100m ² floor area/day
• Multi-Unit Dwellings ¹	• 80L/unit/week	• 40L/unit/week

Sources: Adapted from Waverley Council Code for the Storage and Handling of Waste.

1 Appendix A, Better Practice Guide for Waste Management In Multi-Unit Dwellings 2007

Appendix C: Council's Standard Bin Sizes And Access Requirements

1.1 Single Dwellings

Council provides single dwellings with:

- 1 x 80 litre garbage bin (collected weekly);
- 1 x 120 litre paper recycling bin (collected fortnightly);
- 1 x 120 litre mixed containers recycling bin (collected fortnightly)

1.2 Multi-Unit Dwellings

Council provides multi-unit dwellings with:

- 1 x 240 litre garbage bin per three units (collected weekly);
- 1 x 240 litre paper recycling bin per ten units (collected weekly);
- 1 x 240 litre mixed containers per ten units (collected weekly)

Bin type	Height	Depth	Width
80 Litre Bin	870mm	530mm	450mm
120 Litre Bin	940mm	560mm	485mm
240 Litre Bin	1080mm	735mm	580mm

These dimensions are only a guide and differ slightly according to manufacturer, if bins have flat or dome lids and are used with different lifting devices.

1.3 Access

Mobile garbage and recycling bins are to be placed at the collection point no earlier than the evening prior to the collection day

All mobile garbage and recycling bins are to be removed from the public place by the property owner or occupier as soon as practicable after service, but not later than the evening on the collection day.

Appendix D: Waste Recycling/Storage Rooms in Residential Flat Buildings

1.1 Building Code of Australia

Waste/recycling storage rooms must be constructed in accordance with the requirements of the Building Code of Australia (BCA).

1.2 Location and Appearance

Waste/recycling storage rooms must be integrated into the design of the overall development. Wherever possible, the room should be in a basement location within the main building envelope (rather than a separate stand-alone structure). Materials and finishes visible from outside should be similar in style and quality to the external materials used in the rest of the development.

Waste/recycling storage rooms must be located and designed in a manner that reduces adverse impacts upon the inhabitants of any dwellings on the site and upon neighbouring properties. The location and design of the room should minimise adverse impacts associated with:

- a) the proximity of the room to any dwellings
- b) accessibility to collection point
- c) the visibility of the room
- d) noise generated by any equipment located within the room
- e) noise generated by the movement of bins into and out of the room
- f) noise generated by collection vehicles accessing the site; and
- g) odours emanating from the room.

1.3 Size

Waste/recycling storage rooms must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development.

1.4 Special Waste

Where special waste material are to be generated (such as medical wastes and household hazardous waste) special arrangements will be required.

1.5 Access

The waste storage and recycling room must provide adequate space for maneuvering 240 litre garbage bins and should also comply with the following:

- a) minimum clearance between bins 300mm
- b) minimum opening (door) 1700mm
- c) if bins are to be located on either side of the room, the distance between the rows of bins must be 1700mm

Access

- d) The location of the waste and recycling room must be conveniently accessible and have unimpeded access for both occupants and collection service operators. In the event that the proposed development is protected by a security system and/or locked gates, the waste and recycling room(s) must have unimpeded access for the collection service providers. Where security gates are provided to the development, gates must be accessible by Council's master key. This is for garbage and recycling only where access required to basement.
- e) The maximum grade of any access road leading to a waste and recycling room must be not more than 1:5 (20%). The turning area at the base of any ramp must be sufficient to allow for the manoeuvre of a 6.8m rigid vehicle to exit the building in a forward direction.
- f) The waste and recycling collection point must be located on a level surface away from gradients and vehicle ramps, with the path of travel being free from any floor obstructions such as steps to allow for the transfer of wheelie bins to and from the storage room to the collection vehicle.
- g) The vehicle access road leading to and from the collection point in a waste and recycling room must have a minimum finished floor to ceiling height of 2.60m for residential waste rooms and 4.5m for commercial waste rooms for the entire length of travel within the building (includes being free from conduits, ducting or other obstructions fitted to ceilings).
- h) The Site Waste Minimisation and Management Plan (SWMMP) must describe how the waste management system is to be managed and who is responsible for each stage of the process.
- i) Consideration must also be given to bulky waste collections and their collection point where larger trucks are used for this purpose. For on-site bulky waste collection, an open air on-site area should be provided. The on-site temporary holding area for bulky waste materials must be located inside the property boundary and close to the property vehicular entrance (<10m).
- j) The design and location of the waste storage and collection areas/facilities should be such that they compliment the design of both the development and the surrounding streetscape.

1.6 Layout

- The gradient of waste/recycling storage room floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements.
- Within waste/recycling storage rooms, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers — so that the potential for contamination of recyclable materials is minimised.
- The room is well drained to a floor waste and connected to the sewer

- The room is appropriately signposted e.g. for recycling bins
- Adequate lighting, controllable from outside & inside, is provided
- The room is well ventilated

Construction

- The floor of any waste and recycling room must be constructed of either:
 - i) concrete which is at least 75mm thick; or
 - ii) other equivalent material; and
 - iii) graded and drained to a floor waste which is connected to the sewer
- All floors are to be finished to a smooth even surface, coved at the intersection of walls and floor.
- The walls of any waste room, recycling room and waste service compartment are to be constructed of solid impervious material and must be cement rendered internally to a smooth even surface coved at all intersections.
- All waste and recycling rooms must be provided with an adequate supply of hot and cold water mixed through a centralised mixing valve with hose cock. This does not include waste and recycling service compartments located on residential floors of residential flat buildings.
- A close-fitting and self-closing door that can be opened from within the room must be fitted to all waste and recycling rooms.
- In the event that Council permits the installation of a roller shutter door (under special circumstances only), a sign must be erected in a conspicuous position drawing attention to the fact the door must be kept closed at all times when not in use.
- All waste and recycling rooms must be constructed in such a manner (eg. No gaps under access doors etc) as to prevent the entry of vermin.
- All waste and recycling rooms must be ventilated by either:
 - i) mechanical ventilation system exhausted at a rate of 5L/s per m² of floor area, with a minimum rate of 100L/s; or
 - ii) permanent, unobstructed natural ventilation openings direct to the external air, not less than one-twentieth (1/20th) of the floor area.
- All waste and recycling rooms must be provided with artificial light controlled by switches located both outside and inside the rooms.
- Clearly printed No Standing signs must be affixed to the external face of each waste and recycling room.
- Clearly printed signage must be affixed in all communal waste collection and storage areas, specifying which materials are acceptable in the recycling system and identifying the location of waste and recycling storage areas, as well as waste and recycling service compartments.
- Compaction of garbage is only permitted up to a maximum ratio of 2:1. Compaction is not permitted for recycling or green waste.

Appendix E: Garbage Truck Dimensions for Residential Waste Collection

This page includes information regarding the dimensions of garbage trucks that are typically used for the collection of residential waste. Developments that require Council garbage trucks to enter the site for the collection of residential waste must be designed to accommodate on-site truck movement.

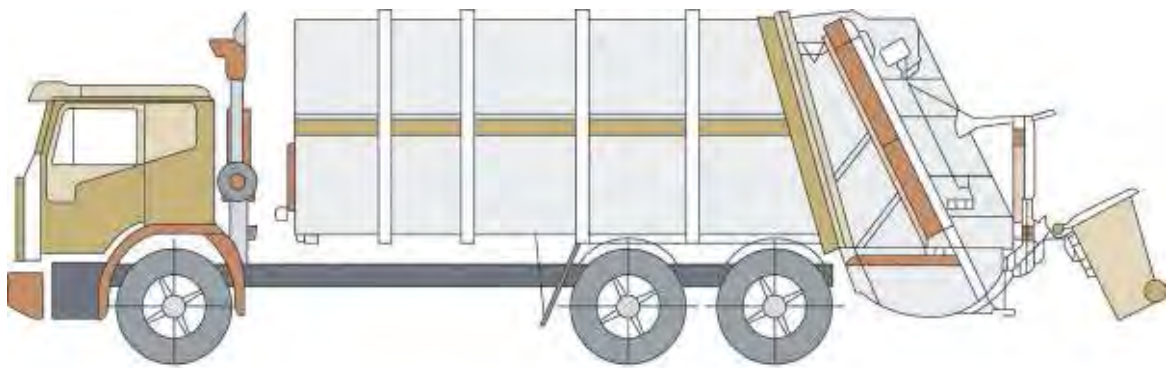
Please note that Council will require indemnification against claims for loss or damage to the pavement or other driving surface, liabilities, losses, damages and any other demands arising from any on-site collection service. In all cases, a hazard assessment will need to be conducted prior to Council agreeing to undertake the service.

Requirements regarding vehicle turning circles and driveway width/gradient are contained in Australian Standard 2890.2 2002/Planning Facilities — off street commercial vehicles.

It is recommended that an applicant speak with Council in regards to the design of development proposals that involve garbage trucks entering the site. On-site services will not be provided where there are undue risks.

- Typical Council Garbage Truck used for Domestic Waste Collection – Rear Load

- | | |
|-----------------------------|---------------|
| • Length overall | • 8.0 metres |
| • Width overall | • 2.5 metres |
| • Operational height | • 4.3 metres |
| • Travel height | • 4.3 metres |
| • Weight (vehicle and load) | • 22.5 tonnes |
| • Weight (vehicle only) | • 13 tonnes |
| • Turning Circle | • 25.0 metres |

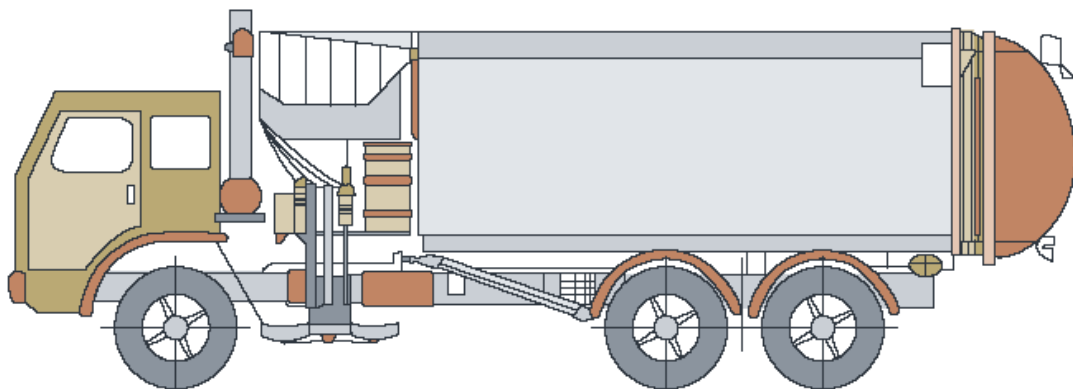


rearloader garbage truck

- Typical Council Garbage Truck used for Domestic Waste Collection – Side Load

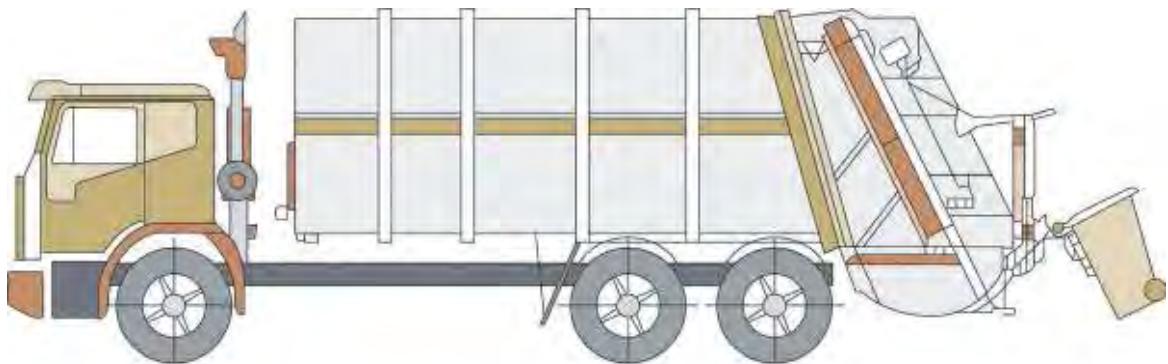
- | | |
|-------------------------------|----------------|
| • Length overall | • 9.64 metres |
| • Width overall | • 1.51 metres |
| • Operational height | • 5.2 metres |
| • Travel height | • 2.93 metres |
| • Weight (vehicle and load) | • 22.5 tonnes |
| • Weight (vehicle only) | • 13 tonnes |
| • Turning Circle kerb to kerb | • 17.86 metres |
| • Turning Circle wall to wall | • 20.56 metres |

Side-loading collection vehicle



• The Smallest Council Garbage Truck used for Domestic Waste Collection – Rear Load

- Length overall • 6.64 metres
- Width overall • 2.37 metres
- Operational height • 2.40 metres
- Travel height • 2.60 metres
- Weight (vehicle and load) • 7.50 tonnes
- Weight (vehicle only) • 5.48 tonnes
- Turning Circle • 10.70 metres



rearloader garbage truck

Appendix F: Garbage Chutes

1.1 Garbage chute design

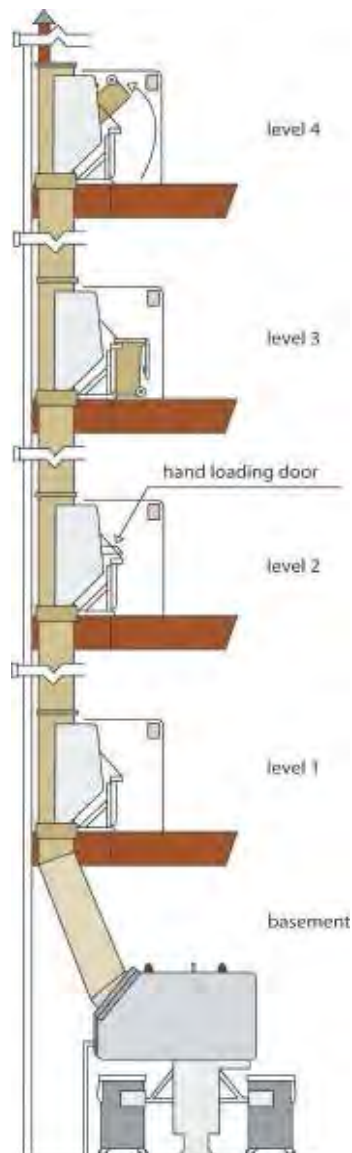
- a) Garbage chutes must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- b) Garbage chutes must be located and insulated in a manner that reduces noise impacts.
- c) Chutes, service openings and charging devices must be constructed of material (such as metal) that is smooth, durable, impervious, non-corrosive and fire resistant.
- d) Chutes, service openings and charging devices must be capable of being easily cleaned.
- e) Chutes must be cylindrical and should have a diameter of at least 500mm.
- f) There must not be any bends (or sections of reduced diameter) in the main shaft of the chute.
- g) Internal overlaps in the chute must follow the direction of waste flow.
- h) Chutes must deposit rubbish directly into a bin or compactor located within a waste/recycling storage room.
- i) A cut-off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced.
- j) The upper end of a chute should extend above the roofline of the building.
- k) The upper end of a chute should be weather protected in a manner that doesn't impede the upward movement of air out of the chute.

1.2 Garbage chute service room design

- a) The service opening (for depositing rubbish into the main chute) on each floor of the building must be located in a dedicated service room.
- b) The charging device for each service opening must be self-closing and must not project into the main chute.
- c) Branches connecting service openings to the main chute are to be no more than 1m long.
- d) Each service room must include provision for 2x240L recycling bins for the storage of recyclable materials. Signage regarding the materials that can be recycled must be displayed near these recycling bins.
- e) Each service room must be located for convenient access by users and must be well ventilated and well lit.
- f) The floors, walls and ceilings of service rooms must be finished with smooth, durable materials that are capable of being easily cleaned.
- g) Service rooms must include signage that clearly describes the types of materials that can be deposited into the garbage chute and the types of materials which should be deposited into recycling bins.

1.3 Management

- a) Garbage chutes are not to be used for the disposal of recyclable materials. Signage to this effect should be displayed near service openings.
- b) Arrangements must be in place for the regular maintenance and cleaning of garbage chutes and any associated service rooms, service openings and charging devices.
- c) Arrangements must be in place for the regular transferral of recyclable materials (which are stored in service rooms) to the main waste/recycling storage room.



Example of a garbage chute system.

Source: Better Practice Guide for Waste Management in Multi-Unit Dwellings, DECC, 2008.

Appendix G: Commercial/Industrial Waste and Recycling Storage Areas

1.1 Building Code of Australia

- a) Waste/recycling storage areas must be constructed in accordance with the requirements of the Building Code of Australia (BCA).

1.2 Location and appearance

- a) Waste/recycling storage areas must be integrated into the design of the overall development. Materials and finishes that are visible from outside should be similar in style and quality to the external materials used in the rest of the development.
- b) Waste/recycling storage areas must be located and designed in a manner that reduces adverse impacts upon neighbouring properties and the streetscape. The location and design of the areas should minimise adverse impacts associated with:
 - I. the proximity of the area to dwellings
 - II. the visibility of the area
 - III. noise generated by any equipment located within the area
 - IV. noise generated by the movement of bins into and out of the area
 - V. noise generated by collection vehicles accessing the site; and
 - VI. odours emanating from the area.

1.3 Size

- a) Waste/recycling storage areas must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development.
- b) Waste/recycling storage areas must be able to accommodate separate general waste bins and recycling bins which are of sufficient volume to contain the quantity of waste generated (at the rate described in Appendix B) between collections.

1.4 Layout

- a) The gradient of waste/recycling storage area floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements.
- b) Within waste/recycling storage areas, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers — so that the potential for contamination of recyclable materials is minimised.

1.5 Access: waste/recycling collection

- a) The development must be designed to allow access by collection vehicles used by the nominated waste contractor. Wherever possible, the site must be configured to allow collection vehicles to enter and exit the site in a forward direction and so collection vehicles do not impede general access to, from and within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles.
- b) Servicing arrangements for the emptying of bins must be compatible with the operation of any other loading/unloading facilities on-site.
- c) Access for the purpose of emptying waste/recycling storage containers must be able to occur in accordance with WorkCover NSW Occupational Health and Safety requirements.

1.6 Access: general

- a) In commercial development, public buildings and industrial development, there must be convenient access from each tenancy to the waste/recycling storage area(s). There must be step-free access between the point at which bins are collected/emptied and the waste/recycling storage area(s).
- b) Arrangements must be in place so that the waste/recycling storage area is not accessible to the general public.
- c) Vermin must be prevented from entering the waste/recycling storage area.

1.7 Surfaces

- a) Waste/recycling storage areas must have a smooth, durable floor and must be enclosed with durable walls/fences that extend to the height of any containers which are kept within.

1.8 Doors/gates

- a) Doors/gates to waste/recycling storage areas must be durable. There must be a sign adjacent to the door/gate that indicates that the door/gate is to remain closed when not in use. All doors/gates are to be openable from both inside and outside the storage area and must be wide enough to allow for the easy passage of waste/recycling containers.

1.9 Services

- a) Waste/recycling storage areas must be serviced by hot and cold water provided through a centralised mixing valve. The hose cock must be protected from the waste containers and must be located in a position that is easily accessible when the area is filled with waste containers.
- b) The floor must be graded so that any water is directed to a sewer authority approved drainage connection located upon the site. In the SMA this is Sydney Water.

1.10 Signage

- a) Waste/recycling storage areas must include signage that clearly describes the types of materials that can be deposited into recycling bins and general garbage bins.

1.11 Management

- a) Arrangements must be in place for the regular maintenance and cleaning of waste/recycling storage areas. Waste/recycling containers must only be washed in an area which drains to a sewer authority approved drainage connection. In the SMA this is Sydney Water.

Part R

Traffic, Transport and Parking



R

- R.1 Introduction
- R.2 Parking
- R.3 Public Transport
- R.4 Pedestrian and Bicycle Facilities
- R.5 Transport Access Guide /
Sustainable Travel and Access
Plan
- R.6 Traffic Impact Assessment
- R.7 Construction Traffic
Management Plan

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R.1 Introduction

1.1 Overview

This section of the Development Control Plan (DCP) has been developed by Council to ensure robust and consistent assessment of the traffic, transport and parking impacts of larger developments. It should be read in conjunction with the relevant Australian Standards, Council's Traffic Impact Assessment (TIA) checklist and the following State Government guidelines:

[RTA Guide to Traffic Generating Developments \(2002\)](#)

(http://www.rta.nsw.gov.au/roadprojects/community_environment/documents/guide_to_generating_traffic_developments.pdf)

[RTA Guide to Traffic Generating Developments – Updated Traffic Surveys \(2013\)](#)

(http://www.rta.nsw.gov.au/trafficinformation/downloads/td13_04.pdf)

[Improving Transport Choice: Guidelines for Planning and Development \(2001\)](#)

(www.planning.nsw.gov.au/programservices/pdf/prg_transport.pdf)

[Planning Guidelines for Walking and Cycling \(2004\)](#)

(www.planning.nsw.gov.au/plansforaction/pdf/guide_pages.pdf)

Reference should also be made to the following long-term Council Plans:

[Lane Cove Bicycle Plan \(2013\)](#)

(<http://ecouncil.lanecove.nsw.gov.au/trim/DocumentLink.asp?ReclD=65366/13>)

[Pedestrian Access and Mobility Plan \(2013\)](#)

(<http://ecouncil.lanecove.nsw.gov.au/trim/DocumentLink.asp?ReclD=23853/13>)

This section – *Part R: Traffic, Transport and Parking* – provides detailed guidance for applicants and transport consultants on how to conduct a robust assessment of their development with a view to demonstrating its sustainability in terms of traffic, transport and parking.

Please note: The requirements of this DCP Part R supercede any references to traffic, transport and parking contained in other sections of the Lane Cove Development Control Plan.

Objectives

The Objectives are to:

1. Set the standard for rigorous assessment of major development in terms of traffic, transport and parking;
2. Establish clear guidelines on how to conduct such an assessment;
3. Promote integrated transport and land-use planning;
4. Manage demand for travel;
5. Introduce appropriate and relevant controls to reflect the type of land use and the transport options available to users;
6. Promote sustainable and active transport;
7. Promote car share;
8. Reduce new users' reliance on the private car;
9. Ensure developers refer to state and local policy as well as relevant guidelines on transport planning and sustainable parking provision;
10. Ensure development is constructed according to the relevant technical standards.

1.2 Acronyms and Abbreviations

AS	Australian Standard
DA	Development Application
DCP	Development Control Plan
LCC	Lane Cove Council
LEP	Local Environmental Plan
LGA	Local Government Area
LOS	Level of Service
PAMP	Pedestrian Access and Mobility Plan
RMS	Roads and Maritime Services (formerly RTA)
RTA	Roads and Traffic Authority
SEPP	State Environmental Planning Policy
STrAP	Sustainable Travel and Access Plan
TAG	Transport Access Guide
TCP	Traffic Control Plan
TIA	Traffic Impact Assessment

1.3 Australian Standards

The following Australian Standards are applicable to this DCP:

AS/NZS 2890.1:2004 Parking facilities—Off-street car parking

AS 2890.2:2002 Parking facilities—Off-street commercial vehicle facilities

AS 2890.3:1993 Parking facilities—Bicycle parking facilities

AS 2890.5:1993 Parking facilities—On-street parking

AS/NZS 2890.6:2009 Parking facilities—Off-street parking for people with disabilities

Australian Standards are subject to regular review and modification. Further information is available at www.saiglobal.com

R.2 Parking

2.1 Parking general

Objectives

The objectives of parking controls are to:

1. Ensure that reasonable parking needs are met.
2. Ensure that developments do not impose excessive demand for on-street parking on surrounding streets.
3. Ensure that car parking spaces are convenient and accessible so that they are utilised for their intended purpose
4. Provide a lower level of car parking in areas with good access to public transport and services.

The parking rates and requirements of this DCP Part R supercede any references to parking contained in other sections of the Lane Cove Development Control Plan.

2.2 Car parking rates

Table 1 provides parking rates for different types of development.

The parking requirements specified in **Table 1** are neither maximum nor minimum rates, but are the rates to be satisfied in any application. Where applicants propose a deviation from the car parking rates, they must provide a justification of the variation supported by relevant data. Any deviation from the car parking rates will be considered on its merits.

Lower parking rates will only be considered if two or more of the following circumstances apply:

- There are realistic transport alternatives to the private car in the locality.
- The applicant can demonstrate a low demand for parking eg. *car ownership survey data in the vicinity or relevant examples of similar developments where reduced parking rates have been successfully implemented*;
- In locations where there is no risk of overspill parking from the development impacting on local streets;
- There are exceptional site constraints which limit available on-site parking *and* appropriate mitigation measures and/or financial contributions are suggested in lieu;
- There is an overriding community benefit arising from the development.

Higher parking rates will only be considered if both of the following circumstances apply:

- The higher parking rate is essential to ensure a high level of transport amenity for the user;
- The applicant can demonstrate a high demand for parking eg. *car ownership survey data in the vicinity or relevant examples of similar developments where higher parking rates have been successfully implemented*

Requirements for on-site car parking in St Leonards are lower but may require approval of a Sustainable Travel and Access Plan (STrAP) - refer to **Section 5.1**.

Provisions

- a) Developments should comply with on-site car parking rates in Table 1;
- b) Deviation from the car parking rates in Table 1 will only be considered in special circumstances mentioned previously;
- c) Each residential dwelling with one or more bedrooms must be provided with a minimum of 1 allocated car parking space;
- d) Small car spaces, with minimum dimensions of 2.3m x 5.0m (as detailed in AS2890.1) are not permitted in private car parks and must form no more than 10% of the overall parking provision in public car parks.

2.3 Parking near St Leonards Railways Station

On-site parking rates shall be reduced for land within a 400m radius of St Leonards Railway Station. The lower parking rates reflect the availability of realistic alternatives to private car travel, existing road capacity constraints, and lower car ownership rates in the area.

Provisions

- a) Any development occurring within 400m (refer to Figure 1) of St Leonards Railway Station shall be subject to the parking rates shown in **Table 2 – Car parking rates near St Leonards Railway Station**. Where any part of a street block falls within 400m radius of St Leonards Railway Station, the whole of that block is considered to be included within catchment.
- b) Developments occurring within 400m of St Leonards Railway Station that generate 10 or more vehicles per hour must be accompanied by a Sustainable Travel and Access Plan (STrAP).
- c) The STrAP must be approved by Council prior to the issuing of the Occupation Certificate.
- d) The allocation of private parking spaces in residential developments within 400m of St Leonards Railway Station is at the discretion of the developer. Developers may allocate car parking to units based on market demand (ie. No minimum parking allocation per unit). This is to optimise the utilisation of residential parking space and minimise the risk of overspill parking onto nearby streets,

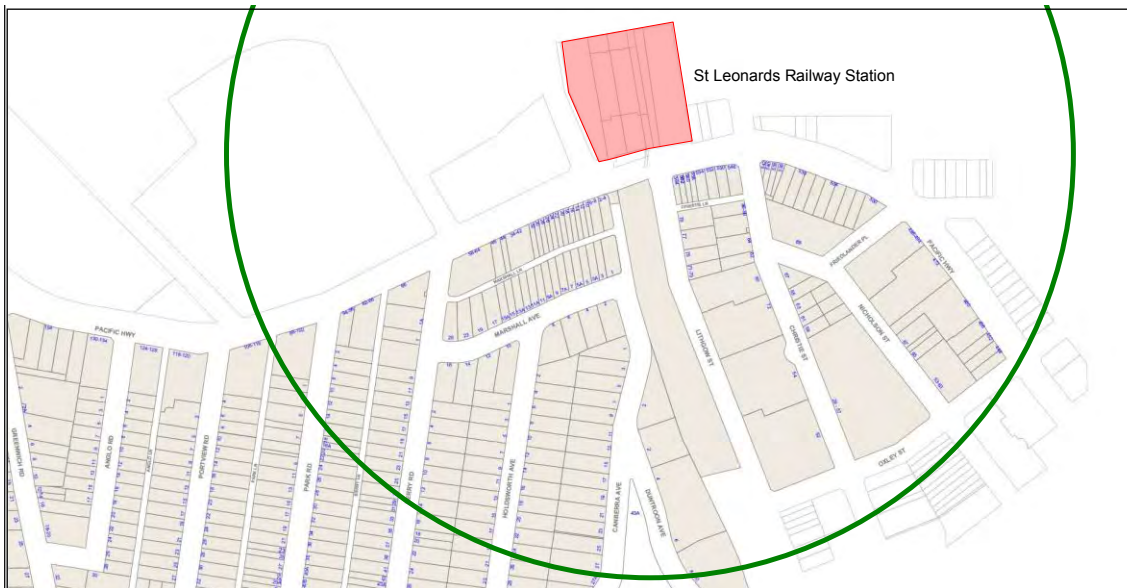


Figure 1: St Leonards Railway Station – 400m Catchment

2.4 State Environmental Planning Policy (SEPP) parking rates

Parking rates for certain special land uses are covered in the relevant State Environmental Planning Policies (SEPPs). These SEPP parking rates override Council's DCP parking rates. References to the relevant documents are provided below.

[SEPP \(Exempt and Complying Development Codes\) 2008](http://www.austlii.edu.au/au/legis/nsw/consol_reg/seppacdc2008721/)

(http://www.austlii.edu.au/au/legis/nsw/consol_reg/seppacdc2008721/)

[SEPP \(Affordable Rental Housing\) 2009](http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+364+2009+cd+0+N)

(<http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+364+2009+cd+0+N>)

[SEPP \(Housing for Seniors or People with a Disability\) 2004](http://www.legislation.nsw.gov.au/viewtop/inforce/epi+143+2004+FIRST+0+N/)

(<http://www.legislation.nsw.gov.au/viewtop/inforce/epi+143+2004+FIRST+0+N/>)

[SEPP \(Infrastructure\) 2007](http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+641+2007+FIRST+0+N/)

(<http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+641+2007+FIRST+0+N/>)

[SEPP \(Temporary Structures\) 2007](http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+498+2007+cd+0+N)

(<http://www.legislation.nsw.gov.au/maintop/view/inforce/epi+498+2007+cd+0+N>)

State Environmental Planning Policies are subject to regular review and modification. Further information is available at www.planning.nsw.gov.au/list-of-state-policies.

2.5 Car share

Car share has an important role to play in reducing private car ownership rates, particularly in areas where most travel needs can be satisfied by public transport and therefore only occasional access to a car is required.

For the purposes of this DCP 'car share' refers to commercial car share operations.

Provisions

- a) Outside the St Leonards Railways Station 400m catchment area, public car share spaces may be provided in residential developments in lieu of on-site parking. Details to be confirmed with Council at DA stage.
 - i. On-site car share spaces are to be provided in lieu of private parking at a rate of 1 per 3. These car share spaces are to be dedicated to commercial car share use and must be accessible to both residents and the general public (ie. on common property within the site boundary and not located behind security doors, roller blinds etc). A worked example showing how car share spaces will offset the required number of parking spaces for a residential flat building is shown overleaf.
 - ii. Alternatively, the applicant must make a financial contribution towards transport and parking infrastructure in Lane Cove in lieu of the on-site car share provision set out above. The value of the contribution is based on the rate for commercial/retail parking in Lane Cove Town Centre (per parking space), detailed in Council's adopted Fees and Charges.
 - iii. The applicant may choose a combination of on-site car share provision (using the rate in (a) i) and cash contribution to infrastructure works (detailed in Council's adopted Fees and Charges).
- b) Under the scenarios shown in (a), each unit comprising one or more bedrooms must be allocated a minimum of one private car space. This allocation should be marked on the architectural plans of the car park at DA stage.
- c) In the St Leonards Railway Station 400m catchment area, public car share spaces within residential development sites must be considered if a STrAP is required.
- d) The developer must also provide evidence at DA stage that commercial car share operator(s) have been engaged and are committed to supplying car share vehicles in all of the designated on-site spaces.

Example 1

A developer proposes a 123-dwelling residential flat building within close proximity of the Epping Road bus corridor. The development comprises 53 one-bedroom dwellings, 56 two-bedroom dwellings and 14 three-bedroom dwellings. To comply with the parking rates set out in **Table 1** there must be 165 resident parking spaces and 31 visitor parking spaces provided on site – a total of 196 spaces.

However, due to exceptional site constraints, the developer is unable to provide 196 car spaces on site. To overcome this, the developer proposes that 4 public car shares spaces are provided

instead. The developer also presents the agreement with a commercial car share operator stating their intent to use the spaces provided.

The provision of 4 public car share spaces means that only 153 resident parking spaces are required – a reduction of 12 resident parking spaces. Visitor parking spaces must still be provided at a rate of 1 per 4 dwellings. Therefore, the total number of on-site parking spaces required is 188.

The required on-site parking provisions with and without public car share spaces are summarised in Figure 2 below.

REQUIRED PARKING PROVISION <u>WITHOUT</u> CAR SHARE SPACES				REQUIRED PARKING PROVISION <u>WITH</u> CAR SHARE SPACES			
Dwelling Type	Qty	Parking rate (see Table 1)	Parking spaces	Dwelling Type	Qty	Parking rate (see Table 1)	Parking spaces
1-bedroom	53	1	53	1-bedroom	53	1	53
2-bedroom	56	1.5	84	2-bedroom	56	1.5	84
3-bedroom	14	2	28	3-bedroom	14	2	28
Car share offset	0	-3	0	Car share offset	4	-3	-12
<u>Residents spaces</u>			165	<u>Residents spaces</u>			153
<u>Car share spaces</u>			0	<u>Car share spaces</u>			4
<u>Visitors spaces</u>		0.25 per dwelling	31	<u>Visitors spaces</u>		0.25 per dwelling	31
<u>TOTAL spaces</u>			196	<u>TOTAL spaces</u>			188

Figure 2: Example of required parking provision with and without car share spaces

2.6 Bicycle parking

Refer to **Section 4.2 – Bicycle facilities** and **Table 3 – Bicycle parking rates**.

2.7 Motorcycle parking

Motorcycle parking is defined as secure parking for powered two-wheel vehicles, including motorbikes, scooters and mopeds.

Provisions

- Developers shall provide 1 motorcycle parking space per 15 car spaces for all types of development.
- Motorcycle parking spaces are to have an area of 1.2m x 3m

2.8 Disabled parking provision

Provisions

- a) For disabled car parking rates refer to **Table 1** and **Table 2**
- b) Disabled parking spaces must be built in accordance with AS/NZS 2890.6:2009 Parking facilities—Off-street parking or people with disabilities.

2.9 Tandem and mechanical stacked parking

Tandem parking means two or more vehicles sharing a parking space at the same level configured nose to tail. This is often the most efficient and cost-effective use of car parking space but these considerations do not override the need for safe and accessible parking areas.

Mechanical stacked parking arrangements are *not* permitted. This is due to the high risk of such devices breaking down, which would lead to complete loss of amenity and may result in overspill parking on surrounding local streets.

Provisions

Council does not support the use of tandem parking provision in new developments. Council may consider its use only in exceptional circumstances where it can be demonstrated:

- a) That the use of tandem parking configurations will enable a reduced level of excavation to preserve existing significant tree(s) and or natural landscape features on the site; AND
- b) That the site's shape is physically constrained, such that conventional parking arrangements would not enable compliance with the parking provision requirements of this DCP; AND
- c) That the number of spaces in the tandem parking configuration does not exceed 10% of the overall parking stock.

2.10 Parking and access for service vehicles

Provisions

- a) Parking areas shall be provided and designed to allow for access and loading by Council's waste collection contractor.
- b) All parking areas for delivery and service vehicles must be designed in accordance with AS 2890.2:2002 Parking facilities—Off-street commercial vehicle facilities. On site delivery and service areas for residential flat buildings must be large enough to accommodate removal trucks.
- c) Developers should refer to Part Q - Waste Management & Minimisation for relevant dimensions and requirements.

2.11 Parking area access and design

Provisions

- a) All parking areas, including access ramps and driveways, must be designed in accordance with AS/NZS 2890.1:2004 Parking facilities—Off-street car parking
- b) Developers shall refer to relevant other sections of Council's Development Control Plan.

2.12 Child Care Centres

Provisions

- a) Refer to Tables 1 and 2 for car parking rates for Child Care Centres
- b) Council may consider a reduction in parking requirements where a study justifies the assumptions that staff and users of the centre will use public transport, or live or work within walking distance, or due to other considerations on an individual site's merits. Particular consideration will be given to centres with a high number of staff due to the provision of 0-2 year old spaces.
- c) Car park spaces design should correspond with Australian Standard 2890
- d) Consideration may be given to reducing the on-site parking requirements, in terms of drop off/pick up component, where convenient and safe on-street parking is available (e.g. indented parking bays) in streets which experience low traffic volumes subject to not adversely affecting the safety and amenity of the adjacent area or causing traffic problems.
- e) On-street car spaces may be required to clearly indicate that they are for the exclusive use of the Child Care Centre users in peak hour periods at the drop-off between 7.00-9.00am and between 2.30-6.00pm.
- f) Car parking for staff and users with disabilities must be provided in accordance with Australian Standards.

2.13 Motels

Provisions

- a) Refer to Tables 1 and 2 for car parking rates for Hotel/Motel*.

*Kitchen facilities which cater for a convention or conference areas will be included in the calculation of floor area of those convention or conference facilities.

- b) A Traffic and Parking Report for hotel/motel development is to address tourist coach set-down and parking provisions. Provision for tourist coach parking should take into account available off-site coach parking. Where practicable and subject to urban design considerations, loading and unloading of passengers and baggage is to be accommodated within the development site.
- c) The Part R car parking requirements are to be provided for each of the uses specified, and will be calculated independently. No discounting of the car parking requirements between different uses on-site will be permitted.

- d) The provision of car parking spaces shall not be permitted within 10 metres of the road to which the site has frontage.

Information regarding dimensions, layouts, etc. for off-street carparks is contained in Australian Standard 2890.1-1993 “Off-Street Car Parking Facilities”.

R.3 Public Transport

3.1 Public Transport – General

Objectives

The objectives of public transport controls are to:

1. Improve public transport amenity at new development sites.
2. Encourage the use of public transport as an alternative to private car-based travel.
3. Reduce the demand for private car trips and parking.

3.2 Large development sites

For large developments, applicants must ensure that access to public transport services is maximised by negotiating with the State Transit Authority (STA) where deemed necessary by Council to divert routes or provide for additional services. The need for applicants to liaise with state transport authorities is to be determined by Council at the Pre-Development Application stage.

Provisions

- a) Diversion of bus routes or provision of additional services shall be discussed with STA if the development is
 - i. A residential development comprising 75 or more units.
 - ii. A non-residential development with value greater than \$20m AUD.
- b) Other developments may trigger the requirement to liaise with STA over bus services – this is at the discretion of Council's Manager – Traffic and Transport.
- c) Should this need arise, developers should engage with relevant state government agencies prior to the Development Application being lodged.

3.3 Other development sites

For developments that do not fall under the category of 'Large development sites' as per the provisions in **Section 3.2**, consideration shall be given to the ability for existing public transport to service the site.

Means of improving access to public transport include the provision of subsidised public transport, improving the quality and safety of pedestrian access to public transport, improving bus shelters and the like.

Provisions

Consideration must be given to the following in the Traffic Impact Assessment:

- a) Means of encouraging residents / users / workers to use local public transport services eg. Transport Access Guides (see **R.5**), discounted public transport season tickets for staff

- b) Minor infrastructure upgrades to improve access to public transport eg. new footpaths
- c) Improved passenger waiting facilities eg. bus shelters

R.4 Pedestrian and Bicycle facilities

4.1 Pedestrian and Bicycle Facilities – General

Objectives

The objectives of pedestrian and bicycle facility controls are to:

1. Improve pedestrian and bicycle safety and amenity in the local area.
2. Improve pedestrian accessibility to public transport, shops, schools, open spaces, community centres and the like.
3. Promote walking and cycling as an alternative to car-based travel.
4. Ensure new development supports the implementation of the Lane Cove Bicycle Plan and Pedestrian Access and Mobility Plan (PAMP)

Developers shall provide adequate walking and cycling facilities in the vicinity of their development and within the site itself.

4.2 Pedestrian facilities

A number of treatments for pedestrians are available to mitigate the impact of developments by controlling pedestrian/vehicle interaction. These include time separated facilities, physical pedestrian aids, physically separated facilities and integrated facilities as defined within Austroads Guide to Traffic Management series and the Austroads Guide to Road Safety series.

Reference shall also be made to **Planning Guidelines for Walking and Cycling**, (www.planning.nsw.gov.au/plansforaction/pdf/guide_pages.pdf)

Provisions

- a) In the Traffic Impact Assessment (TIA) developers must include:
 - i. Identification of major pedestrian routes and existing pedestrian desire lines, particularly with respect to connections to public transport nodes;
 - ii. Pedestrian flows and potential conflicts with vehicles arising from the proposed development, particularly where such conflicts cause capacity constraint on either vehicular or pedestrian movement.
 - iii. An assessment of the pedestrian network which extends beyond the site to include areas within at least 25m of the subject site boundary, and incorporate both sides of the roads within this zone.
 - iv. Suggested pedestrian infrastructure improvements, where deficiencies in the local pedestrian network are identified.
- b) Necessary pedestrian infrastructure improvements shall be funded either fully or partly by the developer or provided as works in kind prior to Occupation Certificate.

- c) Reference must be made to the Pedestrian Access and Mobility Plan (PAMP). Schemes identified in the PAMP works program within the vicinity of the development will be considered by Council as necessary pedestrian infrastructure improvements as stated in b).

4.3 Bicycle facilities and infrastructure

Where relevant reference shall be made to the Lane Cove Bicycle Plan to ensure that future development supports and facilitates the implementation of planned shared paths and cycle paths.

Bicycle parking should be provided for all new development to encourage and facilitate cycling to and from the site. Adequate end of trip facilities, for example showers, changing facilities, drying room, must be provided for commercial and industrial development in accordance with the rates outlined in the NSW Planning Guidelines for Walking and Cycling.

Provisions

Developers must:

- a) Refer to **Table 3 – Bicycle parking rates**; and
- b) Design bicycle parking in accordance with AS 2890.3
- c) Bicycle lockers are intended for use by residents or workers in the development, and should therefore be included in secure areas of the building.
- d) Provide adequate end of trip facilities where more than five bicycle lockers are provided in commercial and industrial development.
- e) Provide at least one bicycle locker per five with a charging point for electric bicycles.
- f) Make reference to the Lane Cove Bicycle Plan. Shared user paths and bicycle paths identified in the Bicycle Plan within the vicinity of the development will be considered by Council as necessary cycling infrastructure improvements.
- g) Fund necessary cycling infrastructure improvements either fully or partly or provide as works in kind prior to Occupation Certificate.
- h) Facilitate the future implementation of planned shared paths and cycle paths for example, by providing building setbacks from the footpath.

Council may request higher bicycle parking rates than those shown in Table 3 where appropriate – for example if the development is in close proximity to a major bicycle corridor.

In general, every bicycle parking device/storage area for visitors must:

- a) Enable wheels and frame to be locked to the device without damaging the bicycle;
- b) Be placed in public view and well lit for security purposes;
- c) Be in a convenient and accessible location outside pedestrian and vehicular movement paths; and
- d) Be protected from the weather.

In the Traffic Impact Assessment (TIA) developers must include:

- a) Identification of major bicycle routes and existing bicycle desire lines;

- b) Bicycle flows and potential conflicts with vehicles, particularly where such conflicts cause capacity constraint on either vehicular or bicycle movement; and
- c) Bicycle infrastructure improvements either fully or partly funded by the developer.

R.5 Transport Access Guide (TAG) / Sustainable Travel and Access Plan (STrAP)

5.1 General

The purpose of Transport Access Guides (TAGs) is to provide customised travel information for people travelling to and from a particular site or venue using sustainable modes of transport – walking, cycling and public transport.

A Sustainable Travel and Access Plan (STrAP) is a package of initiatives to reduce car-based travel and may include mode share targets relating to a specific development. The objective of a STrAP is to encourage residents / customers / staff to make greater use of public transport, cycling, walking and car-sharing for journeys to and from the development.

Objectives

The objectives of Transport Access Guides and Sustainable Travel and Access Plans are to:

1. Provide information on sustainable and active transport routes and services to and from sites.
2. Promote initiatives to reduce car-based travel.
3. Ensure large developments provide alternatives to car-based travel.

Provisions

- a) A TAG is required for medium sized developments that generate more than 10 peak hour vehicle trips.
- b) A STrAP is required for:
 - i. any residential flat building of 75 or more units;
 - ii. other developments over \$20 million AUD in value; and
 - iii. any development within 400m of St Leonards Railway Station that is forecast to generate 10 or more peak vehicle trips.

5.2 What is a Transport Access Guide?

A transport access guide can:

- Give detailed information on how to reach a site or venue using sustainable forms of transport - walking, cycling and public transport.
- Provide a quick visual snapshot at a location making it easy to see the relationship of the site to train stations, bus stops and taxi ranks and walking and cycling routes.
- Reduce the proportion of car travel to a site by letting people know how to get there by public transport, walking or cycling.

- Provide information about surrounding services and businesses including recreational walking and cycling routes.
- Improve health through active transport choices while reducing car travel and associated greenhouse gas emissions and traffic congestion.
- Take many forms - from a map on a notice board in the foyer or printed on the back of business cards, to more comprehensive information such as a brochure as part of an induction kit to new residents / employees.

Refer to the Roads and Maritime Services (RMS) Guides:

<http://www.transport.nsw.gov.au/sites/default/files/b2b/publications/transport-access-guide.pdf>

5.3 What is a Sustainable Travel and Access Plan?

Workplace strategies may include a mixture of hard and soft measures:

- Provide on-site car-share parking spaces.
- Provide bicycle storage, showering and changing facilities.
- Provide a bus to pick-up and drop-off users to the nearest railway station.
- Develop a Transport Access Guide (TAG) providing information to users on how to reach places via public transport, walking or cycling.
- Provide users with cycling allowances, loans and insurance.
- Adopt car pool scheme for work-related journeys.
- Introduce user car-sharing scheme for fleet vehicles.
- Provide priority parking for staff who car pool with more than 2 passengers.
- Provide travel information notice boards or information kiosks in prominent places in the building showing travel options to the site.
- Utilise office teleconferencing facilities as an alternative to face-to-face meetings.
- Facilitate home-working to avoid need for travel.
- Use taxis or public transport for work-related journeys.
- Provide employees with substantial discount or subsidy on public transport costs.
- Provide pool bicycles within the development for shared use.
- Provide public transport tickets at reception for staff to use free-of-charge for work trips during the day.

Residential strategies include:

- Provide a bus to pick-up and drop-off residents to the nearest railway station.
- Provide on-site car-share parking spaces.
- Provide pool bicycles within the development for shared use by residents.
- Provide walking and cycling facilities in the vicinity of the development.

- Provide resident travel packs, which include information on bicycle and walking routes, bus and rail timetables and information on car sharing.
- Issue new residents with bicycle or public transport vouchers.

The STrAP may include mode-share targets, to be agreed between the developer and Council prior to the issuing of the Occupation Certificate.

Provisions

- a) All developments that are forecast to generate more than 10 peak hour vehicle trips, (as per the RTA Guide to Traffic Generating Developments) must be accompanied by a Transport Access Guide approved by Council prior to Occupation Certificate.
- b) Sustainable Travel and Access Plans shall be discussed with Council's Traffic and Transport Team at the Pre-Development Application stage. STrAPs should be developed in consultation with Council staff and must be approved by Council prior to Occupation Certificate.

5.4 Further information

Transport Access Guide: Refer to the Roads and Maritime Services (RMS) Guides:

<http://www.transport.nsw.gov.au/sites/default/files/b2b/publications/transport-access-guide.pdf>

Sustainable Travel and Access Plan: Liaise directly with Council's Traffic and Transport Team.

R.6 Traffic Impact Assessment (TIA)

6.1 Traffic Impact Assessment – General

Lane Cove Council has developed a Traffic Impact Assessment (TIA) checklist to assist applicants when assessing the traffic and transport impacts of their development. Refer to the Development Forms on Council's website to download the Traffic Impact Assessment Checklist, which should be read in conjunction with this DCP.

The following section outlines Council's checklist in more detail.

Objectives

The objectives of a Traffic Impact Assessment is to:

1. Assess the traffic impacts of new developments on the surrounding transport network.
2. Recommend suitable and necessary measures to mitigate the negative impacts.
3. Ensure that the on-site parking provisions are adequate to meet the forecast demand.
4. Assess the adequacy of the development's internal road system in terms of typical loading and servicing activities eg. Council waste collection.
5. Propose a suitable Construction Traffic Management Plan to mitigate the traffic impacts of the construction activities associated with the development.

Provisions

- a) Developments that are forecast to generate 10 or more peak hour vehicle trips are required to submit a Traffic Impact Assessment (TIA) at the DA stage.

6.2 Introduction

The introduction shall give an overview of the development proposal.

6.3 Existing transport network and traffic situation

Details the site location, existing traffic flows and turning counts and assesses existing non-car travel options.

Consideration shall be given to the capacity of the road network to support the proposed increase/change in traffic generation as a result of the proposed development.

Assessment shall include the change in the traffic flows on access and egress routes to the site, including any reassignment of traffic. The capacity of the road is largely determined by the capacity of its intersections to cater for peak period traffic flows. Generally, the capacity of the intersections shall be modelled with programs such as SIDRA. As a minimum, consideration shall be given to the Level of Service (LOS) of the intersection and the average delay per vehicle in seconds.

The Environmental Capacity of a road takes into account residential amenity, pedestrian safety, and traffic noise. Consideration shall be given to the environmental capacity (amenity) of the road network to support the proposed increase/change in traffic generation as a result of the development, particularly in relation to surrounding residential properties. Reference shall be made to the relevant RMS guidelines.

Provisions

- a) Traffic counts shall be undertaken on affected roads during peak hours on a typical Thursday. In addition, Council may request additional traffic counts if deemed necessary.
- b) Intersection counts shall be undertaken at affected intersections during peak hours on a typical Thursday. Intersection counts shall include both pedestrians and cyclists. In addition, Council may request additional intersection counts if deemed necessary.

6.4 Proposed development

Details the nature and size of the development, access arrangements, on-site parking and development trip generation.

Provisions

- a) Access arrangements shall be clearly stated at the DA stage, following advice received at pre-lodgement. Access from quieter, local roads is preferred to busier main roads.
- b) On-site car parking provision must comply with Part R – Section 3 of this DCP.
- c) Development traffic generation shall be estimated using the RTA Guide:
 - [RTA Guide to Traffic Generating Developments \(October 2002\)](http://www.rta.nsw.gov.au/roadprojects/community_environment/documents/guide_to_generating_traffic_developments.pdf)
(http://www.rta.nsw.gov.au/roadprojects/community_environment/documents/guide_to_generating_traffic_developments.pdf)
 - [RTA Guide to Traffic Generating Developments – Updated traffic surveys \(May 2013\)](http://www.rms.nsw.gov.au/trafficinformation/downloads/td13-04a.pdf)
(<http://www.rms.nsw.gov.au/trafficinformation/downloads/td13-04a.pdf>)
- d) The trip generation rates used shall be the most conservative figures provided in the RTA Guide. For example, residential flat buildings must be assessed at the medium density trip rate of 0.5 weekday peak hour trips for smaller apartments and 0.65 peak hour trips for apartments with 3 or more bedrooms. Any deviation from the prescribed rates must be supported by data including surveys of nearby sites with similar characteristics to the proposed development.
- e) Where a particular land use does not have a specified trip rate in the RTA Guide it is acceptable to survey a similar development in the Greater Sydney area to devise approximate trip rates.

6.5 Impact of proposed development

Details the development traffic assignment, future traffic conditions and traffic management proposals.

Provisions

- a) Applicants shall demonstrate which roads the development traffic is likely to utilise to get to and from the development during peak hours.
- b) Future traffic conditions, including nearby intersections, shall be assessed using appropriate modelling software. SIDRA shall be used to analyse intersection level of service and vehicle delay. The future assessment year shall be the estimated date of full occupation of the site.
- c) Applicants shall be cognisant of proposed developments and traffic schemes in the vicinity of the site. The applicant shall agree the scope of a cumulative impact assessment with Council at the pre-DA meeting. Where possible, Council will make the relevant traffic schemes and development applications available to the applicant.
- d) Future year traffic conditions, particularly intersection level of service and vehicle delay, shall be presented both with development traffic and without.
- e) Council may request any relevant modelling files to verify the data and conclusions presented by the applicant.
- f) Applicants shall identify any minor traffic facilities necessary to mitigate the impacts of traffic and parking generated by the development. These could include road signs, pedestrian crossings, roundabouts, angled parking, traffic calming devices, storage bays, median islands and the like.

Any minor road and/or intersection works, as described in (f), are to be provided at total cost to the applicant through either a monetary contribution or works in kind.

6.6 Servicing operations

Details issues related to servicing operations (delivery vehicle loading and unloading).

Provisions

- a) Loading and servicing areas shall be clearly shown on plans and must comply with AS 2890.2: 2002 - Off-street commercial vehicle facilities and Council's DCP Part Q: Waste Management and Minimisation.
- b) Waste collection arrangements must be clearly explained and swept paths of Council's waste collection vehicle must be shown for all internal manoeuvres. Refer to DCP Part Q – Waste Management & Minimisation.

6.7 Recommendations and conclusions

Details the key issues and findings of the TIA, including recommended improvements to the local transport network to mitigate the impact of new development traffic.

Provisions

- a) Where the traffic generation of a development is likely to have a significant adverse impact on the local road network, suitable mitigation measures shall be proposed according to the following hierarchy of interventions:
 - i. Encourage healthy and active travel (eg. provide 3 metre setback from the footpath to facilitate a shared path in the future);
 - ii. Encourage public transport use (eg. improve connectivity to bus stops);
 - iii. Promote car share (eg. devote some on-site parking to spaces for car share).
- b) Sustainable transport infrastructure improvements can be complemented by softer measures as part of a Transport Access Guide or Sustainable Travel and Access Plan.
- c) The definition of “significant adverse impact on the local road network” is at the discretion of Council’s *Manager – Traffic and Transport*.

R.7 Construction Traffic Management Plan

Before commencing the construction stage of any development, Council will usually require the following documents:

- Construction Traffic Management Plan (CTMP)
- Section 138 (Road Opening) Permit (issued under the Roads Act 1993)
- Construction Certificate

A CTMP must give consideration to the following traffic issues:

- The proposed method of access to and egress from the site for construction vehicles
- Disruption to traffic flows
- Preferred construction access
- Vehicles leaving the construction site in a forwards direction
- Through traffic is to be maintained at all times
- Maintain access to all neighbouring properties at all times
- Proposed method of traffic control; controllers must be qualified
- Proposed method of pedestrian management
- Access routes through the Council area
- Method of loading and unloading materials and equipment
- Location of any cranes
- Location of any Work Zones (approval of the CTMP does not imply that the proposed Work Zone will be approved, that is still subject to Traffic Committee approval)
- Temporary, full or partial road closures
- Information to local residents and advertising as required
- Method of demolition and construction
- Areas used for storage of demolition materials, construction materials and waste containers
- Method/device to remove loose material from all vehicles and/or machinery
- Method of support to any adjoining properties
- Protection for Council and adjoining properties
- Other site-specific considerations (as applicable)
- Safe Work Method Statement

Provisions

- a) A Construction Traffic Management Plan must be approved by Council's *Manager – Traffic and Transport* prior to any work commencing on site.
- b) Traffic Control Plans (TCP) included in the Construction Traffic Management Plan must be produced by an RMS-accredited red or orange card holder if any traffic control at the worksite is required.
- c) All Traffic Controllers must be RMS-accredited blue car holders.
- d) Work Zone Permit Applications are to be submitted to Council prior to the commencement of works. No works are to commence on site until the Work Zone fees have been paid and Work Zone signs erected by Council.
- e) Council may amend construction traffic management plans, including the TCP, hours of operation and truck routes, at any time.

Table 1 – Car parking rates

Where parking rates are not provided here, applicants must provide analysis for the proposed parking rates using examples of developments that are similar in terms of land-use, size, location and available transport options. Calculations are to be rounded up to the nearest whole number.

Table 1 – Car parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Residential & Mixed Use Development (Residential component)		
Attached Dwellings and Multi-Dwelling Housing	0.5 spaces per studio 1 space per 1-bedroom unit 1.5 spaces per 2-bedroom unit 2 spaces per 3+ bedroom unit 1 disabled space for each adaptable housing unit	1 space per 4 units 1 disabled space per 50 visitor spaces (minimum 1 disabled space)
Residential flat buildings	0.5 spaces per studio 1 space per 1-bedroom unit 1.5 spaces per 2-bedroom unit 2 spaces per 3+ bedroom unit 1 disabled space for each adaptable housing unit	1 space per 4 units 1 disabled space per 50 visitor spaces (minimum 1 disabled space)
Shop Top Housing	1 space per dwelling 1 disabled space for each adaptable housing unit	
Boarding House	As per SEPP (Affordable Rental Housing) 2009 1 accessible parking space per 100 places	
Tourist and Visitor Accommodation		
Backpackers hostel	1 space per 3 employees	1 space per 10 beds 1 disabled space per 100 visitor spaces (minimum 1 disabled space)

Table 1 – Car parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Hotel/motel	2 spaces + 1 per 20 rooms (staff parking)	1 space per 2 rooms + 1 space per 10m ² of convention/conference facility + 1 space per 6 seats in restaurant 1 disabled space per 10 car spaces (minimum 1 disabled space)
Serviced apartment	1 space per 2 employees	1 space per 4 apartments 1 disabled space per 10 car spaces (minimum 1 disabled space)
Commercial & Mixed Use Development (Commercial component)		
Office premises or business premises	1 space per 60m ² gross floor area (GFA) + 1 disabled space per 10 car spaces (minimum 1 disabled space)	N/A
Bulky goods premises	1 space per 2 employees	1 per 77m ² factory space 1 per 300m ² warehouse space 6 per 100m ² showroom space 1 disabled space per 50 car spaces (minimum 1 disabled space)
Shop	1 space per 40m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)	
Restaurant or cafe	1 space per 40m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)	
Shopping centre (including supermarkets)	Refer to RTA Guide to Traffic Generating Developments (2002) Section 5.7.1 1 disabled space per 20 car spaces (minimum 1 disabled space)	

Table 1 – Car parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Pub / Wine bar / Registered club	1 space per 2 employees	1 space per 40m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)
Entertainment facility eg. Cinema, Theatre	Provide analysis for proposed parking rates ie. A comparison of existing developments with similar characteristics in the locality 1 disabled space per 20 car spaces (minimum 1 disabled space)	
Place of public worship	1 per 2 employees	1 space per 10 seats + 1 per 10m ² where no permanent seating is provided 1 disabled space per 20 car spaces (minimum 1 disabled space)
Motor vehicle services		
Vehicle Repair Station	1 space per 2 employees	Minimum 4 holding bays 1 disabled space per 20 car spaces (minimum 1 disabled space)
Service Stations	1 space per 2 employees	Minimum 4 holding bays 1 per 25m ² retail space 1 disabled space per 20 car spaces (minimum 1 disabled space)
Showroom	1 space per 2 employees	1 per 100m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)
Vehicle Sales or Hire Premises	1 space per 60m ² gross floor area (GFA)	1 space per 200m ² (minimum 2 spaces) 1 disabled space per 20 car spaces (minimum 1 disabled space)

Table 1 – Car parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Industry		
Industry or warehouse or distribution centre	1 per 60m ² of ancillary office area + 1 per 77m ² of light industrial area + 1 per 300m ² of warehouse area + 1 disabled space per 50 car spaces (minimum 1 disabled space)	N/A
Health care		
Hospital	1 space per registered medical practitioner / dentist + 1 space per 2 employees	1 space per 3 beds 1 disabled space per 25 car spaces (minimum 1 disabled space)
Medical centre	1 space per healthcare professional + 1 space per 2 employees	1 space per 3 rooms 1 disabled space per 10 car spaces (minimum 1 disabled space)
Health consulting room	1 space per healthcare professional + 1 space per 2 employees	1 space per 3 rooms 1 disabled space per 10 car spaces (minimum 1 disabled space)
Veterinary hospital	1 space per veterinarian + 1 space per 2 employees	1 space per veterinarian 1 disabled space per 20 car spaces (minimum 1 disabled space)
Education		
Child care centre	1 space per 2 full time employees 1 space per 3 part time employees	1 short term drop off space per 5 children 1 disabled space per 20 car spaces (minimum 1 disabled space)

Table 1 – Car parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Pre school	1 space per 2 full time employees 1 space per 3 part time employees	Minimum 2 short term drop off spaces 1 disabled space per 20 car spaces (minimum 1 disabled space)
School	1 space per 2 staff members	1 space per 20 seats in assembly hall 1 disabled space per 20 car spaces (minimum 1 disabled space)
Tertiary education	1 space per 2 staff members	1 space per 10 students 1 disabled space per 20 car spaces (minimum 1 disabled space)
Community		
Swimming pool / gymnasium	1 space per 5 staff members	3 spaces per 100m ² GFA 1 disabled space per 20 car spaces
Library, art gallery or museum	Provide analysis for proposed traffic generation and parking rates ie. A comparison of existing developments with similar characteristics in the locality 1 disabled space per 10 car spaces (minimum 1 disabled space)	
Other		
Sex services premises	2 spaces on-site per each workroom	

Table 2 – Car parking rates near St Leonards Railway Station

Where parking rates are not provided here, applicants must provide analysis for the proposed parking rates using examples of developments that are similar in terms of land-use, size, location and available transport options. Calculations are to be rounded up to the nearest whole number.

Table 2 – Car parking rates near St Leonards Railway Station		
Proposed Use	Residents/Employees	Customers/Visitors
Residential & Mixed Use Development (Residential component)		
Attached Dwellings and Multi-Dwelling Housing	Refer to Table 1	Refer to Table 1
Residential flat buildings	0.5 spaces per studio 0.5 spaces per 1-bedroom unit 1 space per 2-bedroom unit 2 spaces per 3+ bedroom unit Allocation of parking spaces at developer's discretion. 1 disabled space for each adaptable housing unit	1 space per 4 units 1 disabled space per 10 visitor spaces (minimum 1 disabled space)
Tourist and Visitor Accommodation		
Hotel/motel	2 spaces + 1 per 20 rooms (staff parking)	1 space per 3 rooms + 1 space per 20m ² of convention/conference facility + 1 space per 10 seats in restaurant 1 disabled space per 10 car spaces (minimum 1 disabled space)
Serviced apartment	1 space per 2 employees	1 space per 4 apartments 1 disabled space per 10 car spaces (minimum 1 disabled space)
Backpackers hostel	1 space per 3 employees	1 space per 10 beds minimum 1 disabled space

Table 2 – Car parking rates near St Leonards Railway Station		
Proposed Use	Residents/Employees	Customers/Visitors
Commercial & Mixed Use Development (Commercial component)		
Office premises or business premises	1 space per 100m ² gross floor area (GFA) + 1 disabled space per 10 car spaces (minimum 1 disabled space)	N/A
Bulky goods premises	1 space per 2 employees	1 per 77m ² factory space 1 per 300m ² warehouse space 6 per 100m ² showroom space 1 disabled space per 50 car spaces (minimum 1 disabled space)
Shop	1 space per 110m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)	
Restaurant or cafe	1 space per 110m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)	
Shopping centre (including supermarkets)	Refer to RTA Guide to Traffic Generating Developments (2002) Section 5.7.1 1 disabled space per 20 car spaces (minimum 1 disabled space)	
Pub / Wine bar / Registered club	1 space per 2 employees	1 space per 40m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)
Entertainment facility eg. Cinema, Theatre	Provide analysis for proposed traffic generation and parking rates ie. A comparison of existing developments with similar characteristics in the locality 1 disabled space per 20 car spaces (minimum 1 disabled space)	

Table 2 – Car parking rates near St Leonards Railway Station		
Proposed Use	Residents/Employees	Customers/Visitors
Place of public worship	1 per 2 employees	1 space per 10 seats + 1 per 10m ² where no permanent seating is provided 1 disabled space per 20 car spaces (minimum 1 disabled space)
Motor vehicle services		
Vehicle Repair Station	1 space per 4 employees	Minimum 4 holding bays 1 disabled space per 20 car spaces (minimum 1 disabled space)
Service Stations	1 space per 4 employees	Minimum 4 holding bays 1 per 50m ² retail space 1 disabled space per 20 car spaces (minimum 1 disabled space)
Showroom	1 space per 4 employees	1 per 200m ² 1 disabled space per 20 car spaces (minimum 1 disabled space)
Vehicle Sales or Hire Premises	1 space per 100m ² gross floor area (GFA)	1 space per 400m ² (minimum 2 spaces) 1 disabled space per 20 car spaces (minimum 1 disabled space)

Table 2 – Car parking rates near St Leonards Railway Station		
Proposed Use	Residents/Employees	Customers/Visitors
Industry		
Industry or warehouse or distribution centre	1 per 60m ² of ancillary office area + 1 per 77m ² of light industrial area + 1 per 300m ² of warehouse area + 1 disabled space per 100 car spaces	N/A
Health care		
Hospital	1 space per registered medical practitioner / dentist + 1 space per 2 employees	1 space per 3 beds 1 disabled space per 10 car spaces (minimum 1 disabled space)
Medical centre	1 space per 1.5 healthcare professional + 1 space per 3 employees	1 space per 3 rooms 1 disabled space per 10 car spaces (minimum 1 disabled space)
Health consulting room	1 space per 1.5 healthcare professional + 1 space per 3 employees	1 space per 3 rooms 1 disabled space per 10 car spaces (minimum 1 disabled space)
Veterinary hospital	1 space per veterinarian + 1 space per 2 employees	1 space per veterinarian 1 disabled space per 20 car spaces (minimum 1 disabled space)

Table 2 – Car parking rates near St Leonards Railway Station		
Proposed Use	Residents/Employees	Customers/Visitors
Education		
Child care centre	1 space per 3 full time employees	Set down area: 2 spaces if <24 children 3 spaces if >24 children 1 disabled space per 20 car spaces (minimum 1 disabled space)
Pre school	1 space per 3 full time employees	Minimum 2 short term drop off spaces 1 disabled space per 20 car spaces (minimum 1 disabled space)
School	1 space per 3 staff members	1 space per 30 seats in assembly hall 1 disabled space per 20 car spaces (minimum 1 disabled space)
Tertiary education	1 space per 3 staff members	1 space per 20 students 1 disabled space per 20 car spaces (minimum 1 disabled space)
Community		
Swimming pool / gymnasium	1 space per 8 staff members	2 spaces per 100m ² GFA 1 disabled space per 20 car spaces
Library, art gallery or museum	Provide analysis for proposed traffic generation and parking rates ie. A comparison of existing developments with similar characteristics in the locality 1 disabled space per 10 car spaces (minimum 1 disabled space)	
Other		
Sex services premises	Refer to Table 1	

Table 3 – Bicycle parking rates

All new development is to provide on-site, secure bicycle parking spaces. Where a proposed use is not included below, bicycle parking rates will be considered on merit taking into consideration rates from similar uses in Table 3 as well as those contained in the NSW Guidelines for Walking and Cycling (2004).

Bicycle lockers and rail/racks are to be designed in accordance with AS 2890.3.

Table 3 – Bicycle parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Residential & Mixed Use Development (Residential component)		
Dwelling house	-	-
Residential flat buildings	1 per 4 dwellings	1 rack + 1 rack per 10 dwellings
Tourist and Visitor Accommodation		
Hotel/motel	1 per 4 staff	1 rack + 1 rack per 20 rooms
Serviced apartment	1 per 4 staff	1 rack + 1 rack per 20 rooms
Backpackers hostel	1 per 4 staff	1 rack + 1 rack per 10 beds
Commercial & Mixed Use Development (Commercial component)		
Office premises or business premises	1 per 300m ² GFA	1 rack + 1 rack per 800m ² GFA
Bulky goods premises	1 per 1200m ² GFA	1 rack + 1 rack per 2000m ² GFA
Shop	1 per 50m ² GFA	2 racks + 1 rack per 200m ² over 200m ² GFA
Restaurant or cafe	1 per 50m ² GFA	2 racks + 1 rack per 200m ² over 200m ² GFA
Shopping centre (including supermarkets)	1 per 50m ² GFA	2 racks + 1 rack per 200m ² over 200m ² GFA

Table 3 – Bicycle parking rates		
Proposed Use	Residents/Employees	Customers/Visitors
Pub / Wine bar / Registered club	1 per 200m ² GFA	2 racks + 1 rack per 200m ² GFA over 200m ² GFA
Entertainment facility eg. Cinema, Theatre	-	1 rack + Greater of 1 rack per 30 seats or 1 rack per 80m ² GFA
Place of public worship	-	1 rack + Greater of 1 rack per 30 seats or 1 rack per 40m ² GFA
Motor vehicle services		
Vehicle Repair Station	-	-
Service Stations	-	-
Showroom	-	-
Vehicle Sales or Hire Premises	-	-
Industry		
Industry or warehouse or distribution centre	1 per 20 staff	-
Health care		
Hospital	1 per 5 practitioners / professionals	1 rack + 1 rack per 200m ² GFA
Medical centre	1 per 5 practitioners / professionals	1 rack + 1 rack per 200m ² GFA
Health consulting room	1 per 5 practitioners / professionals	1 rack + 1 rack per 200m ² GFA
Veterinary hospital	1 per 5 practitioners / professionals	1 rack + 1 rack per 200m ² GFA
Education		
Child care centre	1 per 10 staff	2 racks per centre
Pre school	-	-

Table 3 – Bicycle parking rates

Proposed Use	Residents/Employees	Customers/Visitors
School	1 per 10 staff	1 rack + 1 rack per 10 students
Tertiary education	1 per 10 staff	1 rack + 1 rack per 10 students
Community		
Swimming pool / gymnasium	1 per 10 staff	1 rack + 1 racks per 200m ² of pool / gymnasium area
Library	1 per 10 staff	2 racks + 1 rack per 200m ² GFA
Art gallery or museum	1 per 1000m ² GFA	1 rack + 1 rack per 200m ²

See Council Website

Attachment - Dictionary

Access handle means the vehicular access way to a battleaxe allotment.

Accessible means complying with the floor space requirements described in AS 1428.1 and able to be approached, entered and used by people with disability, including those who rely upon a wheelchair.

Accessible housing unit means housing unit with features already in place to facilitate the use by a person with a disability or progressive frailty.

Acid sulfate soils means naturally occurring sediments and soils containing iron sulfides (primarily pyrite) or their precursors or oxidation products, whose exposure to oxygen leads to the generation of sulfuric acid (for example, by drainage or excavation).

Acid Sulfate Soils Manual means the manual by that name published by the Acid Sulfate Soils Management Advisory Committee and made publicly available.

Acid Sulfate Soils Map means the Lane Cove Local Environmental Plan 2009 Acid Sulfate Soils Map.

Acid Sulfate Soils Plan of Management means a plan prepared by or on behalf of one or more landowners, Lane Cove Council, or private drainage board.

Adaptable housing means housing that is designed and built to accommodate future changes to suit occupants with mobility impairment or life cycle needs (Australian Standard 4299: Adaptable Housing).

Adjoining land means land that has a boundary in common with the site on which the development is proposed or land that is separated from the site by not more than a pathway, driveway, laneway, roadway or similar thoroughfare.

Advertisement means a sign, notice, device or representation in the nature of an advertisement visible from any public place or public reserve or from any navigable water.

Advertisements on bridges Advertising structures may be permitted on railway, road and pedestrian bridges or overpass structures where they meet the criteria in the SEPP 64 Guidelines. Special rules apply to the type of advertisements allowed on bridges and overpasses to ensure that the architectural qualities of the bridge and safety along the transport corridor are not compromised.

Advertisements on bus shelters or street furniture Bus shelter poster displays are often positioned as an integral part of a freestanding covered structure at a bus stop. Often the poster displays are internally illuminated.

Street furniture displays commonly are 1.8m x 1.2m or 1.5m x 1m in size and are often backlit. They are generally located within urban centres, entertainment areas and railway platforms.

Advertisements within navigable waters Under SEPP 64, advertising is prohibited within navigable waters (waters capable of navigation and open to or used by the public for navigation) unless it is ancillary to the dominant purpose of the vessel.

Advertising structure means a structure used or to be used principally for the display of an advertisement.

Afflux means the rise in water level in a stream, channel or flowpath caused by a constriction or impediment downstream.

Affordable housing means housing for very low income households, low income households or moderate income households, being such households as prescribed by the regulations or as are provided for in an environmental planning instrument.

AHD means Australian Height Datum, which approximates mean sea level.

Applicant applies to infrastructure providers and their agents.

AR&R means Australian Rainfall and Run-off is an Australian design guide which is published by Engineers Australia to provide engineers with the best available information on design flood estimation.

ARI means Average Recurrence Interval. The long term average number of years between floods which will equal or exceed the selected storm event.

Articulation means buildings elements such as awnings, balconies, blade walls, bay windows and the like.

Backwater means that part of a stream, channel or flowpath where the water is kept back due to some controlling influence or obstruction downstream.

Barriers to access means physical and sensory impediments to paths of travel e.g. stairs, doors, gates, surfaces, lighting, signage, etc.

Bedroom includes, for calculation of Section 94 Contribution and car parking requirements, a room such as a study where it is readily convertible to a bedroom.

Billboard refers to 24 sheet poster, measuring 6m x 3m in size and tend to be located mainly on building walls in commercial and industrial areas, along roads and in railway corridors.

Block plan means an area plan specific to one individual locality indicating the elements which should together comprise the urban design for the area. These specific controls supplement and prevail over any general controls. All other general controls still apply to these Special Areas, however.

Brothel means a brothel within the meaning of the Restricted Premises Act 1943, other than premises used or likely to be used for the purposes of prostitution by no more than one prostitute. (Sex)

Buffer means that part of the site which is a transition between the bushland and the building/s. (Bush)

Building is defined to include part of a building and any structure or part of a structure, but not including a manufactured home, moveable dwelling or associated structure (or part of a manufactured home, moveable dwelling or associated structure).

Building identification sign means a sign that identifies or names a building and that may include the name of a building, the street name and number of a building, and a logo or other symbol, but that does not include general advertising of products, goods or services.

Building line or setback means the horizontal distance between the property boundary or other stated boundary (measured at 90 degrees from the boundary) and:

- a) a building wall, or
- b) the outside face of any balcony, deck or the like, or
- c) the supporting posts of a carport or verandah roof,
- d) whichever distance is the shortest.

Building wrap advertisement means an advertisement used in association with the covering or wrapping of:

- a) a building or land, or
- b) a building that is under construction, renovation, restoration or demolition, but does not include a wall advertisement.

Building wrap and hoarding advertisements are materials such as vinyl mesh used to cover or wrap buildings or land that may be under construction, renovation or demolition. Hoardings are a type of building wrap generally made of wood that are often placed as temporary walls around construction sites. Building wrap advertisements use the wrap material (e.g. mesh or wood) as the mounting surface for the advertisements. Under SEPP 64, these types of advertisements are not considered to be wall advertisements and special rules apply to the use of the advertisements.

Built-upon area The area of a site containing any built structure (whether covered or uncovered), any building, carport, terrace or pergola, hard-surface recreation area, swimming pool, tennis court, driveway, parking area or any likely structure, but excluding minor landscape features.

Bushland means land (private or public) on which there is vegetation which is either a remainder of the natural vegetation of the land or, if altered, is still representative in part of the structure and floristics of the natural vegetation and which contains topographic and natural features. (Bush)

Business identification sign means a sign:

- a) that indicates:
 - I. the name of the person or business, and
 - II. the nature of the business carried on by the person at the premises or place at which the sign is displayed, and
- c) that may include the address of the premises or place and a logo or other symbol that identifies the business,

but that does not include any advertising relating to a person that does not carry on business at the premises or place.

Catchment means area of land from which all runoff water flows to the same low point in a water body or drainage depression (creek, river, harbour, etc.) and always relates to a specific location.

Centres mean any area or a precinct, small or big that has some commercial, retail and other mixed use activities.

Child care centre means a building or place used for the supervision and care of children that:

- (a) provides long day care, pre-school care, occasional child care or out-of-school-hours care, and
- (b) does not provide overnight accommodation for children other than those related to the owner or operator of the centre,
but does not include:
 - (c) a building or place used for home-based child care, or
 - (d) an out-of-home care service provided by an agency or organisation accredited by the NSW Office of the Children's Guardian, or
 - (e) a baby-sitting, playgroup or child-minding service that is organised informally by the parents of the children concerned, or
 - (f) a service provided for fewer than 5 children (disregarding any children who are related to the person providing the service) at the premises at which at least one of the children resides, being a service that is not advertised, or
 - (g) a regular child-minding service that is provided in connection with a recreational or commercial facility (such as a gymnasium), by or on behalf of the person conducting the

- facility, to care for children while the children's parents are using the facility, or
- (h) a service that is concerned primarily with the provision of:
 - (i) lessons or coaching in, or providing for participation in, a cultural, recreational, religious or sporting activity, or
 - (ii) private tutoring, or
 - (i) a school, or
 - (j) a service provided at exempt premises (within the meaning of Chapter 12 of the Children and Young Persons (Care and Protection) Act 1998), such as hospitals, but only if the service is established, registered or licensed as part of the institution operating on those premises.

Co-located facilities mean one or more facilities on or within an original facility or a public utility structure.

Conservation means the use, management and protection of resources so that they are not degraded, depleted or wasted and are available on a sustainable basis for present and future generations.

Constructed wetland means a Shallow water body containing aquatic plants installed to receive and treat contaminated stormwater run-off.

Contaminants means substances that are found in a places where they should not be and may be harmful to the health of the environment.

Coplanar means lines, points or objects lying or occurring in the same plane.

Co-siting means the siting of a number of telecommunication facilities, often owned by different Carriers, in one location.

Cumulative impact means the impact of radiation from various sources or over time.

Cut and Fill means earthworks undertaken to alter the slope or level of the natural land.

Deemed to satisfy means provisions that must be complied with under the BCA.

Deep soil zones are areas of natural ground with relatively natural soil profiles retained within a development. Buildings, basement carparks, swimming pools, tennis courts, patios and decks, and impervious surfaces such as paved areas, driveways, carparking and roofed areas are NOT included as part of the deep soil zone.

Detention systems means holding storages which temporarily store stormwater to control and reduce downstream flow rates. They are designed to retard stormwater runoff during intense rainfall and to empty once the peak of the storm has passed.

Development means:

- (a) the use of land, and
 - (b) the subdivision of land, and
 - (c) the erection of a building, and
 - (d) the carrying out of a work, and
 - (e) the demolition of a building or work, and
 - (f) any other act, matter or thing referred to in section 26 that is controlled by an environmental planning instrument,
- but does not include any development of a class or description prescribed by the regulations for the purposes of this definition.

Drain means a man-made depression, ditch or channel, used to convey water from one area to another.

Drainage easement means the legal rights attached to land whereby another parcel of land has the right to use part or all of the land for the purpose of draining water.

Drainage Management Plan means a document that contains a full description of the management procedures to be applied to a site regarding existing drains and proposed drains. The Drainage Management Plan must comply with the requirements of the Acid Sulfate Soil manual.

Drainage reserve means land vested in Council for drainage purposes.

Dripline of a tree means the horizontal extent of the canopy of the tree.

Dwelling means a room or suite of rooms occupied, or used, or so constructed or adapted as to be capable of being occupied or used as a separate domicile.

Earthworks include the addition or removal of any solid material up to depths of 200mm or more onto or from the land, or any other work which will alter the natural ground level or character of the surface of that land, or service trenches, by at least this amount.

Electromagnetic radiation (EMR) means the radiation in the microwave and radiofrequency band of the electromagnetic spectrum.

Environmental weeds are plant species that have been identified as pest species in bushland and should not be planted on properties adjoining bushland. Refer to appendix B within Part H – Bushland Protection for a list of common environmental weeds in Lane Cove.

Erosion control devices means measures to assist in minimising erosion at a site and downstream sedimentation.

First flush means a treatment strategy that removes a high proportion of pollutants at the first rainfall after a dry period.

Flood means a stream flow that overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam.

Flood mitigation works means work designed and constructed for the express purpose of mitigating flood impacts. It involves changing the characteristics of flood behaviour to alter the level, location, volume, speed or timing of flood waters to mitigate flood impacts. Types of works may include excavation, construction or enlargement of any fill, wall, or levee that will alter riverine flood behaviour, local overland flooding, or tidal action so as to mitigate flood impacts.

Flood ways means the many controlled and uncontrolled routes taken by stormwater in the event of blockage or failure of the underground system.

Floor Space Ratio (FSR) of buildings on a site is the ratio of the gross floor area of all buildings within the site to the site area.

Footpath means the part of a road reserve that is set aside or formed as a path or way for pedestrian traffic.

Freeboard means the difference in height between top water level during a storm event and the floor level of a structure or top of an embankment or channel.

Freestanding advertisement means an advertisement that is displayed on an advertising structure that is mounted on the ground on one or more supports.

GPT means Gross Pollutant Trap. A structure that acts as a water pollution control measure by intercepting and retaining gross pollutants.

Grey water means wastewater that has not come into contact with toilet waste.

Gross Floor Area means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

- (a) the area of a mezzanine, and
- (b) habitable rooms in a basement or an attic, and
- (c) any shop, auditorium, cinema, and the like, in a basement or attic,

but excludes:

- (d) any area for common vertical circulation, such as lifts and stairs, and
- (e) any basement:
 - (i) storage, and
 - (ii) vehicular access, loading areas, garbage and services, and
- (f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
- (g) car parking to meet any requirements of the consent authority (including access to that car parking), and
- (h) any space used for the loading or unloading of goods (including access to it), and
- (i) terraces and balconies with outer walls less than 1.4 metres high, and
- (j) voids above a floor at the level of a storey or storey above.

Gross pollutants means litter and debris transported by urban runoff that is greater than 5mm in diameter or is retained by a 5mm mesh screen.

Ground level (existing) means the existing level of a site at any point.

Habitable room means any room or area used for normal domestic activities, including living, dining, family, lounge, bedrooms, study, kitchen, sun room and play room, but not such rooms as laundries or toilets.

Holding berm means a small bank for retaining water.

Housing unit means a single residence or part of a residence, containing living area and sleeping space, kitchen, toilet and bath or shower room. The term includes bed-sitter flats, detached and semi-detached houses, villa homes townhouses and apartments in multi-storey blocks.

Hydraulics means the study of flow of fluid. In civil engineering, this concerns mainly the flow of water in waterways, in particular the evaluation of flow parameters such as water level and velocity.

Hydrology means the study of water as it relates to rainfall and the runoff process, in particular, catchment behaviour, flow rates and volumes.

Impervious means that it does not allow water to penetrate.

Interallotment drainage means a common stormwater drainage system that serves one or more private properties.

Invert means the lowest point of a channel or gutter, or the internal base of a pipe.

Isolated site means a property that cannot satisfy minimum lot requirements.

Landscaped area means part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.

Local indigenous plants are native species which occur naturally within the Municipality of Lane Cove, and are found on the adjoining bushland reserves.

Locality means a site's immediate vicinity, neighbourhood, precinct, catchment or municipality, or any area beyond, with which the site has an environmental, social or economic relationship.

Low-impact facility (LIF) means a facility that is exempted from state and council local planning under the Telecommunications (Low-impact Facilities) Determination 1997.

LPI means Land and Property Information Division of the NSW Department of Lands.

Maintenance of existing drains includes any works which will disturb or remove soil within existing drains.

Medical centre means business premises used for the purpose of providing health services (including preventive care, diagnosis, medical or surgical treatment, counseling or alternate therapies) to outpatients only, where such services are principally provided by health care professionals, and may include the ancillary provision of other health services.

Noxious weeds are plant species listed under Schedule 1 of the Noxious Weeds Act, 1993 which must be controlled or removed.

Nutrients means substances that provide nourishment to another organism. In the context of stormwater, they consist of Total Phosphorus (filterable phosphorus and particulate phosphorus) and Total Nitrogen (nitrates, nitrites, ammonium compounds and organically bound nitrogen compounds).

Obvert means the internal top of the pipe.

Office means a building or place used for the purpose of administrative, clerical, technical, professional or similar activities that do not include dealing with members of the public at the building or place on a direct and regular basis, except where such a dealing is a minor activity (by appointment) that is ancillary to the main purpose for which the building or place is used.

OSD means on-site Stormwater Detention system. A device used to control the rate of stormwater runoff in order to reduce peak discharges during storm events.

On-site Retention System means a device that controls the rate and volume of stormwater runoff to reduce peak and total volume discharges during and after storm events by ensuring that water is reused on the site.

Orifice means a narrow opening into a pipe or cavity.

PCA means Principal Certifying Authority.

Peak Discharge means the maximum discharge that occurs during a flood event.

Performance Based means alternative solutions to permit development that is non-compliant with the Deemed to Satisfy provisions of the BCA.

Pervious means that it allows water to penetrate.

Planting on Structures means land vegetated with gardens, lawns, shrubs and/or trees and may be over a building structure but does not include swimming pools, tennis courts, driveways, paved areas etc.

PMF means Probable Maximum Flood.

Pollutant means a substance that adversely affects the physical, chemical or biological properties of the environment.

Potable means water that meets the standards of values for drinking water recommended from time to time by the National Health and Medical Research Council.

Potential acid sulfate soil is soil which contains oxidisable sulfur compounds that has a field pH of 4 or more but will become severely acid when oxidised.

Preliminary soils assessment a soil survey involving soils sampling and laboratory methods outlined in the Acid Sulfate Soils Manual.

Principal retail street means Longueville Road, Lane Cove Plaza or Burns Bay Road.

PSD means Permissible Site Discharge. The controlled rate of runoff allowed from a site. (Storm)

Radiocommunications facility means a base station or radiocommunications link, satellite-based facility or radiocommunications transmitter.

Rail corridor means land:

- (a) that is owned, leased, managed or controlled by a public authority for the purpose of a railway or rail infrastructure facilities, or
- (b) that is zoned under an environmental planning instrument predominantly or solely for development for the purpose of a railway or rail infrastructure facilities, or
- (c) in respect of which the Minister has granted approval under Part 3A or (before its repeal) Division 4 of Part 5 of the Act for the carrying out of development (or for a concept plan for a project comprising or including development) for the purpose of a railway or rail infrastructure facilities.

Rear lane means Birdwood Lane, Little Lane, Rosenthal Lane or Library Place or any other street that is not the only form of access to land.

Recognised public drainage system means a common stormwater drainage system that conveys public stormwater and that generally includes one or more of the following: street drainage comprising surface systems (formed and unformed kerb and gutter, earth channels); underground systems (pipes, road pits, headwalls, inlets and outlets); natural and constructed open channels.

Regeneration means the restoration of suitable conditions for ongoing long-term natural regeneration of the local indigenous plant community.

Restriction as to user means a restrictive covenant on the transfer of land which is a binding promise to restrict the use of the land or some part of it in a specified manner, such as a Positive Covenant.

Revegetation means the enhancement of the site by planting local indigenous plant species. Wherever possible revegetation methods should include seed collection and propagation of local indigenous plant species.

Riparian zone means the area of vegetation located on the bank of a natural watercourse.

Roof or sky advertisement means an advertisement that is displayed on, or erected on or above, the parapet or eaves of a building.

Runoff means rainfall that ends up as stream flow.

Sediment means solid material, either mineral or organic, that is in suspension, is being transported or has been moved from its site of origin by air, wind, water or gravity.

Sediment trap means a structure located on construction sites to receive contaminated run-off from disturbed areas and retain sediment.

Setback (see Building line or setback).

Sewage means wastewater that is contaminated by human excrement.

Sewerage means the arrangement of pipes that transports sewage.

Sex services means sexual acts or sexual services in exchange for payment.

Sex services premises means a brothel, but does not include home occupation (sex services).

Shop top housing means one or more dwellings located above (or otherwise attached to) ground floor retail premises or business premises.

Side return fences the portion of the side fence between the front boundary and the front building line.

Signage means any sign, notice, device, representation or advertisement that advertises or promotes any goods, services or events and any structure or vessel that is principally designed for, or that is used for, the display of signage, and includes:

- a) building identification signs, and
- b) business identification signs, and
- c) advertisements,

but does not include traffic signs or traffic control facilities.

Site Area means the area of any land on which development is or is to be carried out. The land may include the whole or part of one lot, or more than one lot if they are contiguous to each other, but does not include the area of any land on which development is not permitted to be carried out.

Sleeved car park means car parking surrounded by other uses so that it is not visible from public domain or outside the building.

Sleeving means wrapping or screening. (GMU)

Small format refers to 6 sheet poster, measuring 3m x 1.5m in size with the same proportions as a 24 sheet poster. Mounted mainly on walls and often located in suburban areas.

Soffit means the lowest point of the ceiling; however, it is generally used in context with awnings, eaves or any overhanging building element.

SOHO means Small Office and/or Home Office.

Soil Management Plan means a full description of the management procedures to be applied for a site. The plan must be prepared in accordance with the Acid Sulfate Soil Manual.

Special promotional advertisement means an advertisement for an activity or event of a civic or community nature, but does not include a wall advertisement.

Spectacular refers to poster displays over 50 square metres in area (standard dimensions are 18.9m x 4.5m). These are often located on highways and generally illuminated.

Storey means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include:

- (a) a space that contains only a lift shaft, stairway or meter room, or
- (b) a mezzanine, or
- (c) an attic.

Stormwater means untreated rain water that runs off the land onto which it falls.

Stormwater system means the system of pipes, overland flowpaths, creeks, canals and other channels used to carry stormwater to the receiving waters.

Street frontage height refers to the height of the building that is built to the street alignment and therefore directly addresses the public street.

Street setback see Building line or setback

Supermarket means a large (gross floor area of greater than 750sqm), usually self-service, shop or market selling food and possibly other domestic products.

Supersite refers to large displays around 42 square metres (often 12.66 x 3.35m) in size. Generally illuminated and located on major arterial roads and national highways.

Telecommunications facility means:

- (a) any part of the infrastructure of a telecommunications network, or
- (b) any line, equipment, apparatus, tower, mast, antenna, tunnel, duct, hole, pit, pole or other structure or thing used, or to be used, or in connection with a telecommunications network.

Telecommunications network means a system, or series of systems, that carries, or is capable of carrying, communications by means of guided or unguided electromagnetic energy, or both.

The Centre means Lane Cove Shopping Centre.

Topographic Features & Natural Features portray the natural lie of the land including but not exclusively any exposed rock (cliffs, escarpments, floaters), gullies, natural depressions, creek lines, foreshore and estuarine areas (rocky platforms, mudflats, beaches and seagrass beds).

Trunk Drainage means the stormwater drainage system that links property, interallotment and street drainage with the receiving waters.

Visitable housing means a housing unit which has at least one wheelchair accessible entry with an accessible path of travel to the living area and to a toilet that is either accessible or visitable.

Wall advertisement means an advertisement that is painted on or fixed flat to the wall of a building, but does not include a special promotional advertisement or building wrap advertisement.

Wastewater means sewage, either greywater or water that is contaminated by human excrement.

Watercourse means any river, creek, stream or chain of ponds, whether artificially modified or not, in which water usually flows, either continuously or intermittently, in a defined bed or channel, but does not include a waterbody.

Water Re-use means the use of water more than once, following treatment of waste water to an appropriate quality standard and delivery to the point of use.

Water Sensitive Urban Design (WSUD) seeks to ensure that development is carefully designed, constructed and maintained so as to minimise impacts on the natural water cycle.

Attachment - Amendments

LIST OF AMENDMENTS TO THE DCP

Table showing amendments and Parts affected:

Date Came into Force	Parts Amended
DCP adopted - 22 February 2010	All Parts adopted
Amendment 1: 18 May 2011	B, C, D, F, J, O Dictionary
Amendment 2: 9 December 2011	A, B, C, D, E, F, H, I, J, M, O, Q, Dictionary, Amendments
Amendment 3: 2 November 2012	D – Commercial & Mixed Use Development, Dictionary (supermarket parking)
Amendment 4: 25 January 2013	C – Residential Localities (Locality 6 – Mowbray Precinct)
Amendment 5: 3 April 2013	F – Access & Mobility (review of Part)
Amendment 6: 9 October 2013	D – Commercial and Mixed Use Development (Restaurant/café parking)
Amendment 6: 9 October 2013	D – Commercial and Mixed Use Localities (Marshall Precinct DCP)
Amendment 7: 11 April 2014	C – Residential Development (Battle-axe blocks)
Amendment 7: 11 April 2014	C – Residential Localities (Locality 7 – 266 Longueville Road)
Amendment 8: 26 September 2014	R – Traffic, Transport and Parking (new Section)
Amendment 9: 1 October 2014	C – Residential Development (Boarding houses)
Amendment 10: 25 March 2015	C – Residential Localities (Locality 1 – 296-314 Burns Bay Road)
Amendment 11: 22 May 2015	D – Commercial & Mixed Use Localities (Locality 5 – 472-504 Pacific Hwy, St Leonards)
Amendment 12: 24 February 2016	C (dev), D (dev), D (Loc), E, F, I, K, M, R (Parking References into Part R)

Table showing when DCP Parts Amended:

Part of DCP	Amendment Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Part A – Introduction	x	●	x	x	x	x	x	x	x	x	x	x
Part B – General Controls	●	●	x	x	x	x	x	x	x	x	x	x
Part C – Residential Development	●	●	x	x	x	x	●	x	●	x	x	●
Part C – Residential Localities	●	●	x	●	x	x	●	x	x	●	x	x
Part D – Commercial & Mixed Use Development	●	●	●	x	x	●	x	x	x	x	x	●
Part D – Commercial & Mixed Use Localities	●	●	x	x	x	●	x	x	x	x	●	●
Part E – Industrial Development	x	●	x	x	x	x	x	x	x	x	x	●
Part F – Access & Mobility	●	●	x	x	●	x	x	x	x	x	x	●
Part G – Acid Sulfate Soils	x	x	x	x	x	x	x	x	x	x	x	x
Part H – Bushland Protection	x	●	x	x	x	x	x	x	x	x	x	x
Part I – Child Care Centres	x	●	x	x	x	x	x	x	x	x	x	●
Part J – Landscaping	●	●	x	x	x	x	x	x	x	x	x	x
Part K – Motels	x	x	x	x	x	x	x	x	x	x	x	●
Part L – Public Art	x	x	x	x	x	x	x	x	x	x	x	x
Part M – Sex Services Premises	x	●	x	x	x	x	x	x	x	x	x	●
Part N – Signage and Advertising	x	x	x	x	x	x	x	x	x	x	x	x
Part O – Stormwater Management	●	●	x	x	x	x	x	x	x	x	x	x
Part P – Telecommunications Facilities	x	x	x	x	x	x	x	x	x	x	x	x
Part Q – Waste Management & Minimisation	x	●	x	x	x	x	x	x	x	x	x	x
Part R – Traffic, Transport and Parking	x	x	x	x	x	x	x	●	x	x	x	●
Attachment – DA Checklist	x	x	x	x	x	x	x	x	x	x	x	x
Attachment – Dictionary	●	●	●	x	x	x	x	x	x	x	x	x
Attachment - Amends	●	●	●	●	●	●	●	●	●	●	●	●

- = Amended
 x = Not Amended