



## Amendment Listing

The following list, details the sections in the Development Control Plan that have been amended after the 22 December 2000.

There have been sixteen amendments, these amendments are:

- § Amendment No. 1 – operational on 4 April 2001,
- § Amendment No. 2 – operational on 8 August 2001,
- § Amendment No. 3 – operational on 7 November 2001,
- § Amendment No. 4 – operational on 23 January 2002,
- § Amendment No. 5 – operational on 23 April 2002,
- § Amendment No. 6 – operational on 17 July 2002,
- § Amendment No. 7 – operational on 12 March 2003,
- § Amendment No. 8 – operational on 16 April 2003,
- § Amendment No. 9 – operational on 20 September 2004,
- § Amendment No.10 – operational on 20 September 2005,
- § Amendment No.11 – operational on 11 April 2006,
- § Amendment No.12 – operational on 11 March 2008,
- § Amendment No.13 – operational on 6 May 2008,
- § Amendment No.14 – operational on 21 July 2008,
- § Amendment No.15 – operational on 26 August 2008,
- § Amendment No.16 – operational on 11 August 2009.
- § Amendment No.17 – operational on 28 August 2012.

**Amendment No.1 has changed or added the following sections:**

- § Table of Contents
- § How to use Leichhardt Development Control Plan
- § Section A1.0 – General Information
- § Transfer of Section B5 – Suburb Profiles to Section A10 – Suburb Profiles
- § Section A10.1 – Lilyfield Suburb Profile (including all subsections)
- § Part B – Residential Development – Introduction page
- § Section B1.2 – Design Element 2 – Building Form, Envelope and Siting
- § Section B3.4 – Design Element 20 – Access to Views

**Amendment No.2 has changed or added the following sections:**

- § Table of Contents
- § Section A1.0 – General Information
- § Section A10.2 – Leichhardt Suburb Profile (including all subsections)
- § Section B1.2 – Design Element 2 – Building Form, Envelope and Siting
- § Section B1.5 – Design Element 5 – Elevation and Materials
- § Section B1.7 – Design Element 7 – Fences



- § Section B2.6 – Design Element 14 – Using solar energy ‘actively’ – Energy efficient water heaters, photovoltaic (solar energy) systems & swimming pool heating
- § Section B2.8 – Design Element 16 – Landscaping
- § Section B3.6 – Design Element 22 – Dormer windows

**Amendment No. 3 has changed or added the following sections:**

- § Table of Contents
- § Section A10.3 – Annandale Suburb Profile (including all subsections)
- § Section C1.0 Non-Residential Development
- § Section C1.1 Design Element 1 – Site layout and building design
- § Section C1.6 Design Element 6 – Shopfronts
- § Incorporation of Section C 5.0 Area Based Controls into the Suburb Profiles

**Amendment No. 4 has changed or added the following sections:**

- § Table of Contents
- § Section A2.0 – Urban Framework Plans
- § Section A6.0 – Site Analysis
- § Section A10.4 – Glebe Suburb Profile (including all subsections)
- § Section B1.1 – Design Element 1 – Site Layout, Subdivision and Design
- § Section B1.2 – Design Element 2 – Building Form, Envelope and Siting
- § Section B4.3 – Development Type 3 – Laneway Development

**Amendment No. 5 has changed or added the following sections:**

- § Section A10.3.1 – Young Street Distinctive Neighbourhood
- § Section A10.3.2 – Annandale Street Distinctive Neighbourhood
- § Section A10.3.3 – Johnston Street Distinctive Neighbourhood
- § Section A10.3.5 – Trafalgar Street Distinctive Neighbourhood
- § Section A10.3.6 – Nelson Street Distinctive Neighbourhood

**Amendment No. 6 has changed or added the following sections:**

- § Table of Contents
- § Section A10.5 – Rozelle Suburb Profile (including all subsections)



**Amendment No.7 has changed or added the following sections:**

- Table of Contents
- Section A10.6 – Balmain Suburb Profile (including all subsections)
- Section B1.9 - Design Element 9 – Corner Site Controls

**Amendment No.8 has changed or added the following sections:**

- Table of Contents
- Section A8.0 – Parking Standards and Controls
- Section A10.2.5 – Leichhardt Commercial Neighbourhood, Leichhardt
- Section C1.7 – Design Element 7 – Protective Structures in the Public Domain – Balconies, Verandahs and Awnings.

**Amendment No.9 has changed or added the following sections:**

- Section B1.2 – Design Element 2 – Building Form, Envelope And Siting
- Section B1.7 – Design Element 7 Fences

**Amendment No.10 has changed or added the following sections:**

- Table of Contents
- Section C4.9 – Development Type 10 – Licensed Premises

**Amendment No.11 has changed or added the following sections:**

- Table of Contents
- A4.0 – Urban Form And Design
- A9.0 – Advertising and Signage
- A9a.0 – Colours and Tones
- Section A10.2.5 – Leichhardt Commercial Neighbourhood, Leichhardt

**Amendment No.12 has changed or added the following sections:**

- Table of contents
- B1.1 - Design Element 1 - Site Layout, subdivision and design



**Amendment No.13 has changed or added the following sections:**

- B3.5 – Design Element 21 – Acoustic Privacy

**Amendment No.14 has changed or added the following sections:**

- C4.9 – Development Type 10 – Licensed Premises

**Amendment No 15 has changed or added the following sections:**

- Table of contents
- How to use Leichhardt Development Control Plan
- Section D1 – Site Specific Controls (Balmain Leagues Club Precinct)

**Amendment No 16 has changed or added the following sections:**

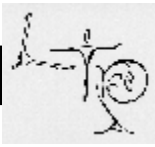
- Table of contents
- How to use Leichhardt Development Control Plan
- Section A3a.0 – Sustainable Water and Risk Management

**Amendment No 17 has changed or added the following sections:**

- Table of contents
- How to use Leichhardt Development Control Plan
- Section D2 – Site Specific Controls (ANKA Site 118-124 Terry Street, Rozelle)

**The latest amendment date is printed on the affected section and users should ensure that the DCP has been updated. It is essential that when amendments are added that they are inserted in order of amendment. For example Amendment No.1 must be inserted prior to Amendment No.2.**

**Amendments and alterations have affected page numbering throughout the document. However, only those sections that have had content altered are listed above.**



**BLANK PAGE**



<b>How To Use Leichhardt Development Control Plan</b>	<b>1</b>
<b>Part A – General Information</b>	
A1.0 General Information	A1
A2.0 Urban Framework Plans	A2
A3.0 Principles Of Ecologically Sustainable Development	A3
A3a.0 Sustainable Water and Risk Management	A3a.1
A4.0 Urban Form And Design	A4
A5.0 Amenity	A5
A6.0 Site Analysis	A6
A7.0 Heritage Conservation	A10
A8.0 Parking Standards And Controls	A11
A9.0 Advertising And Signage	A14
A9a.0 Colours And Tones	A20 a
A10.0 Suburb Profiles	A20
A10.1 LILYFIELD Suburb Profile	A21
A10.2 LEICHHARDT Suburb Profile	A58
A10.3 ANNANDALE Suburb Profile	A92
A10.4 GLEBE Suburb Profile	A130
A10.5 ROZELLE Suburb Profile	A184
A10.6 BALMAIN Suburb Profile	A217
<b>Part B</b>	
<b>B1.0 Residential Development</b>	<b>B1</b>
How DCP Part B – Residential Applies	B2
B1.1 Design Element 1 Demolition, Site Layout, Subdivision And Design	B3
B1.2 Design Element 2 Building Form, Envelope And Siting	B6
B1.3 Design Element Car Parking	B12
B1.4 Design Element 4 Site Drainage And Stormwater Control	B14
B1.5 Design Element 5 Elevation And Materials	B16
B1.6 Design Element 6 Front Gardens And Dwelling Entries	B18
B1.7 Design Element 7 Fences	B20
B1.8 Design Element 8 Site Facilities	B22
B1.9 Design Element 9 Corner Site Controls	B22 a
B2.0 Ecologically Sustainable Residential Development	B23
B2.1 Design Element 9 - Building Construction Thermal Mass And Materials	B24
B2.2 Design Element 10 - Solar Control - External Window Shading	B26
B2.3 Design Element 11 Insulation	B27
B2.4 Design Element 12 Natural Ventilation	B29
B2.5 Design Element 13 Heating and Cooling	B31
B2.6 Design Element 14 Using Solar Energy	B33
B2.7 Design Element 15 Water Conservation And Management	B40
B2.8 Design Element 16 Landscaping	B43
B3.0 Residential Amenity	B45
B3.1 Design Element 17 Solar Access, Residential Amenity And Energy Efficiency	B46
B3.2 Design Element 18 Private Open Space	B49
B3.3 Design Element 19 Visual Privacy	B51
B3.4 Design Element 20 Access To Views	B53
B3.5 Design Element 21 Acoustic Privacy	B55
B3.6 Design Element 22 Dormer Windows	B56



B4.0	Development Types	B58
B4.1	Development Type 2 Alterations And Additions To Existing Dwelling Houses	B59
B4.2	Development Type 2 Conservation Of Small Detached Houses	B62
B4.3	Development Type 3 Laneway Development	B65
B4.4	Development Type 4 Foreshore Development	B69
B4.5	Development Type 5 Conversion Of Existing Non-Residential Buildings	B70
B4.6	Development Type 6 Residential Development in Business Areas	B72
B4.7	Development Type 7 Diverse And Affordable Housing	B74
<b>Part C</b>	<b>C1.0 Non-Residential Development</b>	<b>C1</b>
	How DCP Part C – Non-Residential Applies	C2
C1.1	Design Element 1 Site Layout And Building Design	C3
C1.2	Design Element 2 - Parking Layout, Servicing And Manoeuvring	C5
C1.3	Design Element 3 Landscaping	C7
C1.4	Design Element 4 Elevation And Materials	C9
C1.5	Design Element 5 Site Facilities	C11
C1.6	Design Element 6 Shopfronts	C12
C1.7	Design Element 7 – Protective Structures in the Public Domain – Balconies, Verandahs and Awnings	C14
C2.0	Ecologically Sustainable Non-Residential Development	C16
C2.1	Design Element 8 Site Drainage And Stormwater Control	C17
C2.2	Design Element 9 Energy Efficient Siting And Layout	C19
C2.3	Design Element 10 Building Construction, Thermal Mass And Materials	C21
C2.4	Design Element 11 Solar Control, External Window Shading And Internal And External Lighting	C22
C2.5	Design Element 12 Insulation	C24
C2.6	Design Element 13 Ventilation	C25
C2.7	Design Element 14 Space Heating And Cooling	C27
C2.8	Design Element 15 – Using Solar Energy	C28
C2.9	Design Element 16 Appliances And Equipment	C29
C3.0	Interface Amenity	C30
C3.1	Operational Element 1 Noise And Vibration Generation	C31
C3.2	Operational Element 2 Air Pollution	C32
C3.3	Operational Element 3 Water Pollution	C33
C3.4	Operational Elements Working Hours	C34
C4.0	Development Types	C35
C4.1	Development Type 7 Home Based Employment	C35
C4.2	Development Type 2 Motor Showrooms And Service Stations	C36
C4.3	Development Type 3 Non-Residential Foreshore Development	C38
C4.4	Development Type 4 Playgrounds	C39
C4.5	Development Type 5 Public Domain	C40
C4.6	Development Type 6 Smash Repairs	C41
C4.7	Development Type 7 Transport Facilities	C42
C4.8	Development Type 9 Youth Facilities	C43
C4.9	Development Type 10 Licensed Premises	C44
<b>Part D</b>	<b>D1.0 Site Specific Controls</b>	<b>D1</b>
	<b>Balmain Leagues Club Precinct</b>	
D1.1	Land to which this Section Applies	D2
D1.2	Background	D3



D1.3	Relationship with other Standards Contained within this DCP	D3
D1.4	General Objectives	D3
D1.5	Layout and Massing	D4
D1.6	Land Use	D7
D1.7	Building Language	D9
D1.8	Development within the Conservation Area	D11
D1.9	Public Domain and central plaza area	D12
D1.10	Access and Management	D15
D1.11	Traffic Management	D17
D1.12	Parking	D17
	<b>D2.0 Site Specific Controls</b>	<b>D2</b>
	<b>ANKA Site 118-124 Terry Street, Rozelle</b>	
D2.1	Land To Which The DCP Applies	D20
D2.2	Relationship To Existing LEPs And DCPs	D20
D2.3	Future variations to the DCP	D21
D2.4	Background	D21
D2.5	Aims And Objectives	D21
D2.6	Public Domain	D22
D2.7	Built form and design	D26
D2.8	Residential Amenity	D28
D2.9	Parking and access	D30
D2.10	Environmental performance	D31
D2.11	Waste and recyclable materials storage and disposal	D32





## How to use Leichhardt Development Control Plan

Leichhardt Development Control Plan (DCP) should be used together with Leichhardt Local Environmental Plan 2000 (LEP).

Leichhardt LEP provides the legal framework by which development decisions are made. It sets out Council's vision and seeks to implement this by way of objectives, policies, zoning tables and zoning and heritage conservation maps.

The DCP supplements this document by providing detailed reasoning, guidelines, controls and general information relating to the decision making process. Together these documents form the Leichhardt Town Plan.

Leichhardt DCP is divided into 4 parts.

### Part A General Information

### Part B Residential

### Part C Non-residential

### Part D Site Specific Controls

#### Part A

- Provides background information, procedures and standards that apply to all development.

#### A1.0 General Information

- This section sets the statutory framework for the DCP.

#### A2.0 Urban Framework Plans

- These are maps which diagrammatically indicate built and natural features and are supplementary to all guidelines and controls.

#### A3.0 Principles of Ecologically Sustainable Development

- This section sets out the main principles and justification relating to the design elements set out under the Ecologically Sustainable Development sections in parts B & C.

#### A3a.0 Sustainable Water and Risk Management

- This section contains development standards and requirements for water management.

#### A4.0 Urban Form and Design

- This section sets out the main principles and justification relating to the design elements within the Urban Form and Design sections in Parts B & C.

#### A5.0 Amenity

- This section sets out the main principles and justification relating to the design elements in the amenity section in Part B & C.

#### A6.0 Site Analysis

- This section sets out the reasons for and issues to be considered in preparing a site analysis - the first step in the development process.

#### A7.0 Heritage Conservation

- Covers the issues of heritage and conservation consideration.

#### A8.0 Car Parking standards and controls

- This section sets out controls and guidelines relating to the provision of on-site parking.

#### A9.0 Advertising and signage

- This section outlines what types of advertising signs are permissible and other controls and guidelines relating to signage.

#### A10.0 Suburb Profiles

- This section sets out specific principles, guidelines and development controls for the suburbs of Lilyfield, Leichhardt, Annandale, Glebe and Balmain and Rozelle.



Parts A7.0 – A9.0 are all divided into 4 sections;

<b>Principles</b>	<i>describe the primary purpose.</i>
<b>Rationale</b>	<i>provides an explanation and supporting information.</i>
<b>Guidelines</b>	<i>provide steps and procedures for best practice and are encouraged by Council.</i>
<b>Controls</b>	<i>provide mandatory controls on all development.</i>

Part A10.0 Suburb Profiles is divided into neighbourhoods which have the following sections:

**Landform** *describes the history and topographical characteristics.*

#### **Existing Character**

*describes the existing character in terms of built form, street layout and subdivision pattern.*

#### **Desired Future Character**

*provides desired future character statements in terms of building materials, urban form, landscaping and local area character.*

#### **Neighbourhood Controls**

*provides mandatory controls on development across each neighbourhood.*

#### **Additional Controls**

*provides mandatory controls on development in specific local areas.*

**Part B** - Residential and **Part C** - Non-residential are essentially divided into three main sections;

- Urban Form and Design (B1.0 & C1.0)
- Ecologically Sustainable Development (B2.0 & C2.0)
- Amenity (B3.0 & C3.0)

These 3 sections relate to the main policies in Parts 4, 5, 6 and 7 of the LEP and form the basis for assessing development.

Each section is divided into 'design elements' ('operational elements' in relation to C3.0). These address the various issues for consideration such as site layout and design (Urban Form and Design), using solar energy (Ecologically Sustainable Development), or visual privacy (Amenity). Each 'element' consists of principles, rationale, guidelines and/or controls. Each element should be considered with the information contained in Part A to ensure the most satisfactory design solution.

Both Part B and Part C have additional sections in the form of development types (B4.0 & C4.0), and area based controls (Part C5.0) to assist in the design and decision making process.

A Glossary and Bibliography complete the DCP.

Information sheets and policy statements are incorporated and are referenced throughout the document.

**Part D1** relates to Site Specific Controls. It currently provides a planning and urban design framework to guide the redevelopment of the Balmain Leagues Club Precinct.

**Part D2** relates to Site Specific Controls. It currently provides a planning and urban design framework to guide the redevelopment of ANKA Site 118-124 Terry Street, Rozelle.



## **A1.0 General Information**

### **1.1 Adoption date**

Leichhardt Development Control Plan (DCP) was adopted by Leichhardt Council on 18 April 2000 and came into operation on gazettal of Leichhardt Local Environmental Plan 2000. This DCP is subject to amendment from time to time and users should refer to the Amendment Listing.

### **1.2 Land to which Leichhardt Development Control Plan applies**

Leichhardt DCP applies to the development of all land in the Leichhardt Local Government Area.

### **1.3 Relationship to Leichhardt LEP and other Council Plans and Policies**

Leichhardt DCP supplements the controls of Leichhardt *Local Environmental Plan 2000 (LEP)*. Leichhardt DCP is a comprehensive plan, and incorporates previous DCP's for the Leichhardt area.

This DCP has been prepared in accordance with the provisions of section 72 of the Environmental Planning & Assessment Act (EP&A Act) 1979, and clauses 19-25 of the Environmental Planning & Assessment Regulation, 1994.

EP&A Act Section 79c:  
Under section 79c of the Environmental Planning and Assessment Act 1979, Leichhardt Council is required to take Leichhardt DCP into consideration, when determining development applications.

EP&A Act Section 94 Contributions Plans:  
Under a contributions plan Council may require the dedication of land, the carrying-out of buildings or works or the payment of a monetary

contribution towards the provision of services and facilities to meet the needs of Leichhardt's growing population. Refer to the Contributions Plans to determine if the proposed development is required to make a contribution.

**Tree Preservation Order (TPO):**  
The TPO order protects trees by prohibiting the ring-barking, cutting down, chopping, lopping, removing, injuring or wilful destruction of any tree without the consent of Council. The order is set out in Policy Statement 1.

Other development control plans which may need to be referred to include:

DCP 21 - Wharf Road (Birchgrove)

DCP 27 - Balmain Power Station (Rozelle)

DCP 31 - Ampol (White Bay)

DCP 32 - Design for Equity of Access

DCP 35 - Exempt and Complying Development

DCP 36 - Notifications under the EPA Act.

DCP 38 - Waste, Avoid, Reuse and Recycle.

DCP 42 - Land Contamination

DCP 47 – Jane Street, Balmain

DCP 48 –Managing Activities on Footpaths and Street Verges

DCP 51 – Telecommunications and Radiocommunications



## A2.0 Urban Framework Plans

Leichhardt's streets and suburbs have distinctive character generated by a rich mix of street patterns, building types and architectural styles. Whilst elements of this character are constantly changing, there is need to guide overall changes. Leichhardt's *Urban Framework Plans* (UFP) draw together key urban and environmental elements that contribute to overall character and provide the strategic framework upon which Leichhardt's future development depends.

The *Urban Framework Plans* should be addressed by every development in Leichhardt. Natural and built features, as identified should be accentuated by design, and the strategies for the future must be recognised and acted upon in all new proposals.

The Urban Framework Plans consist of 3 diagrammatical plans which specifically identify the following features and initiatives.

### UFPA2.1 Environment and open space;

- topography, hills, valleys, creeks and ridgelines,
- existing and potential open space network,
- headlands and promontories,
- stormwater,
- ecological restoration,
- existing and proposed public waterfront.

### UFPA2.2 Urban character and identity;

- key buildings and urban spaces,
- civic and community precincts,
- key townscape and landscape elements,
- key links/roads,
- key views and vistas,
- gateways to important centres/areas,
- water and land connections.

### UFPA2.3 Urban Strategy;

- strategic sites,
- town centre / main street improvement project,
- light rail corridor,
- major pedestrian and cycle links,
- arterial and primary roads,
- key open spaces and links,
- recreation corridor,
- gateways to the Municipality,
- corridor strategy,
- bays precinct



### A3.0 Principles of Ecologically Sustainable Development

Leichhardt LEP and DCP are based upon principles of Ecologically Sustainable Development (ESD). These principles provide a broad framework of planning and design controls for all used, and aim to achieve a more ecologically responsible design of the built and natural environment.

The following four principles are recognised by Intergovernmental Agreement on the Environment (IGAE), as being those which should inform policy making and program implementation.

1. “Precautionary principle – where there are threats of serious or irreversible environmental damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation...”
2. “Intergenerational equity – the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations...”
3. “Conservation of biological diversity and ecological integrity should be a fundamental consideration...”
4. “Improved valuation, pricing and incentive mechanisms” – this principle includes the concepts of:
  - (i) ‘polluter pays’
  - (ii) full-cycle costing for goods and services, including the use of natural resources and assets and the disposal of wastes
  - (iii) cost effective pursuit of environmental goals, via use of incentive structures – including market mechanisms.

The policies contained in the LEP when implemented together with the detailed policies in the DCP should ensure that development in Leichhardt contributes to a sustainable future.

Integration of the principles of ESD into urban design and management could make a significant contribution to the less wasteful use of natural resources. Sustainable design seeks to minimise the negative effects of urban development on the natural environment and embrace energy efficient buildings, ‘clean’ technology and ‘green’ management practices. It aims to achieve more conservative use of resources so that they can be harvested at a sustainable rate that allows for healthy regeneration. Sustainable design seeks to ensure that natural resources are replenished and available to support future generations rather than being depleted.

Council’s development controls require energy efficient design for new buildings and renovation, encourage good-quality landscaping, aim to increase open space, reduce the negative social and environmental impetus of traffic and create a pedestrian friendly and diverse urban environment.



## **A3a.0 Sustainable Water and Risk Management**

### **Part A General Information**

1. Land to which this Plan applies
2. Relationship of this Plan to other LEP's and DCP's
3. Relationship to BASIX
4. Aims and Objectives
5. Water Sensitive Urban Design
6. Reports to be submitted with DA's

### **Part B Water Management**

- B1 Water conservation
- B2 Managing stormwater within the site
- B3 On-site detention of stormwater
- B4 Stormwater treatment
- B5 Water disposal
- B6 Building in the vicinity of the public drainage system
- B7 Wastewater management
- B8 Managing the construction site

### **Part C Hazard Management**

- C1 Flood risk management
- C2 Foreshore risk management

### **Part D Glossary**

### **Part E Annexures**

- A Information on the preparation of reports required by this DCP
- B Flood Control Lot Maps
- C Foreshore Flood Control Lot Map



## **PART A – GENERAL INFORMATION**

### **1. LAND TO WHICH THIS PLAN APPLIES**

This DCP applies to all land within the Leichhardt Local Government Area.

### **2. RELATIONSHIP OF THIS PLAN TO OTHER LEP'S AND DCP'S**

This DCP supplements the controls of Leichhardt Local Environmental Plan 2000 and the accompanying Development Control Plan 2000.

This DCP has been prepared in accordance with the provisions of s.74C of the Environmental Planning and Assessment Act (EPA) 1979, and clauses 16-21 of the Environmental Planning and Assessment Regulation, 2000.

### **3. RELATIONSHIP TO BASIX**

This DCP operates alongside State Environmental Planning Policy – Building Sustainability Index (Building Sustainability: BASIX) 2004, applying water conservation measures to non-BASIX affected development

### **4. AIMS AND OBJECTIVES**

The aim of this DCP is to set out Council's requirements for water management to provide for the more sustainable water management outcomes in the long term across Leichhardt. The controls seek to ensure *water sensitive urban design* that:

- Integrates water management appropriate to the site and its surroundings
- Provides more sustainable management and use of water
- Allows for the management and conservation of natural and built assets in the catchments.
- Responds to the heritage character of the area.

#### **Water sensitive urban design**

Water sensitive urban design seeks to ensure that development is carefully designed, constructed and maintained so as to minimise impacts on the natural water cycle. It is part of the contemporary trend towards achieving development that is more environmentally sustainable than previous eras of urban development.

Water sensitive urban design can help counteract many of the negative impacts of urban development on the natural water cycle by utilising measures in the design and operation of development that:

- maintain and restore natural water balance
- reduce and manage the social, environmental and economic risks and impacts associated with major flood or tidal inundation events
- reduce erosion of waterways, slopes and stream banks
- improve water quality in streams and groundwater



- make more efficient use of water
- reduce the cost of providing and maintaining water infrastructure
- protect and restore aquatic and riparian ecosystems and habitats.

Traditional water supply, stormwater and wastewater practices are largely based on centralised collection, conveyance, treatment and disposal of water flows. By contrast, water sensitive urban design promotes a more decentralised approach that is more attuned to natural hydrological and ecological processes. It gives greater emphasis to on-site collection, treatment and utilisation of water flows as part of an integrated 'treatment train' that may be applied in addition to, or in lieu of conventional stormwater measures. Elements of water sensitive urban design may include:

- use of roof water in place of mains supply especially for toilet flushing, laundry use, irrigation
- reuse of surface runoff for irrigation purposes
- use of greywater treatment systems to supplement water supply
- infiltration of stormwater to underground aquifers
- landscaping designed for cleansing runoff and conserving water
- protection of native vegetation to minimise site disturbance and conserve habitat
- protection of stream corridors for their environmental, recreational and cultural values.

Water sensitive urban design calls for designers to respond to the constraints and opportunities of each site. Consequently, careful consideration must be given to site characteristics such as soil type, slope, groundwater conditions, rainfall, position within the catchment and upon the floodplain, and the scale and density of development.





## REPORTS REQUIRED WITH DEVELOPMENT APPLICATIONS

### A1 Water Management Statement

All Applications will require a Water Management Statement that addresses the provisions of this DCP. A Water Management Statement is a summary of the proposed water management measures to be integrated into the development, including:

- Water conservation measures
- Stormwater management and treatment
- Stormwater disposal method
- Any additional wastewater measures, if proposed
- On site stormwater detention facilities design, if applicable
- Flood or foreshore risk management, if applicable

The Water Management Statement must demonstrate that all provisions of this DCP have been considered and addressed.

Specifically regarding water conservation measures in BASIX-affected development, the BASIX certificate is acknowledged as the appropriate water conservation response for the residential component of such development and the Water Management Statement should specifically address management measures described above including water conservation measures for non-residential components of a Proposal.

### A2 Integrated Water Cycle Plan

An Integrated Water Cycle Plan (IWCP) is required for all Applications for:

- 15 or more dwellings or residential lots, or
- the provision of accommodation for 50 or more residents, occupants or employees, or
- is expected to generate a water demand of 5,000 litres per day or more, or
- the creation of 2,500 square metres of impermeable surface or more, or
- the subdivision of 2,500 square metres of land or more for commercial or industrial purposes.

The Integrated Water Cycle Plan is a design, management and implementation plan for large-scale developments.

Where an IWCP is required for BASIX-affected development then, specifically regarding water conservation measures, the BASIX certificate is acknowledged as the appropriate response for the residential component of such development proposals and the IWCP should respond to remaining aspects of water management, including water conservation measures for non-residential components of a Proposal.

Refer to Annexure A for more information on the preparation of an IWCP.

### A3 Stormwater Drainage Concept Plan

A Stormwater Drainage Concept Plan is required for all Applications that include alterations or additions to existing roof areas, or as required elsewhere in this DCP.

The purpose of the Stormwater Drainage Concept Plan is to demonstrate how stormwater will be managed on the site and at a minimum show how it will be collected, conveyed and disposed from the site. Where any stormwater management measures are required by this DCP, the Plan must



be to an adequate level of detail to demonstrate that those measures can be achieved and how they will be integrated into the development.

The Stormwater Drainage Concept Plan is not intended for use as a construction plan. In most cases a detailed stormwater drainage design and specifications will only be required for the issue of a Construction Certificate.

#### **A4 Flood Risk Management Report**

Applications for a site identified as flood control lot on the maps in Annexure B will require a Flood Risk Management Report.

A Flood Risk Management Report is not required where the assessed value of the works is under \$50,000; except where, in the opinion of Council, those works are likely to substantially increase the risk of flood to the subject or adjoining sites.

The Flood Risk Management Report must establish the following:

- the Flood Planning Level
- the Probable Maximum Flood Level
- the Hazard Category
- an on site response and evacuation plan

Some Applications for sites identified as a flood control lot will require both a Flood Risk Management report and a Foreshore Risk Management report.

Refer to Annexure A for more information on the preparation of this Statement.

#### **A5 Foreshore Risk Management Report**

Applications for a site identified as foreshore flood control lot on the maps in Annexure C will require a Foreshore Risk Management Report.

A Foreshore Risk Management Report is not required where:

- the assessed value of the works is under \$50,000; or
- there are no new works proposed below RL 3.5m AHD; or
- there are no existing habitable structures or buildings below RL 3.5m AHD; or
- any proposed Jetties, Bridging Ramps or Pontoons are located on the seaward side of the foreshore edge;

except where, in the opinion of Council, those works are likely to substantially increase the risk of flood to the subject or adjoining sites

The Foreshore Risk Management Report must address the general requirements for development and establish:

- the Foreshore Planning Level
- an on site response and evacuation plan

Some Applications for sites identified as a flood control lot will require both a Flood Risk Management report and a Foreshore Risk Management report.

Refer to Annexure A for more information on the preparation of this Statement.



## PART B – WATER MANAGEMENT

### B1 Water Conservation

#### Principles

*To design development to improve water conservation and increase on-site storage of rainwater for reuse.*

#### Rationale

Given the limited supply of potable water supply systems and increasing urban population there is a need to use water more efficiently.

These controls are complementary to the requirements of BASIX.

#### Controls

B1.1 For all applications where BASIX is not applicable, including small residential alterations and additions, the following water efficiency design elements must be included *and be indicated on plans*:

- new or altered showerheads must have a flow rate no greater than 9 litres per minute or a 3 star (or better) water rating
- new or altered toilets must have a flow rate no greater than 4 litres per average flush or a 3 star (or better) water rating
- new or altered taps must have a flow rate no greater than 9 litres per minute or a 3 star (or better) water rating

B1.2 For all applications, site landscaping should be designed with water efficient gardens that minimise the need for watering. A list of suitable indigenous and low water use species is provided at the website: [http://www.basix.nsw.gov.au/pdf/indigenous\\_species/84.pdf](http://www.basix.nsw.gov.au/pdf/indigenous_species/84.pdf). Planting schedules should select from these species.

#### Note:

Where On Site Detention (OSD) is required by this DCP, Council may consider a reduction in the storage volume where there is *On Site Retention* (OSR) facilities for *rainwater reuse* and/or *stormwater reuse* installed to service all toilets, laundries and outdoor usage (eg irrigation and car washing). Calculations to justify this reduction must be provided to Council.

### B2 Managing stormwater within the site

#### Principles

*To integrate site layout and the drainage system design to avoid nuisance flows and flooding within the development and onto neighbouring properties.*

#### Rationale

New buildings and structures or alteration to the existing topography can block or redirect the natural flow of stormwater runoff, potentially causing nuisance flows or flooding through the site or neighbouring properties. These effects should be minimised by integrating the general site layout with the design of the stormwater drainage system.

Typical considerations should include:

- Minimising disturbance to the natural surface landform



- Allowing a gap between buildings or structures and the boundary to allow excess surface flows to pass
- Using lightweight or paling fences to allow excess surface flows to pass through
- Providing a step up to the building entrances from external finished ground levels

### Controls

- B2.1 The site layout must be designed to minimise disruption or disturbance of land surfaces or natural drainage patterns. Where natural surface flows from upstream properties currently pass through the property, they must not be blocked or redirected as a consequence of the proposal.
- B2.2 Solid or masonry boundary fences should not be proposed where they will divert stormwater runoff from one property onto another. Boundary fences should be of lightweight or partially open construction so that excess surface flows can pass through.
- B2.3 Where the development blocks or diverts the natural surface flows, the site drainage system must be designed to collect and convey those flows through the site by gravity. The site drainage system must consist of a pipe system to convey flows from more frequent rainfall events, combined with an overland flow path to convey larger flows generated during storms.

Where an overland flow path cannot be provided due to the position of existing buildings/structures that are to be retained, the capacity of the pipe system must be significantly increased.

- B2.4 Where the development would cause the existing and/or natural drainage patterns in the vicinity of the site to be blocked or diverted or otherwise concentrate flows onto another property, an interallotment drainage system must be constructed to collect and convey those flows, and an associated drainage easement created.

## B3 On-Site Detention of Stormwater

### Principle

*To reduce the peak stormwater flows into the public drainage system and to reduce the probability of downstream flooding.*

### Rationale

Urban development increases the area of impermeable surfaces and causes significant alterations to the hydrological cycle. As urban areas become larger and denser, the area taken up by buildings, footpaths, driveways, paved areas and other impermeable surfaces also increases. This 'hardening' of the urban landscape acts to reduce the quantity of rainwater that can infiltrate the soil, thereby causing most rainfall to become runoff.

As older buildings are redeveloped and new more efficient drainage systems are installed, the rate of discharge from those sites is also increased.

These changes can cause the peak flow rates to be increased along the downstream drainage systems which can increase the likelihood of flooding to adjacent properties.

These impacts can be mitigated by providing 'detention storage' on the development site to temporarily store stormwater before slowly releasing it into the public drainage system.



### Controls

- B3.1 On-site detention (OSD) facilities are required except where:
- the site drains directly into Parramatta River or Sydney Harbour
  - only minor works to a single dwelling, commercial or industrial building are proposed and the impervious area across the total site is not increased by more than 40 square metres
  - subdivision of existing or currently approved dwellings is proposed
- B3.2 The OSD facilities should be designed by a relevantly qualified civil engineer and set out the calculation of the volume of storage and permissible site discharge.
- B3.3 The volume of OSD storage can be reduced where On Site Retention (OSR) facilities for rainwater reuse and/or stormwater reuse are provided.

### Note:

Where On Site Detention (OSD) is required by this DCP, Council may consider a reduction in the storage volume where there is *On Site Retention* (OSR) facilities for *rainwater reuse* and/or *stormwater reuse* installed to service all toilets, laundries and outdoor usage (eg irrigation and car washing). Calculations to justify this reduction must be provided to Council.

Additional OSD may be required where the site does not drain naturally to any street frontage.

## B4 Stormwater Treatment

### Principle

*To minimise the transport of pollutants into the harbour and other waterways.*

### Rationale

Increased runoff during rainfall events flushes pollutants from paved and other impermeable surfaces into the stormwater system. This results in a greater pollutant load reaching streams, waterways and the harbour. The main pollutants of concern are litter, sediment, suspended solids, nutrients, oil and grease and toxicants.

### Controls

- B4.1 For all applications other than for single dwellings, a water quality filtration basket or equivalent primary treatment device must be installed on the site stormwater drainage system.
- B4.2 For major or significant development, advanced water quality treatment techniques should be utilised such as gross pollutant traps, sediment traps, filter strips, grass swales, porous pavers, infiltration trenches, rain gardens and sand filters where appropriate.
- B4.3 Applications for open carparking areas with 9 or more parking spaces, including loading bays, must install an additional device to remove oil and greases from the driveway and carpark stormwater runoff.
- B4.4 Multi unit residential developments must include car wash bays.

Multi unit residential developments for more than 3 but less than 16 dwellings, the car wash bay may be provided separately or in one of the visitor car spaces (dual signage).



Multi unit residential developments for 16 or more dwellings, a dedicated carwash bay must be provided at a rate of one bay per 60 dwellings or part thereof.

B4.5 In addition to the above, for applications that:

- incorporate 15 or more dwellings or residential lots, or
- provide accommodation for 50 or more residents, occupants or employees, or
- generate a water demand of 5,000 litres per day or more, or
- involves the creation of 2,500 square metres of impermeable surface or more, or
- involves the subdivision of 2,500 square metres of land or more for commercial or industrial purposes,

water quality treatment measures must be installed that meet the following environmental targets for stormwater runoff leaving the site:

Pollutant	Baseline Annual Pollution Load (kg/ha/yr)	Retention Criteria
Gross pollutants, including trash, litter and vegetation matter greater than 5mm	500	90% reduction of average annual load
Total suspended solids, including sediment and other fine material less than 5mm	900	85% retention of average annual load
Total Phosphorous	2	65% retention of average annual load
Total Nitrogen	15	45% retention of average annual load
Hydrocarbons (Oils and Greases)		90% reduction of annual load – no visible discharge
Toxicants		100% containment of toxicants

Table 4.1: Environmental Targets

(Source Catchment Management Authority Sydney Metropolitan: Draft Managing Urban Stormwater: Environmental Targets, October 2007)

The design of the Stormwater Treatment system must be incorporated into the Integrated Water Cycle Plan in accordance with *Section A2 Integrated Water Cycle Plan*.

## B5 Water Disposal

### Principle

*To maintain existing natural drainage patterns and avoid nuisance and flooding to the drainage system and downstream properties.*

### Rationale

The public stormwater drainage system is made up of minor and major drainage infrastructure; both piped and unpiped, with different components owned and managed by either Council or Sydney Water. The systems can generally be described as follows:

- Council minor drainage – kerb and gutter, dish gutters, surface drains, and small pipes to take water through road intersections
- Council trunk drainage – pits and pipelines below the road, or passing through private property and overland flowpaths



- Sydney Water trunk drainage – Pipelines, culverts, open channels and Whites Creek, Johnston's Creek and Hawthorne Canal

All properties should be connected to the public drainage system, unless they can discharge stormwater directly to Parramatta River or Sydney Harbour. The scale and nature of the development should determine whether the site discharge should be connected to the minor or piped (trunk) drainage system.

The discharge should always be in the same direction and within the same catchment as the site naturally drains, which will sometimes mean that drainage easements must be acquired through downstream properties. Directing the site runoff into different catchments can lead to an increased risk of flooding to properties downstream of the point of discharge.

As easements can be difficult to obtain, there should be scope for consideration to vary this requirement where the development does not significantly intensify the landuse.

The discharge of subsurface waters from basement structures to the public drainage system should be avoided as they can cause nuisance or public health risks to the receiving drainage system. Where possible subsurface water should be retained on site otherwise, be connected to the piped trunk drainage system.

### Controls

- B5.1 Where the majority of the site naturally drains towards any street frontage, stormwater runoff from all roof and paved/impermeable areas must be drained by gravity to the public drainage system of that street frontage.
- B5.2 Where the site naturally drains away from all street frontages and can not discharge stormwater directly to, Parramatta River or Sydney Harbour, stormwater runoff should be drained to:
- a piped (trunk) drainage system if it passes through the site
  - an existing (registered) drainage easement benefiting the site

Where neither of the above options are available but the roof area of the development may be drained to the street:

- B5.2.1 For minor alterations and additions that result in the addition or alteration of more than 20 square metres, but less than 40 square metres of roof area, as much roof and surface area as practicable should be drained by gravity to the street frontage above.
- B5.2.2 For alterations and additions to a single dwelling, that result in the addition or modification of more than 40 square metres of roof area, the entire roof area of the existing dwelling should be drained by gravity to street frontage above.
- B5.2.3 For new single dwellings, discharge to the street frontage above the site, subject to at least 80% of all paved/ impermeable surfaces being drained by gravity to street frontage above.

### Note

For minor alterations and additions that result in the addition or alteration of less than 20 square metres of roof area (including a garage or carport), the existing site drainage system may be utilised.



The drainage of any roof and surface areas that cannot drain to the street must be adequately designed to cause no concentration of flows or nuisance to downstream properties. The requirements to achieve this outcome are specified in the Water Management Section of Council's Engineering Code.

B5.3 Where the controls in B5.2 cannot be met, a drainage easement over a downstream property to the street below should be sought. Council will not consider alternative solutions unless detail evidence of the efforts to obtain an easement are provided.

B5.4 Connection to the Public stormwater drainage system

B5.4.1 Once the site stormwater outlet location has been established, the outlet pipeline must be connected directly to the public piped drainage system, where it is available.

B5.4.2 Where the piped drainage system is not present, and the works are minor alterations and additions or single dwellings, connection may be made to the street kerb.

B5.4.3 Where the piped drainage system is not present, and the works are not minor alterations and additions, the existing public system must be extended to the frontage of the site, as specified by Council.

B5.5 Basement Drainage

Basements must be of fully tanked construction such that pump-out systems are not required to drain the subsurface drainage system.

Consideration will only be given to the provision of a pump-out system where it can be demonstrated by detailed geotechnical investigation that groundwater flows are minimal/intermittent. For basements other than for car parking purposes, this exception will only be considered where the sump and pump facilities can be housed and accessed for maintenance from an area external to the building above.

B5.6 Where the basement is associated with car parking facilities, a pump out system is permitted for minor surface areas that drain to the basement, such as from the access driveway. All other forms of access to the basement, including fire access stairs, must be protected from the weather, such that the entry of stormwater runoff to the basement is minimised.

## B6 Building in the Vicinity of the Public Drainage System

### Principle

*To ensure development in close proximity to the public drainage system provides adequate access for its future management.*

### Rationale

The public stormwater drainage system often passes through private property. The system will be owned by Council or Sydney Water and will generally be carrying out dual functions, whereby water from more common rainfall events is carried by the pipelines below the ground, while the water generated during larger storm events is carried across the surface.

It is important that new development in close proximity to these drainage systems does not compromise its functionality or limit the capacity of the responsible authority to manage the





system. Typically the management of the system will include construction or reconstruction, maintenance, repair or cleaning; with access required for manual or electronic inspection and use of equipment, from hand held up to large earth moving machinery.

While approval is required from Sydney Water for construction in the vicinity of their piped drainage system, Council must still consider the wider implications, such as the flood risk considerations defined in the Flood Risk Management Section of this DCP.

### **Controls**

- B6.1 The construction of permanent structures or placing of fill over Council's piped drainage system is not permitted. Permanent structures include buildings, eaves, balconies, garages, impervious fences, swimming pools and retaining walls.
- B6.2 Where the drainage system is located within a drainage easement, the above restrictions extend over the width of the easement. Where the drainage system is not located within an easement, the above restrictions extend by 1500mm to both sides of the centreline of the drainage structure.
- B6.3 The above restrictions may be extended further due to flooding considerations associated with *Flood Risk Management*.
- B6.4 Council may consider permitting open structures such as carports or open parking spaces where it can be demonstrated that they will not increase the risk of flooding to the subject or adjoining properties or to Council property. Any structures must not unreasonably prevent or hamper future access to the drainage system for construction, reconstruction, maintenance, repair or cleaning.

#### Note:

The construction of structures over or adjacent to the Sydney Water piped stormwater drainage system must be approved by Sydney Water. Further the requirements of this DCP may be in addition to any conditions imposed by Sydney Water.

## **B7 Wastewater Management**

### **Principle**

*To encourage recycling of the water resource in a safe and sustainable manner.*

### **Rationale**

In addition to the installation of water saving devices and rainwater tanks, water may be conserved by treating wastewater on the site, and where appropriate, reusing it.

### **Controls**

- B7.1 All developments must be connected to the centralized sewerage waste disposal system operated by Sydney Water.
- B7.2 On site wastewater treatment must be designed and installed to meet all relevant statutory requirements (eg Sydney Water, NSW Health) and any relevant Australian Standards.



## PART C – HAZARD MANAGEMENT

### C1 Flood Risk Management

#### Principle

*To manage development of flood control lots and flood prone land to reduce the risks and costs associated with flooding.*

#### Rationale

The larger part of the Council and Sydney Water owned stormwater drainage systems throughout the Leichhardt LGA were constructed during the 1800s and early 1900s. While development has flourished in the subsequent years, there has not been a corresponding upgrading or updating of the drainage system.

The piped component of the system is generally designed to carry the runoff generated during frequent rainfall events, while during larger storm events stormwater will flow across the surface generally following the natural valleys and depressions.

With the increase in stormwater runoff that invariably follows development, and the greater number and concentration of buildings and dwellings along the creeks and natural depressions, there has been a gradual rise in the flooding risk throughout the LGA.

If not carefully designed, further development on flood-prone land can increase the exposure of new and existing properties to flooding, through redirection or removal of flow paths.

The NSW Governments Flood Prone Land Policy dictates that further development in the vicinity of the creeks and natural depressions must be managed to ensure that the risk of flooding to current and future landowners, occupiers and the community are not increased as a consequence of development.

#### Note:

Council's Flood Study to be published in late 2009 will provide extensive information to assist in the preparation of the Flood Risk Management Report.

Exempt Development may still be permissible on a *Flood Control Lot*.

#### Controls

Applications for a flood control lot must be accompanied by a Flood Risk Management Report supported by a flood study prepared by a relevantly qualified civil engineer. The Report must establish the Hazard Category of site.

Subject to that Report, the following controls will apply:

#### C1.1 Single Dwelling Residential or Dual Occupancy Development

All floor levels, including any existing components to be retained, are to be at or above or raised to the Flood Planning Level.

The following exceptions/ variations apply:



C1.1.1 For alterations and additions to a residential dwelling, some or all of the existing floor levels may be retained below the Flood Planning Level provided that each of the following controls is complied with:

- a) The floor levels of the additions and any significantly altered floor areas must be at or above or raised to the Flood Planning Level.
- b) Where the proposed works involve alterations to less than 60% of the total existing habitable ground floor areas, those existing areas that are not to be significantly altered may be retained below the Flood Planning Level.
- c) Where the alterations and additions affect greater than 60% of the total existing habitable floor areas, but raising some or all of the existing floor levels is impracticable due to Heritage or Conservation Area constraints, those areas so constrained may be retained below the Flood Planning Level.
- d) The additions must be designed and constructed such that they do not preclude the raising of the existing floor areas to the Flood Planning Level at a future date or when further additions are proposed.
- e) For a second storey addition to the dwelling, the floor level of the second storey must be at a height that allows for the ground floor below to potentially be raised in the future to the Flood Planning Level, whilst maintaining minimum floor to ceiling height requirements.
- f) Any floor areas of the existing dwelling to be retained at the existing level, below the Flood Planning Level, must be satisfactorily flood proofed (either wet or dry) to the Flood Planning Level.

**C1.2 Multiple Unit Residential Development – 3 or more Dwellings or Units**

All floor levels are to be at or above the Flood Planning Level.

**C1.3 Commercial, Industrial and Mixed Use Development**

All floor levels, including any existing components to be retained, are to be at or above the Flood Planning Level or raised to the Flood Planning Level.

Where constructing the floor level, or raising the floor level of existing development, to the Flood Planning Level may be impracticable due to site and access constraints (eg within a shopping precinct), consideration may be given to some or all of the non-residential floor levels having a freeboard of less than 500mm above the 100 year ARI flood level provided that satisfactory flood proofing (either wet or dry) is achievable to the Flood Planning Level. All entrances and evacuation routes servicing any residential components must be above the Flood Planning Level.

**C1.4 Subdivision**

Subdivision is only permitted where it can be demonstrated that as a result of the development or future anticipated development on the proposed lots, that there are adequate building platforms or developable areas including carparking facilities that can be provided above the Flood Planning Level.



For subdivision of an existing or previously approved (with current consent) building, flood risk management options must be implemented, where practicable, including at a minimum, suitable evacuation and emergency response measures.

**C1.5 Special uses**

All floor levels for uses associated with emergency services, accommodation or treatment of children, the aged, disabled or vulnerable (defined here as Special Uses), are to be at or above the Probable Maximum Flood level or Flood Planning Level, whichever is the highest.

**C1.6 All Other Developments**

The above controls for Commercial, Industrial and Mixed Use Development (C9.3 and C9.4) apply to all other development.

**C1.7 All Development on Land with High Hazard Category**

Development on land with a High Hazard Category (as identified in the Flood Risk Management Report) must demonstrate that:

- there is no net loss in flood storage and floodway area, as a result of the development,
- the development will not increase velocity, volume or direction of flood waters;
- for subdivisions, there are adequate building platforms or developable areas including carpark facilities and access which are not affected by the High Hazard Category;
- the underside of all new floors are above the Probable Maximum Flood level or Flood Planning Level, whichever is the highest, and all structures designed to withstand the High Hazard condition; and
- the principle entries to all dwellings and common areas are located above the Probable Maximum Flood level or Flood Planning Level, whichever is the highest, and an evacuation route is provided clear of the floodway.

**C1.8 Carparking Facilities/ Basements**

- The floor level of new enclosed garages must be at or above the Flood Planning Level. Consideration may be given to a floor level at a lower level, within 500mm of the Flood Planning Level, where it can be demonstrated that providing the floor level at the Flood Planning Level is not practical within the constraints of compliance with AS/NZS 2890.1.
- The floor levels of open carpark areas and carports are permissible below the Flood Planning Level, subject to being raised as high as practical within the constraints of compliance with AS/NZS 2890.1.
- Basement (ie below natural ground level) carparking must have all access and potential water entry points above the Probable Maximum Flood level or Flood Planning Level whichever is the higher, and a clearly signposted flood free pedestrian evacuation route from the basement area separate to the vehicular access ramps.

**C1.9 Flood Mitigation/Modification Works**

Flood mitigation works that modify the stormwater drainage system or flood behaviour within the development site, may be permitted subject to the following:

- The works do not have an adverse impact on any surrounding property.



- A Section 88B notation is to be placed on the title of the land that informs future landowners that flood protection measures, and the associated locations, have been undertaken on the property and/or the dwelling and of the need to retain and maintain these structures and works for future flood mitigation.
- Where it is demonstrated that flood mitigation works result in the safe diversion of the floodwater away from the proposed development, the floor level may be located below the Flood Planning Level.

## C2 Foreshore Risk Management

### Principle

*To manage development along the Parramatta River and Sydney Harbour foreshores to reduce the long term risks associated with tidal inundation and wave impact.*

### Rationale

Leichhardt Council is responsible for local planning and land management along approximately 17 kilometres of foreshore land bordering Parramatta River and Sydney Harbour.

Properties along the foreshore can be affected by inundation and wave impact during storm events due to a combination of high tides and larger waves. The impact of future global sea level rise will see an increase in this effect.

It is important that the floor levels of development along the foreshore are constructed high enough to minimise the potential for inundation in the long term. All structures along the foreshore should also be structurally designed to withstand the impact of waves during storm events.

### Note:

Council's Estuarine Planning Levels Study to be published in late 2009 will provide extensive information to assist in the preparation of the Flood Risk Management Report.

The Draft NSW Government Sea Level Rise Policy Statement will also assist in the preparation of the Flood Risk Management Report.

Exempt Development may still be permissible on a *Flood Control Lot*.

### Controls

Applications for flood control lots on the foreshore must be accompanied by a Foreshore Risk Management Report prepared by a relevantly qualified civil engineer. Subject to that study the following controls will apply:

#### C2.1 Floor Levels – New Development and Additions

All floor levels, including the floor levels of existing components of the development, but excluding open balconies (with open balustrades), must be at, or above, or raised to the Foreshore Planning Level.

The following exceptions/ variations on the requirements will be considered:

- C2.1.1 For alterations and additions to existing residential dwellings, existing floor levels may be retained below the Foreshore Planning Level provided that each of the following controls are complied with



- a) The floor levels of the additions and any significantly altered floor areas must be at or above or raised to the Foreshore Planning Level.
- b) Where the proposed works involve alterations to less than 60% of the total existing habitable floor areas, those existing areas that are not to be significantly altered may be retained below the Foreshore Planning Level.
- c) Where the alterations and additions affect greater than 60% of the total existing habitable floor areas and raising some or all of the existing floor levels is impracticable due to Heritage or Conservation Area constraints, those areas so constrained may be retained at the existing level.
- d) The additions must be designed and constructed such that they do not preclude the raising of the existing floor areas to the Foreshore Planning level at a future date or when further additions are proposed.
- e) For a second storey addition to the dwelling, the floor level of the second storey must be at a height that allows for the ground floor below to potentially be raised in the future to the Foreshore Planning Level, whilst maintaining minimum floor to ceiling height requirements.
- f) Any floor areas of the existing dwelling to be retained at the existing level, below the Foreshore Planning Level, must be satisfactorily flood proofed (either wet or dry) to the Foreshore Planning Level.

### **C2.2 All other developments**

Where constructing the floor level, or raising the floor level of existing development, to the Foreshore Planning Level may be difficult to achieve due to site and access constraints, consideration may be given to some or all of the floor levels being up to 300mm lower than the Foreshore Planning Level provided that satisfactory flood proofing (either wet or dry) is achievable to the Foreshore Planning Level.

### **C2.3 Subdivision**

Subdivision of foreshore land will only be permissible where it can be demonstrated that adequate building platforms or developable areas, including carparking facilities and access, can be provided above the Foreshore Planning Level.

### **C2.4 Floor Levels – Boatshed Facilities**

All floor levels must be at or above the Foreshore Planning Level.

### **C2.5 Carparking Facilities/ Basements**

- The floor level of new enclosed garages must be at or above the Foreshore Planning Level.
- The floor levels of open carpark areas and carports are permissible as low as 300mm below the Foreshore Planning Level, subject to them having been raised as high as practical within the constraints of compliance with AS/NZS 2890.1.



- Basements (ie below natural ground level) for carparking or other purposes, must have all access and potential water entry points above the Foreshore Planning Level and a clearly signposted pedestrian evacuation route from the basement area separate to any vehicular access ramps.

### **C2.6 General Requirements**

Mitigation works that modify the wave action or tidal inundation behaviour within the development site, including the filling of land, the construction of retaining structures and the construction of wave protection walls, may be permitted on a merit basis subject to satisfying the above criteria.

A Section 88B notation under the Conveyancing Act 1919 may be required to be placed on the title of the land describing the location and type of mitigation works with a requirement for their retention and maintenance.

**PART D GLOSSARY**

<b>Australian Height Datum (AHD)</b>	The level from which heights in Australia are measured and which is based upon an approximation of mean sea level.
<b>Average Recurrence Interval (ARI)</b>	The long-term average number of years between the occurrence of a flood or storm event that is equal to or larger than the selected event.
<b>Building Sustainability Index (BASIX) and BASIX Certificate</b>	The Building Sustainability Index is defined by the BASIX SEPP and the BASIX Certificate is generated by the applicant on the NSW Department of Planning website: <a href="http://www.basix.nsw.gov.au">www.basix.nsw.gov.au</a> .
<b>Catchment</b>	An area of land from which all runoff water flows to the same low point in a waterbody or drainage depression (creek, river, harbour, etc) and always relates to an area above a specific location.
<b>Conservation</b>	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.
<b>Drainage Easement</b>	The legal rights attached to land whereby another parcel has the right to use part or all of the land for the purpose of draining water.
<b>Flood Control Lot</b>	A lot identified as a flood control lot on the maps in Annexures B & C of this DCP
<b>Foreshore Planning Level</b>	A combination of the tidal and wave levels generated during the designated storm event with a freeboard applied above.
<b>Foreshore Risk</b>	The potential danger to personal safety and potential damage to property resulting from tidal levels and wave impacts.
<b>Foreshore Risk Management Report</b>	A report detailing the foreshore risks associated with a particular property or area, along with recommendations on measures to address those risks.
<b>Foreshore Risk Study</b>	An analysis of the tidal and wave characteristics of a water body such as Sydney Harbour to establish how they impact on a particular property or area.
<b>Floodplain</b>	An area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is, flood prone land.
<b>Flood Planning Level</b>	A combination of the flood level with a freeboard applied above.
<b>Flood proofing</b>	A combination of measures incorporated in the design, construction and alteration of individual buildings or structures subject to flooding, to reduce or eliminate flood damages.
<b>Flood Risk</b>	The potential danger to personal safety and potential damage to property resulting from flooding.
<b>Flood storage areas</b>	Those parts of the floodplain that are important for the temporary storage of floodwaters during the passage of a flood. The loss of flood storage can increase the severity of flood impacts by reducing natural flood attenuation.





<b>Flood Risk Management Report</b>	A report detailing the flood risks associated with a particular property or area, along with recommendations on measures to address those risks.
<b>Flood Study</b>	An analysis of the local stormwater drainage catchment to determine the flood characteristics affecting a particular property or area.
<b>Floodway areas</b>	Those areas of the floodplain where a significant flow of water occurs during floods and they are often aligned with naturally defined channels. Floodways are areas that even if only partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood levels.
<b>Freeboard</b>	A factor of safety typically used in relation to the setting of floor levels and is included in the Flood Planning Levels and Estuarine Planning Levels. Freeboard tends to compensate for factors such as wave action localised hydraulic effects, 'greenhouse' and climatic change, as well as sensitivity of flood modelling data.
<b>Greywater</b>	Waste water that does not contain human excreta, such as water from the laundry or from the bathroom (but not toilet).
<b>Gross Pollutants</b>	Materials made up of litter and debris that is transported by urban runoff and that is not less than 5mm in diameter and/or is retained by a 5mm mesh screen.
<b>Gross Pollutant Trap (GPT)</b>	A structure that acts as a water pollution control measure by intercepting and retaining gross pollutants.
<b>Habitable Room</b>	In a residential situation, is a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom, bathroom, laundry or workroom. In a commercial or industrial situation, it is an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.
<b>Hazard</b>	A source of potential harm or a situation with a potential to cause loss. In relation to this DCP the hazards are flooding, inundation or wave impacts which all have the potential to cause damage to the community.
<b>High Hazard Category</b>	A hazard where there is potential danger to personal safety; evacuation by trucks is difficult; able-bodied adults would have difficulty in wading to safety; and there is potential for significant structural damage to buildings.
<b>Hydraulics</b>	The term given to the study of water flow in stormwater drainage systems and waterways. In particular, it relates to the evaluation of flow parameters such as water level and velocity.
<b>Hydrology</b>	The term given to the study of the rainfall and runoff process. In particular, it relates to the evaluation of peak flows, flow volumes and the derivation of hydrographs for a range of floods.
<b>Impermeable surfaces</b>	Those surfaces that are not readily penetrable by water.
<b>Interallotment drainage</b>	A private stormwater drainage system that carries stormwater from one property, or a number of properties, through other properties.



<b>Integrated Water Cycle Plan</b>	A design, management and implementation plan for large-scale developments detailing the proposed stormwater management measures that are to be integrated into the development.
<b>Invert</b>	The lowest point of a channel or gutter, or the internal base of a pipe.
<b>Litter</b>	All material of human origin that is capable of being mobilised by stormwater runoff.
<b>Natural water balance</b>	The relative balance between runoff, infiltration and evapotranspiration under natural (pre-development) conditions, so as to maintain appropriate groundwater, soil salinity and streamflow characteristics.
<b>Nutrients</b>	Substances that provide nourishment to another organism. In the context of stormwater, they consist primarily of Total Phosphorous and Total Nitrogen.
<b>On site Detention (OSD)</b>	A facility used to temporarily store stormwater on site so that it can be released at a controlled discharge rate.
<b>On Site Retention (OSR)</b>	A facility used to temporarily store stormwater on site so that peak and total volume discharges during and after storm events can be reduced by ensuring that water is reused on the site.
<b>Orifice plate</b>	A thin sheet of stainless steel metal that has a hole with a set diameter to restrict the discharge to a predetermined rate.
<b>Overland Flowpath</b>	A section of land that carries stormwater or flood flows across the surface; usually those flows that cannot be contained in the piped drainage system.
<b>Peak Discharge</b>	The maximum discharge occurring during a flood or storm event.
<b>Permissible Site Discharge (PSD)</b>	The maximum rate of stormwater discharge from a site, often controlled by the orifice plate in an on site stormwater detention facility.
<b>Pervious surface</b>	A surface that is penetrable by water.
<b>Porous pavement</b>	A type of pavement that is designed to allow the infiltration of water to an underlying sub-base, thereby producing less surface runoff than conventional (non-porous) pavements. The permeability of porous pavement declines with time unless it is adequately maintained.
<b>Potable water</b>	Water fit for human consumption.
<b>Probable Maximum Flood (PMF)</b>	The PMF is the largest flood that could conceivably occur at a particular location.
<b>Public stormwater drainage system</b>	Made up of minor and major drainage infrastructure; including kerb and gutter, dish gutters, pits and pipelines and open channels, with different components owned and managed by either Council or Sydney Water.
<b>Rainwater Reuse</b>	Collection of water discharged from non-trafficable roof areas within a development site to use for purposes such as toilet flushing, laundry, garden irrigation and other household end uses.



<b>Runoff</b>	The rainfall that does not ends up as stormwater.
<b>Sediment</b>	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.
<b>Site Area</b>	The area of land contained within the title boundaries of the site or the area of the property on which the development is proposed to be carried out.
<b>Stormwater</b>	Untreated rain water that runs off the land onto which it falls.
<b>Stormwater Drainage Concept Plan</b>	A plan that shows how stormwater will be managed within a development site, in particular demonstrating how the measures required by this DCP will be implemented.
<b>Stormwater Management</b>	The means by which stormwater is collected, conveyed, treated or utilised within a particular property or area.
<b>Stormwater Reuse</b>	Collection of water discharged from trafficable surfaces, including paved or ground surfaces, within a development site. When untreated, the water can be used for garden irrigation, and should not be applied to edible plants. When treated, the water can be used for purposes such as garden irrigation, toilet flushing and cold water washing machine supply, providing it meets the requirements set by NSW Health.
<b>Sydney Water</b>	Sydney Water Corporation or any organisation that replaces it.
<b>Total Nitrogen</b>	Total Nitrogen is the sum of nitrate (NO <sub>3</sub> ), nitrite (NO <sub>2</sub> ), organic nitrogen and ammonia (all expressed as N).
<b>Total Phosphorous (TP)</b>	A nutrient essential to the growth of organisms, and is commonly the limiting factor in the primary productivity of surface water bodies. Total phosphorus includes the amount of phosphorus in solution (reactive) and in particle form.
<b>Total Suspended Solids (TSS)</b>	Very small particles remaining dispersed in a liquid due to turbulent mixing that can create turbid or cloudy conditions.
<b>Trunk Drainage</b>	A component of the public stormwater drainage system, owned by either Council or Sydney water, that includes pits and pipelines below the road, or passing through private property, culverts, open channels and Whites Creek, Johnston's Creek and Hawthorne Canal.
<b>Waterbody</b>	A natural or man made system for carrying or holding water, including watercourses, creeks, rivers, open channels, lakes, bays, lagoons or harbours.
<b>Water Management Statement</b>	A summary of the proposed stormwater management measures that are to be integrated into the development.
<b>Wastewater</b>	Sewage, and can be greywater or water that is contaminated by human or commercial processes, and includes water from a domestic pool.
<b>Water Sensitive Urban Design</b>	An integrated approach to urban planning and design to ensure that development is carefully designed, constructed and maintained so as to minimise impacts on the natural water cycle.



## ANNEXURE A

### Integrated Water Cycle Plan

An Integrated Water Cycle Plan (IWCP) is a design, management and implementation plan for large-scale urban development projects that integrates all issues and responses affecting the water cycle. It is required for proposals that:

- incorporate 15 or more dwellings or residential lots, or
- accommodate 50 or more residents, occupants or employees, or
- are expected to generate a water demand of 5,000 litres per day or more, or
- involve the creation of 2,500 square metres of impermeable surface or more, or
- involve the subdivision of 2,500 square metres of land or more for commercial or industrial purposes.

The purpose of the IWCP is to ensure an integrated development response and must address the following matters:

1. Existing environment – a summary of the current condition of the land and its catchment context, with particular reference to the following issues:
  - catchment hydrology and hydrogeology
  - soil conditions
  - vegetation cover, remnant native vegetation and vegetation condition
  - groundwater depth and chemistry
  - site constraints and hazards such as flooding, slope stability, reactive soils, coastal hazards, erosion hazard, urban salinity, acid sulfate soils and land contamination
  - water quality conditions
  - stream flow regime.
2. Objectives and performance standards – water cycle outcomes that are to be achieved during construction and throughout the life of the development. These should be consistent with those contained in plans, strategies or policies adopted by relevant agencies, including regional plans and strategies, water management plans, catchment blueprints, stormwater management plans and joint statements of intent.

The following matters should be addressed:

- water consumption
- flood risk
- stream erosion
- water balance (relative balance between runoff, infiltration and evapotranspiration)
- salinity
- stream flow and environmental flows
- water quality
- water-dependent ecosystems such as streams, riparian zones, wetlands and estuaries
- erosion and sedimentation
- biodiversity and habitat conservation
- groundwater conditions
- public health
- recreational use of waterways and related areas
- aesthetic, visual and landscape issues



- indigenous and European cultural issues.
3. Planning and design principles – general principles to be adopted at the sub-catchment, precinct, street and lot levels that seek to promote achievement of the objectives and performance standards. These principles will shape the overall planning, design and staging of the project. They should be compatible with principles outlined in strategies and plans adopted by relevant agencies, including:
    - regional strategies
    - settlement, economic, housing and infrastructure strategies
    - biodiversity, catchment, environmental and open space strategies
    - structure plans and master plans.
  4. Water management measures – management measures that are to be applied so as to meet relevant objectives and performance standards.
  5. Community partnerships – community and educational initiatives that will support the objectives and performance standards.
  6. Infrastructure program – an infrastructure program that integrates all aspects of water cycle management, including water supply, sewerage, drainage, wastewater treatment and reuse, water quality control, flood risk management, open space provision and ecological protection.
  7. Developer contributions – proposed arrangements regarding section 94 contributions, headworks charges, etc.
  8. Ongoing operation – strategies to ensure effective ongoing maintenance of on-site water management measures, maintenance requirements and proposed enforcement mechanisms.
  9. Monitoring program – arrangements for monitoring the achievement of objectives and performance standards.

#### *Consultation*

You should consult with relevant agencies regarding the issues that should be addressed and the level of detail required. Relevant agencies include:

- Council
- Sydney Water
- Department of Environment & Climate Change
- Department of Environment and Conservation

The IWCP must be prepared by a qualified practicing Civil Engineer with demonstrated relevant experience in stormwater and environmental engineering.



## Flood Risk Management Report

A Flood Risk Management Report is required for potentially flood prone lots and is required to ensure that the risks associated with flooding are clearly identified and where appropriate, the development is modified to minimise those risks.

The Report must be prepared by a qualified practicing Civil Engineer with demonstrated relevant experience in flooding and floodplain management. The Report must address the relevant controls of this DCP and is to provide at a minimum, the following details:

1. Description of the existing stormwater drainage system, including catchment definition.
2. Extent of the 100 year Average Recurrence Interval (ARI) flood event in the vicinity of the development.
3. Long and cross sections demonstrating that 500mm freeboard has been provided above the 100 year ARI flood event, to all proposed floor levels.
4. Note that a reduced freeboard to the floor level of the proposed carport/garage/parking space may be considered where an acceptable level of risk to damage and safety can be demonstrated.
5. Long and cross sections demonstrating that 500mm freeboard has been provided above the 100 year ARI flood event, to the floor levels of all existing and proposed components of the development.

Note that a reduced freeboard to the floor level of the proposed [carport/garage/parking space] may be considered where an acceptable level of risk to damage and safety can be demonstrated.

6. Recommendations on all precautions to minimise risk to personal safety of occupants and the risk of property damage for the total development to address the flood impacts on the site of the 100 year ARI and Probable Maximum Flood (PMF) storm. These precautions shall include but not be limited to the following:
  - (i) Types of materials to be used to ensure the structural integrity of the development for immersion and impact of velocity and debris for the 100 year ARI event.
  - (ii) Waterproofing methods, including electrical equipment, wiring, fuel lines or any other service pipes or connections
  - (iii) A flood evacuation strategy
  - (iv) On site response plan to minimise flood damage, and provide adequate storage areas for hazardous materials and valuable goods above the flood level.
7. Details of any flood mitigation works that are proposed to protect the development.
8. Provide supporting calculations.
9. Specify architectural/engineering plans on which the assessment is based.
10. Specify date of inspection.
11. Specify professional qualifications and experience of the authors.



## Foreshore Risk Management Report

A Foreshore Risk Management Report is required for potentially flood prone lots and is required to ensure that the risks associated with wave action and tidal inundation are clearly identified and where appropriate, the development is modified to minimise those risks. The Report must be prepared by a Civil Engineer with demonstrated relevant experience in coastal engineering. The Report must address the relevant controls of this DCP and is to provide at a minimum, the following details:

1. Description of the site and surrounding geotechnical and coastal/estuarine features.
2. Description of the existing and proposed development.
3. Identification of the geotechnical constraints on the land including assessment of the sub surface conditions geomechanics, slope stability and ground water conditions.
4. Identification of the constraints due to coastal/estuarine processes on the land including an assessment of storm wave impact, coastal processes, erosion and tidal inundation likely to occur during a 100 year ARI storm event.
5. Establishment of the 100 year ARI flood level associated with storm wave action and tidal inundation, including provision of adequate freeboard.
6. Assessment of the stability of the existing seawall adjacent to the boundary of the site with the harbour. The report must include recommendations to ensure continued stability of the wall during the construction process and in the long term.
7. Recommendations for the design of the stormwater drainage system for the site, including subsurface conditions, collection of runoff and its disposal to the Harbour.
8. Certification that there is a low risk of instability of the site over the economic life of the development, including the proposed development and existing structures that are to be retained.
9. Where any floor levels of the proposed development and/or existing structures are proposed to be retained below the 100 year ARI flood level, the report must address whether and how the proposal is to be either flood proofed to protect the overall development or justify that periodic water inundation will not cause any adverse risk to the development, its occupants or uses. Note that inundation of habitable components of the development is not permissible and must be provided with adequate freeboard.
10. Where any part of the proposed and/or existing development is below the flood level, the Report must make recommendations on all precautions to minimise risk to occupants and the risk of property damage. These precautions shall include but not be limited to safe evacuation, ensuring all structures, electrical equipment, wiring, fuel lines or any other service pipes and connections shall be waterproofed below the flood level, and be capable of withstanding the effects of wave action and tidal inundation.
11. Certification that the proposed development will not cause adverse impacts on surrounding lands, coastal environment and public amenities.

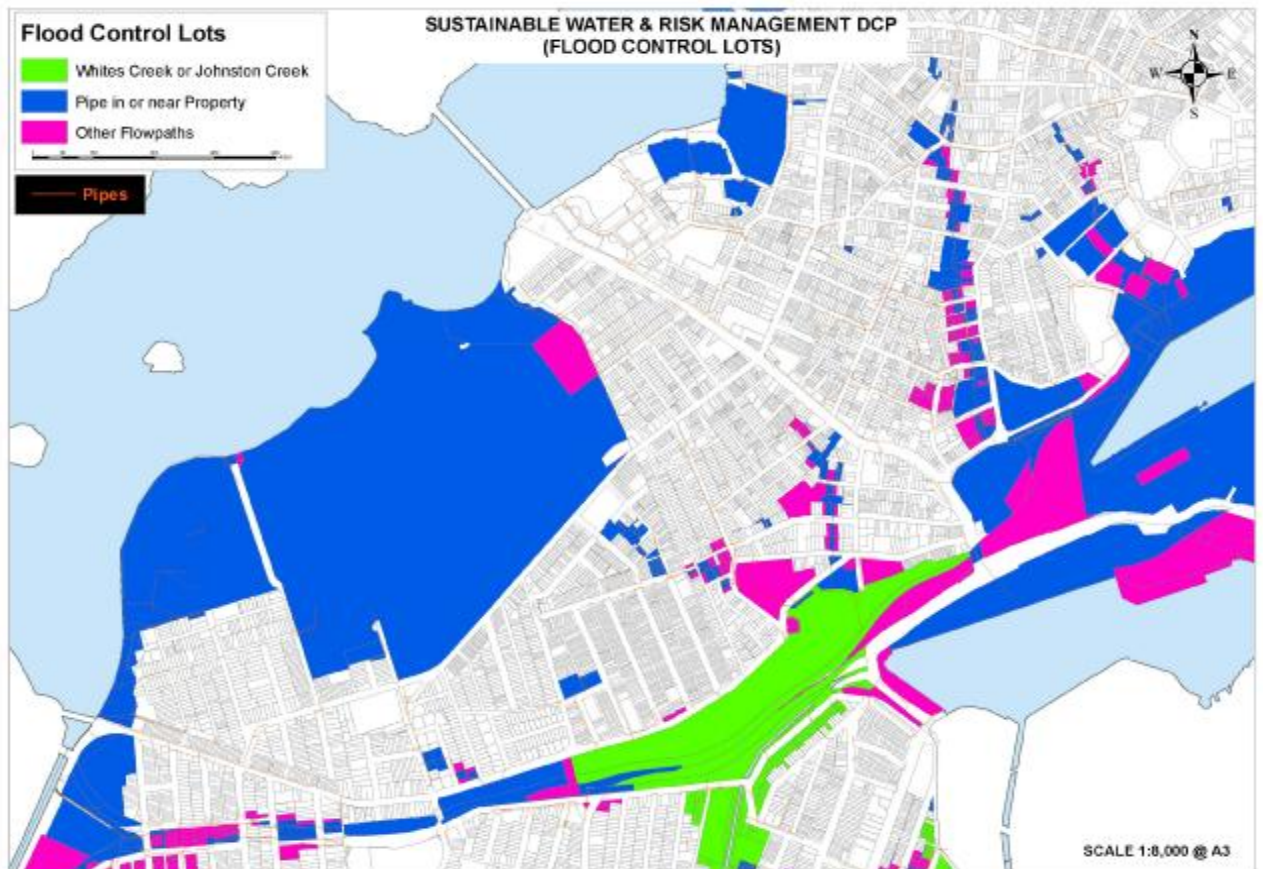
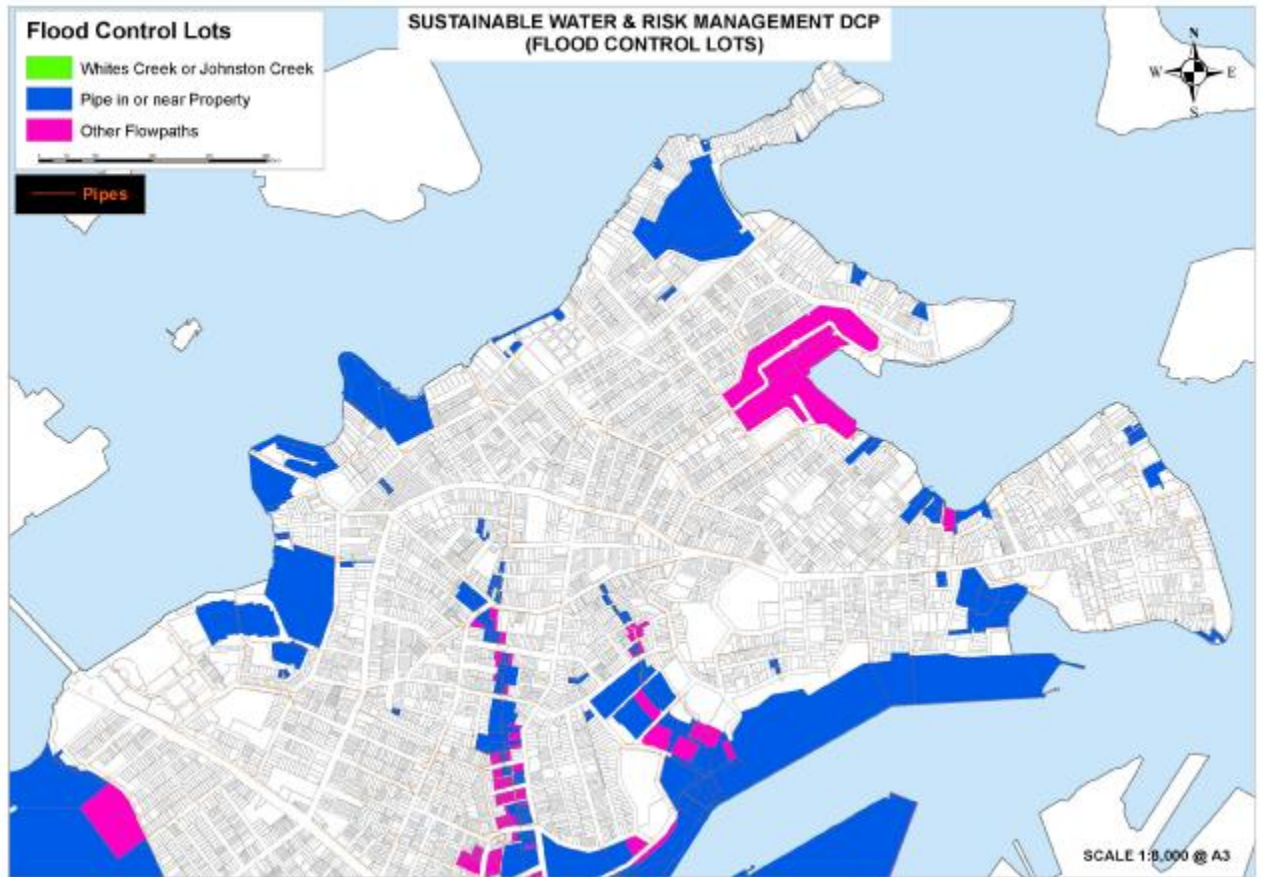


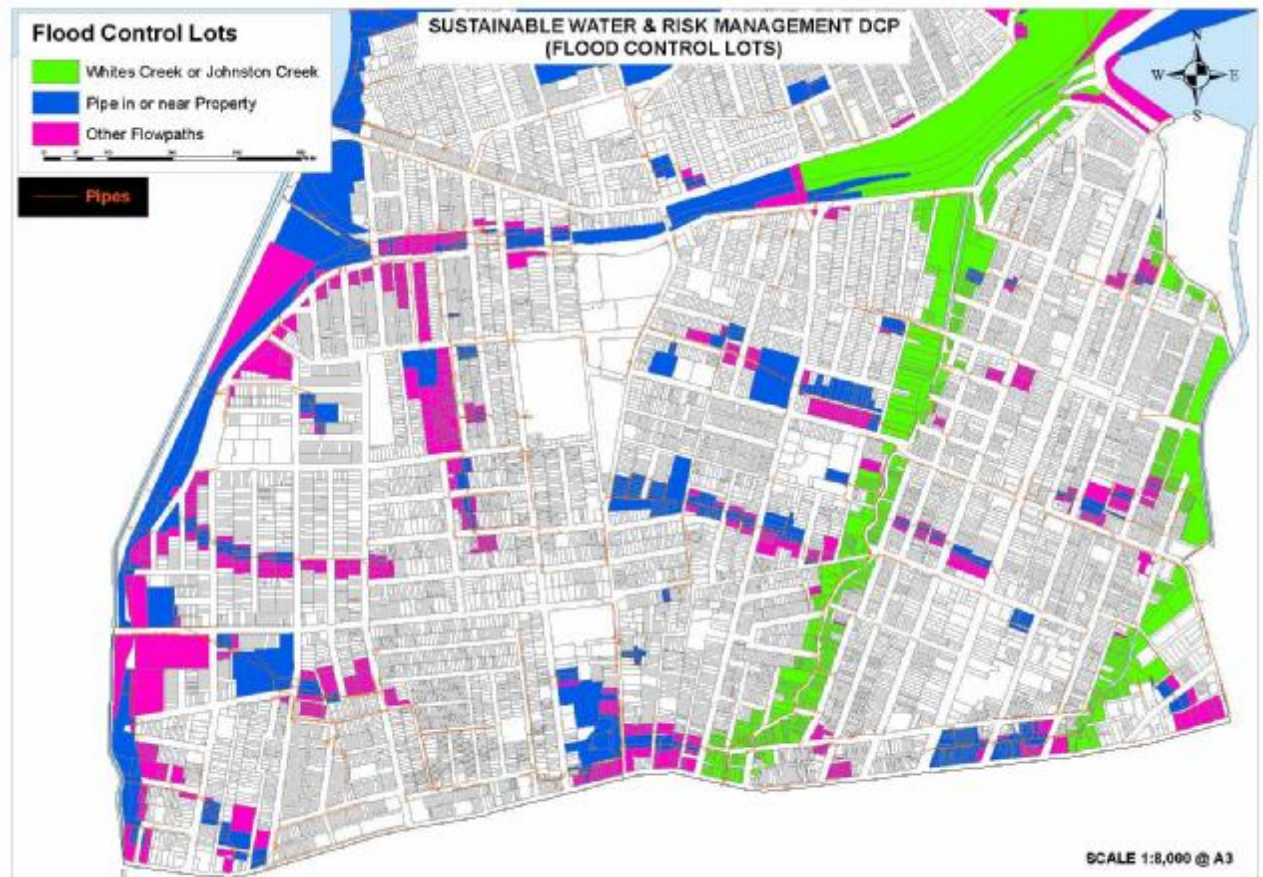
12. Specify the architectural/engineering plans on which the assessment is based.
13. Specify the date of inspection
14. Specify professional qualifications and experience of the authors





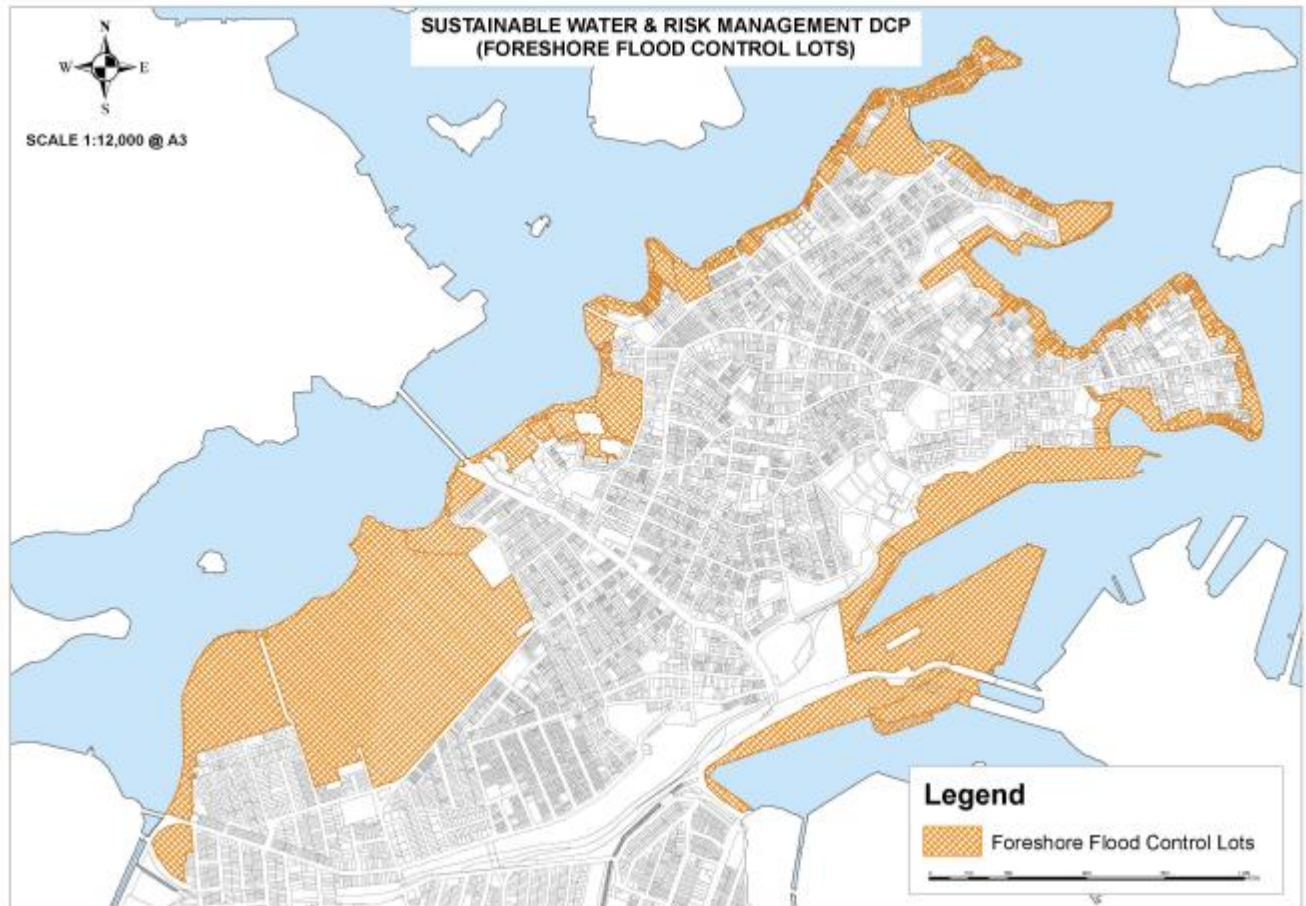
## ANNEXURE B – Flood Control Lot Maps







## ANNEXURE C – Foreshore Flood Control Lot Map





## A4.0 Urban Form and Design

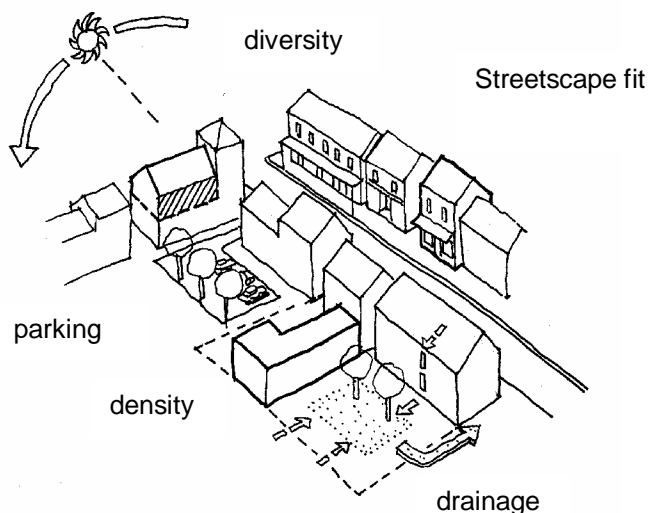
A sense of community, privacy and safety are often evident in the older parts of towns and cities which are characterised by traditional street patterns.

In these areas, streets and spaces are well-defined with buildings that directly access and overlook them, providing good surveillance. The buildings and their surrounds are integrated and compatible with each other.

The built environment has more than just a visual impact on our lives. The form, layout and design of urban spaces shapes the way we interact with each other and carry out our day to day activities. It has been demonstrated that a poorly designed urban environment can directly affect personal well-being and contribute to increased crime and the loss of a sense of place and community which may lead to isolation and segregation. Inhuman scale and lack of visual interest and variety in the built form are contributory factors to poor urban design. Consequently it is important to ensure that the built environment grows in a way that best accommodates future needs and requirements by having consideration to the design elements that are essential to good urban form and design.

The design elements which are addressed in more detail in separate sections provide guidance and controls relating to features of good urban form and design and include:

1. undertaking a site analysis;
2. ensuring the design of the proposal relates to the site and the prevailing street subdivision pattern;
3. having regard to the bulk, size, heights, massing and proportions of the proposed buildings in relation to surrounding development, and ensuring that adequate space is provided around buildings to provide an appropriate setting;



4. ensuring that the car parking provided is appropriate to the development and site circumstances and that the layout is sympathetic and practical;
5. ensuring that the elevational detail and materials are sympathetic to the surrounding development;
6. consideration of front walls, fences, out-buildings, landscaping and building entries, site facilities and utility installations.

Some of these design elements have implications for the amenity enjoyed by the future occupants of the new development and that of neighbouring occupiers. Additionally, the design and layout of buildings is important in terms of providing ecologically sustainable development.

Each design element does not stand alone but is intrinsically linked to other design elements relating to urban form, design, amenity and ecologically sustainable development. A balance between these issues needs to be reached in order to produce the best development.



#### **A4.1 Development at the Business Zone/Residential Zone interface**

For development at the Business Zone/Residential Zone interface, any proposal for development on land zoned Business must recognise and take into account the form of existing development, and/or development likely to occur, in adjoining land zoned Residential.

Where development is proposed in excess of 2 storeys in land zoned Business at a Business Zone/Residential Zone interface, any storey above the second storey should not be visible (or at most, partially visible) from the rear yards of adjoining land zoned Residential.

Applicants for development in the Business Zone must also consider amenity impacts upon adjoining land owners in the Residential Zone.



## A5.0 Amenity

Amenity is defined in Leichhardt Local Environmental Plan 2000 as

"Amenity means the enjoyment of the environment, whether by the community as a whole or by an individual, arising from the day to day use of property, including dwellings or publicly accessible land, community facilities or open space, and includes, but is not limited to, the enjoyment of:

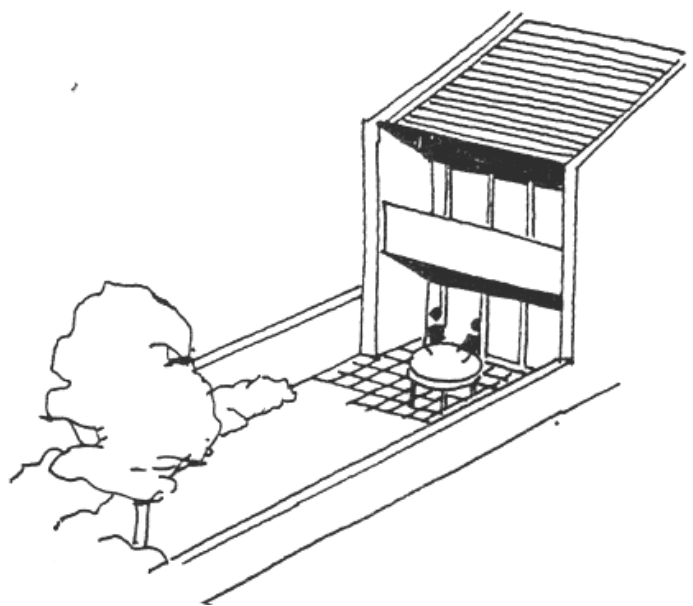
- (a) sunlight, privacy and views, and
- (b) residential and community life free from nuisance arising from the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products or grit."

Reasonable amenity should be ensured to future occupants of new development and maintained to residents in their existing homes. It is not the function of the planning system however, to ensure the protection of one person's amenity to the detriment of another, but to balance the needs of the community as a whole.

The amenity of a resident is determined by many factors including urban form and design, access to services and the principles of ecologically sustainable development. However, specifically, solar access, private open space, visual privacy, acoustic privacy, access to views and the activities of non-residential development are seen to impact directly on the enjoyment of residential amenity.

Whilst the design elements in this development control plan have been separated into sections to enable easy reference they are nevertheless intrinsically linked. Together the application of these design elements will enable the provision and maintenance of an environment that meets the future and current needs of the community.

Providing privacy for one dwelling may result in the loss of solar access or outlook to another dwelling. Frequently the achievement of the ultimate outcome in one design element will result in a less than satisfactory outcome in another. Consequently all the issues need to be balanced and innovative design solutions incorporated to ensure that the best all round solution is achieved.





### A6.0 Site Analysis

A site analysis is the first step in considering the development potential of a site. It is a prerequisite to all new development proposals and should be completed before a development is designed. For alterations and/or additions, a site analysis will be left up to the discretion of the Assessing Officer. Council will exercise its judgement about the extent of information required in a site analysis depending on the nature of the development proposal.

A site analysis must be to scale and should identify development opportunities and constraints offered by a site, and the potential impact of a development on its surroundings. This is fundamental to the process of achieving good urban ecologically sustainable development and enhancing amenity.

The site analysis is a concept plan. It not only addresses the constraints and opportunities of the development site but also the context within which the site is set. It is essential to consider the wider picture when preparing a site analysis, including

neighbouring developments, the street and locality.

#### How to Prepare a Site Analysis

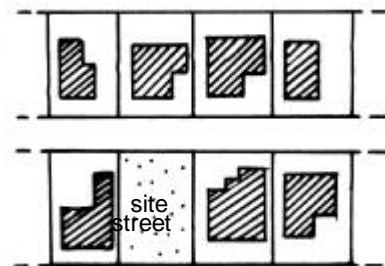
Use an annotated plan to show key characteristics and relationships to adjacent buildings and streets, as set out below. For large residential sites, address issues such as orientation of streets and buildings.

Refer to the Urban Framework Plans for the strategic context and Leichhardt *Suburb Profiles* (A10.0) to assess local area character.

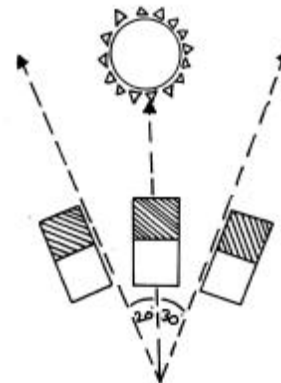
A site analysis at its most exhaustive would address the following in relation to:

#### The site, its context and surroundings

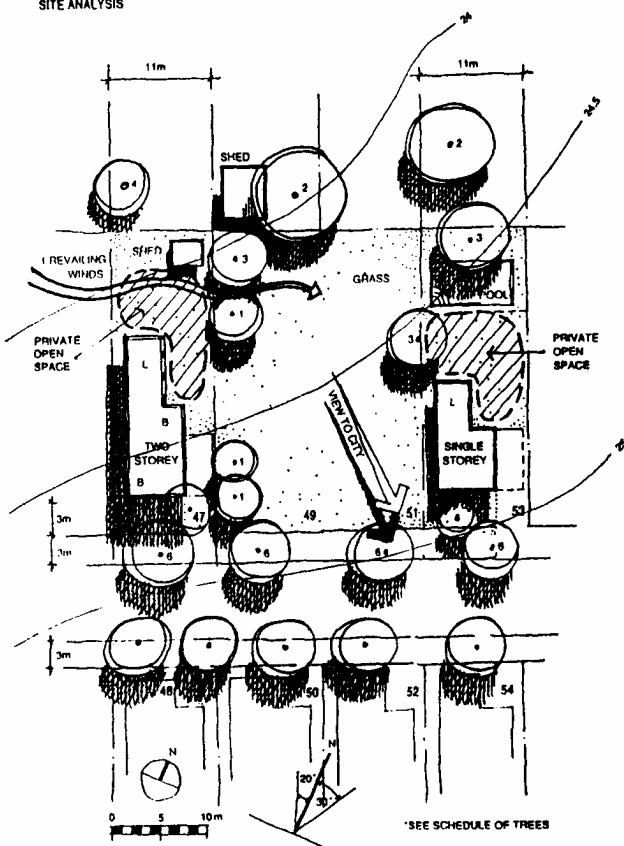
- The site context in relation to neighbouring sites, street patterns and lot sizes and orientation.



- Drainage lines across the site.
- True North, and a range of 30° east and 20° west of true North.

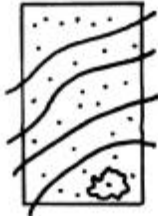


SITE ANALYSIS





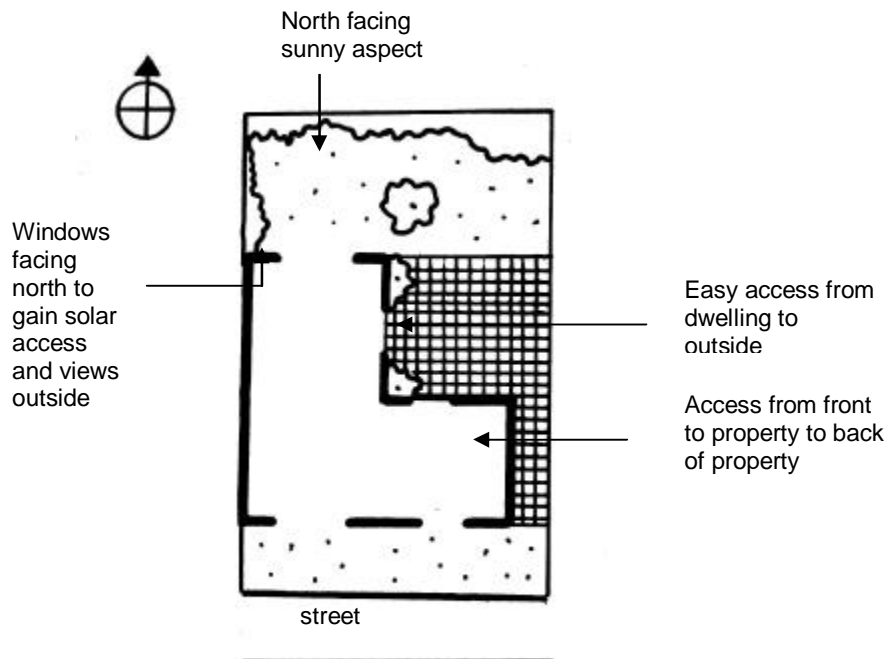
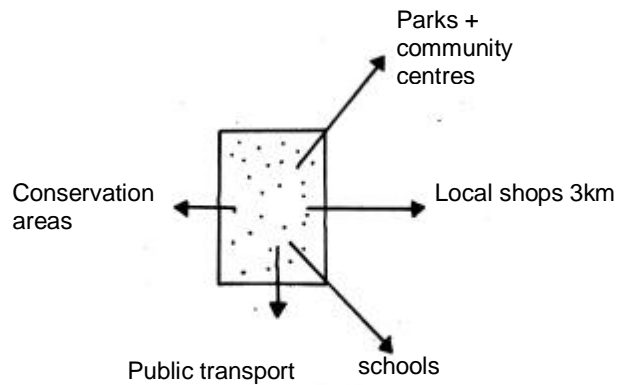
- Sun and Shade characteristics and prevailing winds.
- Contours and topographical features the location and characteristics of any adjacent public open space.



such as balconies and verandahs.

- Access and connection points
- The direction and distances to local shops, schools, public transport, parks and community facilities.

- Location of utility services
- Potential noise sources, eg swimming pool, railway lines.
- The location of Heritage Items and Conservation Areas in the vicinity.
- The location status and use of adjacent buildings or structures.
- Private Open Space
- Street frontage features such as poles, street trees, kerb crossovers, bus stops, services, and existing building features







**BLANK PAGE**



**BLANK PAGE**



## A7.0 Heritage Conservation

### Principle

*To protect, conserve and enhance Leichhardt's heritage, and ensure that changes to this heritage take place in an appropriate manner.*

### Rationale

Leichhardt's character is largely determined by its heritage. As heritage considerations underpin the Leichhardt Town Plan, the principles and guidelines set out in the Burra Charter have been adopted as the basis for assessment of carrying out work to places of heritage value. This includes items of individual value known as Heritage Items, and areas of overall conservation value, known as Conservation Areas. Specific requirements are set out in Part 3 – Heritage Conservation, of Leichhardt LEP 2000.

### Guidelines

Parts B and C of this DCP contain detailed guidelines and controls relating to designing buildings that will respect the heritage of Leichhardt. These parts should be referred to. Here you will find a description of acceptable building forms as well as instruction for identifying features and materials that should be recognised when designing new development and when proposing alterations and additions to existing buildings.

The heritage value of a building is not only its contribution to the streetscape. Other external and internal features may also be important. Consider allotment shape and size, building footprint, setting, a past use or occupant, technological achievements, the internal layout and dimensions of rooms or special fixtures.

This list is certainly not exhaustive but indicates the broad nature of features relating to heritage significance.

The applicant should:

- Determine the significance by understanding the history of a place, and the changes that have been made over time.
- Determine why the fabric of a place is important.
- Determine the most appropriate way to conserve and retain the heritage significance of the fabric.
- Before making decisions about change, clearly set out why a place has heritage significance.
- Base decisions on an understanding of the place.
- Assess the impact of proposed changes to the established significance of a place.

### Controls

- **Only undertake work necessary to conserve the place, or to comply with safety or other regulations.**
- **Retain the existing fabric wherever possible, and maintain rather than replace the fabric.**
- **Minimise any alterations to the building and setting required for occupation.**
- **Make a record of the place before making changes, and maintain a record of the changes made.**
- **Changes to a building's fabric are to be complementary to the architectural period and style of the building.**

#### Key References:

Summary of illustrated Burra Charter,  
Courtesy of Peter Marquis-Kyle & Meredith Walker  
Australia ICOMOS.

#### Refer to:

- B4.1 Alteration and additions to existing dwelling houses.
- B4.2 Conservation of small detached houses
- B5.4 Leichhardt Suburb profiles



## A8.0 Parking Standards and Controls

### Principle

*To ensure that safe and sufficient parking for all modes of transport is provided to meet anticipated demands.*

*Improve access by walking, cycling and public transport to housing, jobs and services.*

*Ensure access for people with disabilities.*

*Increase the choice of available transport and reducing dependence on cars.*

*To make cycling a viable transport alternative.*

*To restrain employee off-street parking provisions to discourage car travel.*

*To improve the design and quality of the urban environment.*

### Rationale

Council requires that parking be provided to meet the needs of the proposed use. This should be designed to meet the relevant code and standards set at the Local, State and Federal levels. This section deals with the standards and controls which should be addressed in relation to the provision of access, parking and servicing of a development.

Applicants are required to demonstrate with their application that their proposed parking provisions are consistent with the objectives and principles of the DCP.

The rates in the following table are intended as a generic guide and may need to be adjusted for local circumstances, employee densities, public transport accessibility and reduced car mode share targets, where appropriate.

The staff parking rates are based on the principle of providing parking supply up to 20% lower than observed or calculated demand to discourage car usage for journey to work travel.

### Controls

- **The parking rates in the following table are generic and are included to demonstrate the principles outlined in the DCP for determining parking requirements for new development.**

- **Developments that are not tabled will be assessed having regard to the following criteria and any demonstration of parking requirements from surveys of comparable establishments:**
  - **the person capacity of the premises;**
  - **the proportion of visitors or patrons likely to arrive by car;**
  - **the availability and level of service of public transport (AMCORD research suggests proximity of 400 metres or less to rail stations and main bus routes may reduce parking for residential uses by at least 25%);**
  - **the number of full-time and part-time employees;**
  - **the hours of use;**
  - **the location of the premises particularly in relation to schools, local services, employment, retail and recreational facilities and where these services will reduce the need for vehicle use;**
  - **the number of occasions during the year when the facility is fully used;**
  - **the availability and affordability of public parking;**
  - **the availability of additional parking areas to cover peak demands.**



**Generic Parking Rates**

Land Use	Car Parking					Bicycle Storage	
	Staff/ Residents		Visitors/ Shoppers		Mobility Impaired	Staff/ Residents	Visitors/ Shoppers
	Maximum	Minimum	Maximum	Minimum	Minimum	Minimum	Minimum
<b>Residential</b>							
– Bed-sit	0.5 spaces per unit	Nil	0.2 spaces per unit	0.1 spaces per unit	See note (1)	0.33 spaces per unit	0.08 spaces per unit
– 1 bedroom	1 space per unit	0.5 spaces per unit	0.2 spaces per unit	0.1 spaces per unit	See note (1)	0.33 spaces per unit	0.08 spaces per unit
– 2 bedrooms	1.6 spaces per unit	0.8 spaces per unit	0.2 spaces per unit	0.1 spaces per unit	See note (1)	0.33 spaces per unit	0.08 spaces per unit
– 3 + bedrooms	2 spaces per unit	1 space per unit	0.2 spaces per unit	0.1spaces per unit	See note (1)	0.33 spaces per unit	0.08 spaces per unit
– Dwelling	2 spaces per dwelling	Nil	N/A		See note (1)	Nil	Nil
<b>Amusement Centre</b>	0.4 spaces per employee	Nil	0.2 space per machine plus 1 space per pool/ snooker table	Nil	See note (1)	0.2 spaces per employee	2 spaces plus 5 spaces per 1000m <sup>2</sup> GFA
<b>Bulky Goods Retail</b>	See note (4)		see note (2)		See note (1)	See note (2)	See note (2)
<b>Child Care Facility</b>	0.55 spaces per staff	0.44 spaces per staff	0.125 spaces per child	Nil	See note (1)	2.5 spaces per 1000m <sup>2</sup> GFA	5 spaces per 1000m <sup>2</sup> GFA
<b>Clubs</b>							
– Lounge and Bar Areas	See note (4)		10 spaces per 100m <sup>2</sup> GFA	5 spaces per 100m <sup>2</sup> GFA	See note (1)	4 spaces per 100m <sup>2</sup> of bar area, plus 1 space per 100m <sup>2</sup> of lounge area	4 spaces per 100m <sup>2</sup> of bar area, plus 1 space per 100m <sup>2</sup> of lounge area
– Dining & Auditorium	See note (4)		Greater of 0.2 spaces per seat or 8 spaces per 100m <sup>2</sup> GFA	Greater of 0.1 spaces per seat or 4 spaces per 100m <sup>2</sup> GFA	See note (1)	Nil	Nil



Land Use	Car Parking					Bicycle Storage		
	Staff/ Residents		Visitors/ Shoppers		Mobility Impaired	Staff/ Residents	Visitors/ Shoppers	
	Maximum	Minimum	Maximum	Minimum	Minimum	Minimum	Minimum	
<b>Commercial Premises</b>	Overall parking requirement (including staff and shoppers parking): <b>Minimum:</b> 1.5 spaces per 100m <sup>2</sup> <b>Maximum:</b> 3 spaces per 100m <sup>2</sup>					See note (1)	5 spaces per 1000m <sup>2</sup> GFA	1.33 spaces per 1000m <sup>2</sup> GFA
<b>Hotels</b>	See note (4)		10 spaces per 100m <sup>2</sup> GFA plus 5 spaces per 100m <sup>2</sup> of outdoor/semi outdoor seating area	5 spaces per 100m <sup>2</sup> GFA plus 3 spaces per 100m <sup>2</sup> of outdoor/semi outdoor seating area	See note (1)	4 spaces per 100m <sup>2</sup> of bar area plus 1 space per 100m <sup>2</sup> of outdoor/semi outdoor seating area	4 spaces per 100m <sup>2</sup> of bar area plus 1 space per 100m <sup>2</sup> of outdoor/semi outdoor seating area	
<b>Industry</b>	Overall parking requirement (including staff and shoppers parking): <b>Maximum:</b> 1 space per 4 employees, or 1 space per 100m <sup>2</sup> GFA whichever is greater <b>Minimum:</b> 1 space per 2 employees or 2 spaces per 100m <sup>2</sup> GFA, whichever is greater					See note (1)	1 space per 1000 m <sup>2</sup> GFA	Nil
<b>Motels</b>	See note (4)		1 space per room	1 space per room	See note (1)	0.025 spaces per room	Nil	
<b>Motor &amp; Retail Showrooms</b>	See note (4)		See note (2)		See note (1)	1.33 spaces per 1000m <sup>2</sup> of sales floor	1 space per 1000m <sup>2</sup> of sales floor	
<b>Passenger Terminal</b>	See note (4)		see note (3)		See note (1)	see note (3)	see note (3)	
<b>Professional Consulting Rooms</b>	0.55 spaces per staff	0.44 spaces per staff	4 spaces per 100m <sup>2</sup> GFA	2 spaces per 100m <sup>2</sup> GFA	See note (1)	0.125 spaces per practitioner	0.25 spaces per practitioner	
<b>Restaurants</b>	0.55 spaces per staff	0.44 spaces per staff	10 spaces per 100m <sup>2</sup> GFA plus 5 spaces per 100m <sup>2</sup> of outdoor/semi-outdoor seating area	5 spaces per 100m <sup>2</sup> GFA plus 2.5 spaces per 100m <sup>2</sup> of outdoor/semi-outdoor seating area	See note (1)	4 spaces per 100m <sup>2</sup> of public area	2 spaces	



<b>Service Stations</b>	See note (4)	4 spaces per work bay plus 10 spaces per 100m <sup>2</sup> ancillary retail	2 spaces per work bay plus 2 spaces per 100m <sup>2</sup> ancillary retail	See note (1)	1 space per 20 staff	Nil
<b>Shops</b>	See note (4)	3 spaces per 100m <sup>2</sup> GFA	1.5 spaces per 100m <sup>2</sup> GFA	See note (1)	3 spaces per 1000m <sup>2</sup> of sales floor	2 paces per 1000m <sup>2</sup> of sales floor
<b>Warehouse</b>	<p>Overall parking requirement (including staff and shoppers parking):</p> <p><b>Maximum:</b> 2 spaces per 100m<sup>2</sup> GFA for first 100m<sup>2</sup> GFA, plus 1space per 100m<sup>2</sup> GFA for the next 100m<sup>2</sup> GFA, plus 0.5 spaces per 100m<sup>2</sup> GFA for the next 1,800m<sup>2</sup> GFA, plus 0.33 spaces per 100m<sup>2</sup> GFA for any GFA over 2,000m<sup>2</sup>.</p> <p><b>Minimum:</b> 1 space per 100m<sup>2</sup> GFA for first 100m<sup>2</sup> GFA, plus 0.5 spaces per 100m<sup>2</sup> GFA for the next 100m<sup>2</sup> GFA, plus 0.25 spaces per 100m<sup>2</sup> GFA for the next 1,800m<sup>2</sup> GFA, plus 0.17 spaces per 100m<sup>2</sup> GFA for any GFA over 2,000m<sup>2</sup>.</p>			See note (1)	1 space per 1000m <sup>2</sup> GFA	Nil

Notes:

- 1) For required disabled parking provisions, refer to Development Control Plan 32 – Design for Equity of Access and Adaptability.
- 2) The requirements are to be determined by comparative survey.
- 3) The requirements are to be determined in consultation with local transport operators, relevant transport agencies and Leichhardt Council.
- 4) Staff parking shall be restricted to a minimum of 80% of the total staff parking demand and a maximum of 100% of total staff parking demand generated by the development, depending on local circumstances and public transport accessibility. The calculation of staff parking demand is to be based on current journey to work mode share patterns for the locality.
- 5) When calculating the number of spaces, rounding up to the nearest whole number should be used. For stage and segmented development, parking requirements for each component should be calculated separate.



- Parking spaces must be kept free of obstructions at all times and shall only be used for the purposes of car parking.

#### **Mixed Uses**

- Some mixed uses such as commercial and residential may have overlapping or complementary parking demand. In such cases where maximum demand varies throughout the day, parking provisions may be reduced.
- Council may require taxi, private vehicle and coach drop off/set down areas where the proposed development warrants the facility.

#### **Bicycle Storage**

- Bicycle storage facilities should be secure having regard to the type of use and visibility of the parking areas.
- Bicycle storage facilities should be located in convenient locations, be clearly visible and accessible to pedestrian entries so as to encourage their use.

#### **Advisory:**

It is recommended that the design of bicycle storage facilities have regard to Austroads Guide to Traffic Engineering Practice (Part 14- Bicycles).

#### **Landscaping**

- Landscaping shall not hinder visibility of either drivers or pedestrians.
- Clear sightlines must be maintained between parking areas, public roads and paths.
- Landscaping must not conflict with lighting and services.
- Plants species used for landscaping in and near parking areas should not be prone to drop fruit, branches, sap or bark and should have minimum long term maintenance requirements.
- Car Parking areas shall be well lit and visible allowing for casual surveillance.

- Car parking areas are to be well ventilated if enclosed as well as being safe and secure. Hidden and enclosed areas should be avoided. In areas where this is not possible such as staircases and lift lobbies, mirrors or similar devices should be used.
- Large parking areas must be broken up with the use of soft and hard landscaping features and different surface treatments.
- Parking areas and accessways are to be designed, surfaced and graded to reduce run-off and allow stormwater to be controlled within the site.
- Car parking, access and service areas shall be in accordance with guidelines prescribed by AS2890.1 – Off Street Car Parking 1993.
- Parking spaces shall be provided in accordance with Council's Parking Policy. Council may permit a departure from the Parking Policy if the applicant can demonstrate that the departure will not be inconsistent with the principles of the plan and will not detrimentally affect amenity.

#### **Refer to:**

- B1.3 Car Parking (Residential development)
- C1.2 Parking layout, servicing and manoeuvring (Non-residential development)

#### **Use Of Existing Buildings**

- Where a development proposal involves additions to an existing building, a change in use or an intensification of use, the required parking is to be based on the generated demand arising from the additional component or intensification of use as assessed by Council.
- Additional parking provision may not be required if the redevelopment does not result in any increased floor space and the use of the building is not

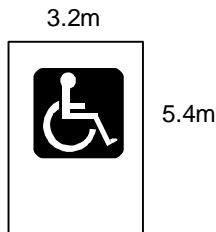




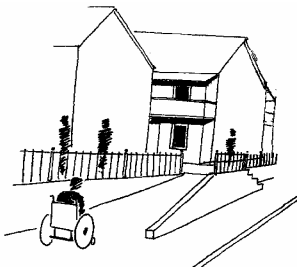
- significantly changed in the opinion of Council.

***Parking for persons with disabilities***

- Minimum dimensions for parking for persons with disabilities shall be 3.2 metres by 5.4 metres.



- Minimum dimensions for parking for adaptable housing units shall be 3.8 metres by 6 metres.
- Unimpeded access shall be provided between each parking space for disabled persons and the adjoining walkway.
- Parking spaces for disabled persons shall be located close to wheelchair accessible entrances or lifts.



- Parking spaces for disabled persons shall be identified by a sign incorporating the international symbol of access for persons with disabilities. The sign shall be readily visible from a vehicle at the entrance to the carpark, or guide signs indicating the direction of the parking spaces shall be provided.
- Parking spaces for disabled persons shall be provided in accordance with Development Control Plan No. 32 – Design for Equity of Access and Adaptability.



## A9.0 Advertising and Signage

### Principles

*Ensure that advertising and signage is in keeping with the size, scale, character and architectural treatment of the building to which it is attached or the development with which it is associated.*

*Design and locate outdoor advertising signs in a manner which conserves the heritage of significant places, protecting and enhancing what is valued about the building or the place.*

### Rationale

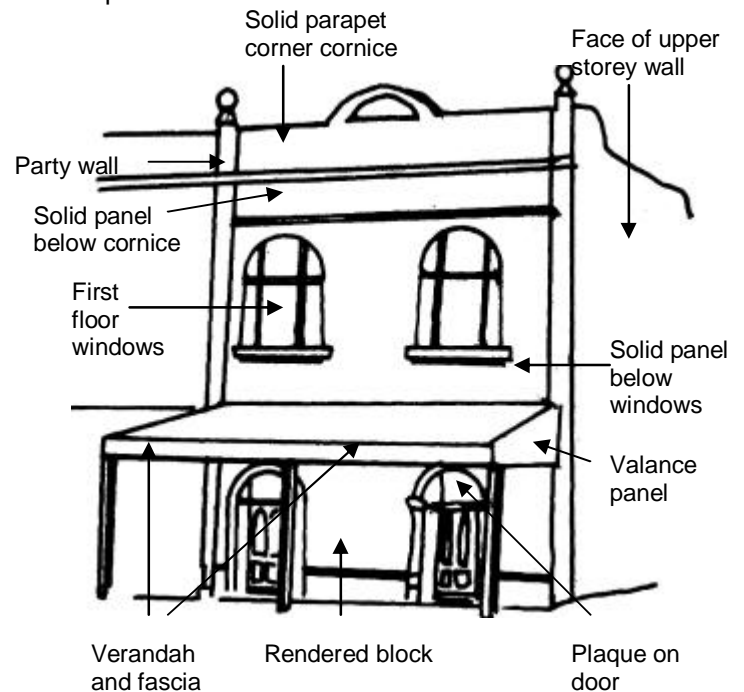
Advertising is a feature of the urban townscape. However, whilst it is necessary for advertising to be visible, it should not dominate the townscape and streetscape. Competition between businesses for the more dominant advertisement creates a situation where the character of an area is eroded and masked by a sea of advertising.

Industrial areas vary in architectural expression, scale and siting of buildings, landscaping and mix of uses.

Many industrial areas are not visually attractive, and the management of sign design and location can enhance the visual quality of an area, as well as more effectively advertise individual businesses.

Advertising signs can be intrusive and out of character in residential areas. However, they are often necessary to ensure the principles of ecologically sustainable development are maintained especially with regard to home occupations, home based employment or other permissible uses within the residential zone. It is essential that the signs are designed in such a way that they do not detract from the residential character or amenity of the area and are kept to a maximum one sign per site.

Leichhardt has a wealth of places and buildings of special significance, which are worthy of conservation. Leichhardt Town Plan identifies Conservation Areas in all suburbs of Leichhardt – refer to Leichhardt LEP – Heritage Conservation Map.



*Typical sign locations on buildings in conservation areas.*

Conservation Areas and suburb profiles are the primary method of control to preserve the distinctive historic character of each area. These Conservation Areas include the main business areas of Leichhardt's suburbs and, therefore, advertising and signage should be designed to enhance the historic character of these areas. Surviving early signs may contribute to the significance of a building and should be conserved.



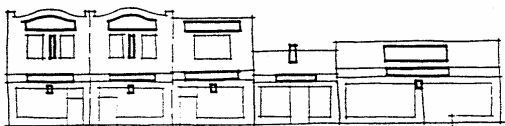
### Guidelines – Appropriate sign opportunities

To identify sign opportunities, subdivide the facade using the main design lines to form a series of panels. Many traditional building designs can be easily broken into a grid based on the alignments of the parapet (skyline), cornice, verandah, window and door.

The scale of advertising signs should be compatible with the buildings they are on, as well as with nearby buildings, street widths and other existing signs. In most cases, appropriate dimensions are achieved by restricting signs to panels. This ensures that the original architectural character (set by the lines of awnings, window and door openings, parapet lines and setbacks) remain dominant.

Generally, sign panels can be identified as follows:

- a solid parapet above a cornice;
- the horizontal entablature or panel below a cornice;
- verandah (ground or upper floor) fascia as well as the possible side valance panel formed by the roof profile;
- spandrel panels below windows;
- ground floor or first floor windows;
- notice boards or plaques on ground floor piers;
- string courses;
- small signs limited to individual architectural elements such as a rendered block;
- on side upper storey walls;
- party walls able to be viewed above adjacent buildings.



An advertising sign should;

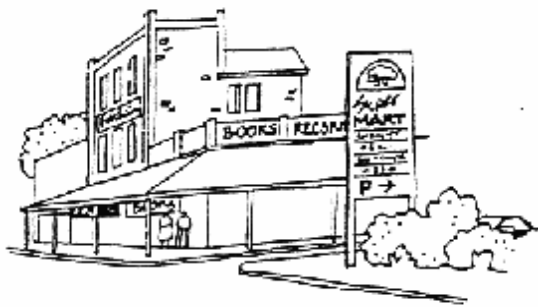
- conform to the desired future character of the zone as described in the relevant suburb profile within this DCP;
- complement the streetscape character;
- complement the architectural character of the building or area;
- convey the advertiser's message or image while conforming to the surrounding urban character;
- rationalise or reduce the number of existing signs;
- not adversely affect traffic safety;
- not adversely affect the environmental amenity of residential areas;
- be compatible with the scale of building, street widths and other existing signs;
- be capable of being removed without causing damage to the fabric of the building.

The following points offer matters to consider when designing signage.

- Heritage lettering styles may involve shaded letters, the mixing of sizes and styles of letters and ornamental scrolls, as relevant to the period of the building;
- The external colours applied in different historic periods for advertisements varied and were more limited in range than today. It is therefore necessary to research appropriate colour ranges for buildings in heritage areas.
- For a terrace or series of buildings, develop patterns and themes, and achieve visual continuity with neighbouring buildings.
- Develop themes by placing signs in locations compatible with those on adjoining buildings.

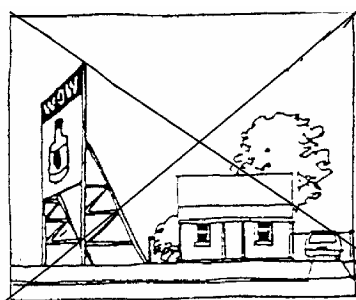


- Where illumination is necessary, floodlighting is preferred. Large backlit signs will be appropriate only on buildings and items constructed during the period when neon was used. Small neon signs hanging inside the windows of shops may be appropriate as they form part of the window display rather than a dominant townscape element.
- Consider the use of natural materials such as wood and metal.



Aim to co-ordinate sign locations of adjacent facades by placing signs in similar locations on adjacent building, eg on parapets, above window heads or beside entrance doors. The signs should contribute to the character of the area.

Ensure signs do not visually dominate the area of building walls and parapets or landscaped surroundings.

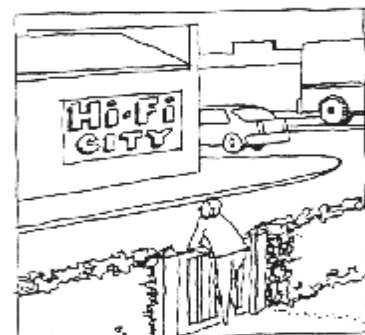


Where a building is set back from the street alignment incorporate a freestanding sign into an architectural feature. A low level sign of about one metre in height, mounted on posts or a low wall whether parallel or at an angle to the approach road is acceptable. Alternatively, one double

sided pole sign – freestanding and possibly internally illuminated may be acceptable.

#### Controls

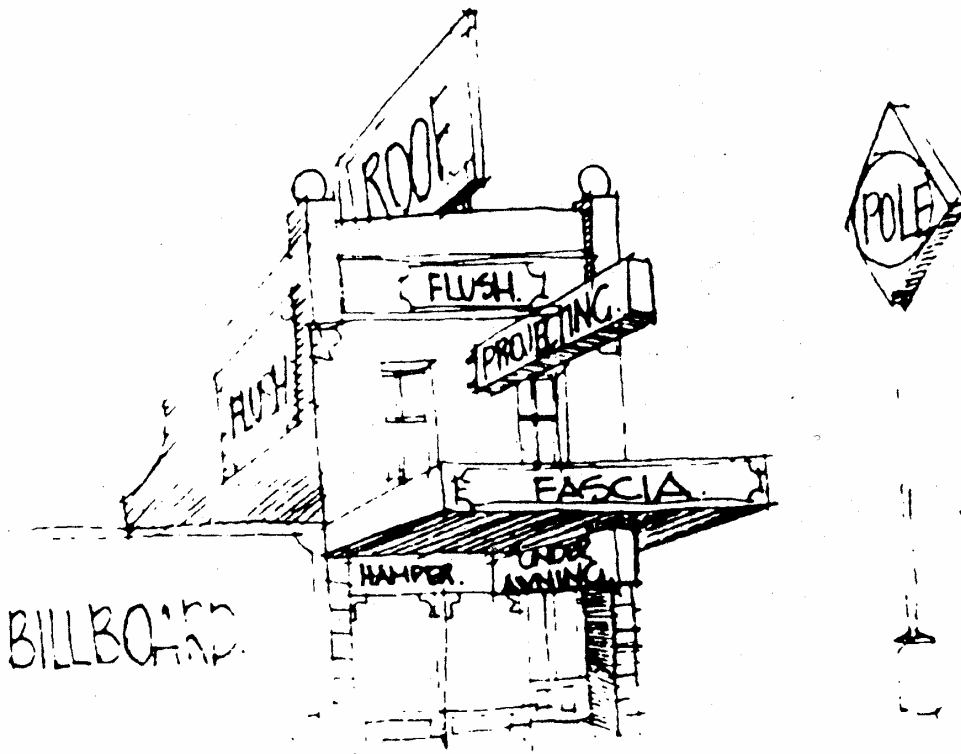
- Refer to area based controls.
- No signs should break a parapet or roofline of a building. A possible exception is single-storey verandah roof-lines.
- On buildings with decorative facades, signs should not be placed on the decorative forms or mouldings. They should appear on the undecorated wall surfaces.
- Flashing signs or fluorescent and iridescent paints are not permitted.
- When designing new buildings, signs or space for signs should be incorporated into the architecture of the buildings or site, and form part of the original development application.
- Identify the entrance of multiple occupancy developments by a sign or directory board identifying the name of the site and the occupants.
- Signs in residential areas should be discrete and carefully designed to respect residential character.



- Internally and externally illuminated signs are not permitted, except where spillage of light does not detract from amenity of neighbouring properties.



- The only sign permissible on a building used primarily as a residence is one nameplate or “commercial sign”:
  - identifying the office of a professional person, a home occupation or homebased employment
  - located wholly within the boundary of the subject property
  - having a maximum dimension of 600mm x 300mm.



Council will direct the alteration, obliteration, demolition or removal of advertisements and their associated structures, where such are unsightly, objectionable or injurious to the local amenity only after due consideration of complaints from residents has been given.



**BLANK PAGE**



## ADVERTISING TABLE

The development of signage is limited to one (1) under awning sign for each shopfront, with any additional advertising area not to exceed 1 square metre for each 1.5 square metres of street frontage.

As standard signage modules may not be considered by Council to be appropriate in particular business centre, applicants are advised to consult Council prior to submitting an application for the development of signage (particularly where the proposed signage is generic corporate signage typically associated with franchises).

The number of permissible internally illuminated advertising signs is limited to one (1) per building.

Advertisements are to be erected in accordance with this table below where:

- DA = permissible with consent (ie submission of a DA for erection of sign required).**
- YES= permissible without consent**
- NO = prohibited**

TYPE OF SIGN	DEFINITION	CONDITIONS	PERMITTED
Advertising Panel	Includes billboards, multi-sheet poster signs and the like, but does not include hoarding for a construction site.		NO
Advertising Board	Includes a hoarding enclosing a construction site or bulletin board, whether or not attached to a building.	<ul style="list-style-type: none"> <li>• must not extend laterally beyond the wall.</li> <li>• must not project vertically above the wall or parapet.</li> <li>• must not cover any window or architectural feature.</li> </ul>	DA
Under Awning Sign	A sign attached to the under side of an awning (other than the fascia or return end).	§ 1 per premises. § Max. size 0.5 x 2.5m § Erected horizontal to ground and perpendicular to the building. § Illuminated or not § Not to project beyond the awning § If over a public area, must be suspended at a height no less than 2.6m above ground/pavement level.	YES <ul style="list-style-type: none"> <li>• Requires consent if attached to a heritage item.</li> </ul>
Fascia Sign	Sign attached to the fascia or return end of an awning	§ Flush with fascia. § Not to project above or below the existing fascia or return end of the existing awning.	YES <ul style="list-style-type: none"> <li>• Requires consent if attached to a heritage item.</li> </ul>
Above Awning Sign and Fin Sign	Sign attached to the top of an awning (other than the fascia or return end); sign erected on or above the canopy	§ Main supports attached to the awning but may have guy wires attached to the front of the building. § Must not project beyond the awning. § Must be securely fixed.	DA
Flush Wall Sign	Attached to the wall of a building (other than a dwelling), not projecting more than 300mm from the wall, and located under the awning level.	§ Must not be illuminated. § Maximum size up to 0.75m <sup>2</sup> . § Must not project above or beyond the wall. § Must not cover any window or architectural feature. § 1 per occupation.	YES <ul style="list-style-type: none"> <li>• Requires consent if attached to a heritage item.</li> </ul>



TYPE OF SIGN	DEFINITION	CONDITIONS	PERMITTED?
Painted Wall Sign	Painted onto the wall of a building (other than a dwelling).	§ Max size up to 0.75 <sup>m<sup>2</sup></sup> § Must not be illuminated. § 1 per wall	YES • Requires consent if attached to a heritage item.
Projecting Wall Sign	Attached to the wall of a building (other than a dwelling) and projecting horizontally more than 300mm.	<ul style="list-style-type: none"> <li>• Must be at least 2.6m above the ground.</li> <li>• Shall not be illuminated if it is located 4.6m above ground level or above the level of the first floor window (whichever is lower).</li> <li>• There shall not be more than one sign for each 3 metres of the length of the premises.</li> <li>• Must not exceed the dimensions of 2.5m by 0.5m.</li> <li>• Must not be erected at a right angle to the wall of the building to which it is attached.</li> </ul>	DA
Pole, Pylon, Totem Sign	Erected on poles, pylons or comprising a totem independent of any building or other structure but associated with the business upon that site.	<ul style="list-style-type: none"> <li>• The minimum height for Pole or Pylon signs shall be 2.6m above the ground where it projects.</li> <li>• Totem signs shall not exceed 2m in width.</li> <li>• Totem signs shall not exceed 10m in height.</li> </ul>	DA
Roof Sign	Erected on or above the roof or parapet of a building (other than a dwelling).		NO
Top Hamper Sign	A sign attached to the transom of a doorway or display window of a building.	§ Not to extend below the head of the doorway or window to which it is attached. § Flush with the surface. § Not to project beyond the building. § One per premise/occupation.	DA • Does not require consent if all of the conditions (left) are met, the site is not in a conservation area, and, the maximum area is not greater than 2.5m <sup>2</sup> .
Window Sign	Attached to or displayed on a shop window.	§ Not to cover more than 25% of the window surface. § One sign per occupation/premise.	YES • Requires consent if the site is within a conservation area.
Real Estate Sign	A sign advertising the sale or let of a property.	§ One sign per premises. § Not exceed 2.5m <sup>2</sup> . § Non-illuminated. § Removed after 14 days of sale or let.	YES
Miscellaneous Advertisement	Flags, streamers, inflatable structures and the like which announce any local event or a religious, educational, cultural, political, social or recreational character or relate to any temporary matter in connection with such an event, and which do not include any advertising of a commercial nature (except for the names of the event sponsor).	<ul style="list-style-type: none"> <li>• Must not be displayed earlier than 28 days before the event to which it relates is to take place.</li> <li>• Must be removed within 14 days after the event.</li> </ul>	DA



## A9a.0 Colours and Tones

### Principles

*To provide guidance on the use of colour and tone for new buildings or to change the colour of existing buildings in the commercial distinctive neighbourhoods of Leichhardt, Rozelle and Balmain.*

### Guidelines – Appropriate Colours and Tones

- Colours and tones should reflect, complement and be part of the design characteristics of the building and streetscape in general
  - ‘Earth’ and ‘natural’ colours are encouraged; strong primary colours on large and prominent areas of walls and roofs are generally inappropriate.
  - Any unpainted stone and unrendered brick walls should remain unpainted.
  - Large, brightly coloured surfaces should be avoided. Small areas of strong colour may be allowed in some cases.
  - Architectural details may be highlighted to contrast with their background. Colours and tones should be used to emphasise the architecture, such as mouldings around openings, cornice lines etc. Generally, joinery to openings are painted in dark colours and tones to reinforce the articulation of walls and windows as solids and voids.
  - Visible roofs should generally be painted darker than the walls (except metal roofs which should use light non reflective colours and neutral tones).
  - Railings, balconies, ornamental ironworks and joinery should generally be painted in darker colours.
  - The colour and tone of shop frontages should be sympathetic to the treatment and character of the main facade and adjoining properties.
- Most successful colour schemes employ up to three colours. Usually the use of two or more tones of the main wall colour is preferable to the use of more colours.
  - Owners should aim to achieve a balance of colours between their individual units and the streetscape as a whole
  - Muted colours that will fit in with the already existing colours of buildings from the relevant building period are encouraged.
  - Corporate colour schemes on buildings are discouraged unless they are consistent with the guidelines and controls in this Plan.