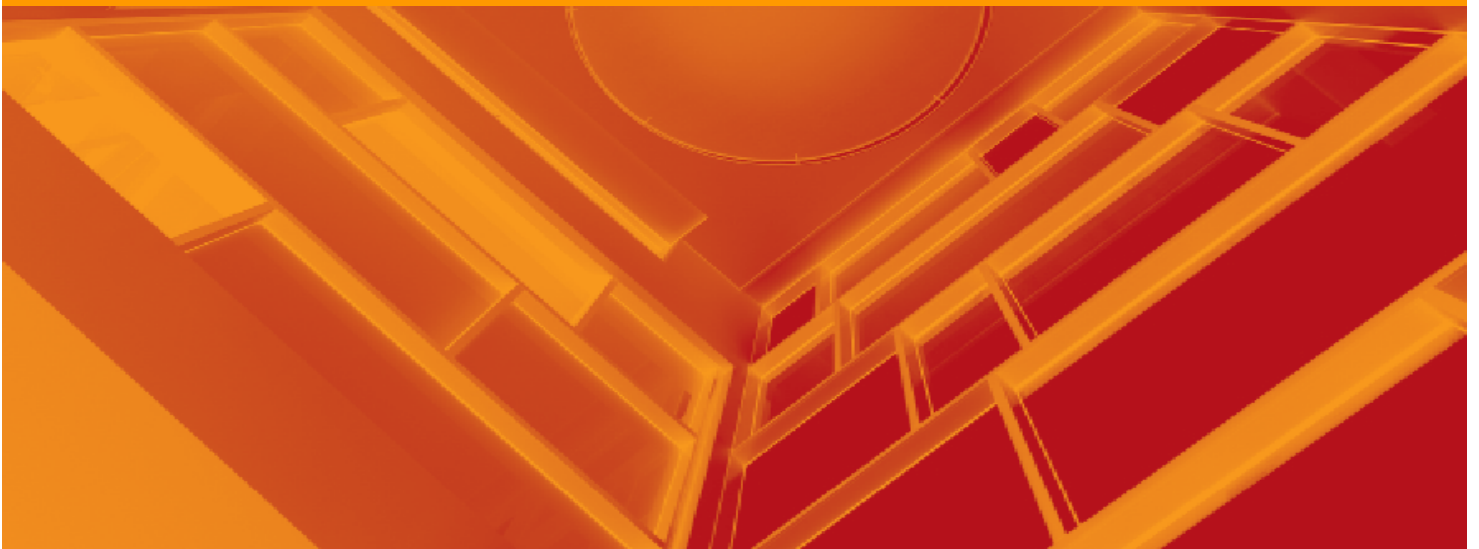


**RANDWICK CITY COUNCIL
DEVELOPMENT CONTROL PLAN**

B General Controls

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- B2 Heritage
- B3 Ecologically sustainable development
- B4 Landscaping and biodiversity
- B5 Preservation of trees and vegetation
- B6 Recycling and waste management
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1 Introduction

A key outcome for Randwick City in its 20 year Strategic Community Plan, the Randwick City Plan, is to achieve excellence in urban design and development. A strong appreciation of a development site and its context is vital to achieving good urban design. This is particularly important in Randwick City, with most development occurring in established neighbourhoods, most commonly as infill development or alterations and additions to existing developments.

This section of the DCP applies to all developments in Randwick City. It sets out the key components of good design, and requirements for development applications to address these via a context and site analysis. Additional requirements also apply to larger sites and developments as identified in RLEP, and SEPP 65: Design Quality of Residential Flat Buildings.

This section of the DCP should be read in conjunction with:

- Part A - Introduction and Part B - General Controls; and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the application.

1.1 Objectives

- To ensure that high quality urban design is a fundamental consideration for all development.
- To identify key components of urban design to be considered and addressed in development proposals.

2 Principles of good design

Explanation

Good design is a creative process which, when applied to development, results in great urban places, buildings and spaces. Good design is inextricably linked to its site and locality, responding to the landscape, existing built form, culture and attitudes. Good design serves the public interest and includes appropriate innovation to respond to technical, social, aesthetic, economic and environmental challenges.

Ten design quality principles below are derived from SEPP 65: Design Quality of Residential Flat Buildings. They provide a guide to achieving good design, and the means of evaluating the merit of proposed solutions. All DA's required by RLEP to demonstrate design excellence (in addition to DAs covered by SEPP 65) must address these principles, as outlined in Clause 4: Additional requirements for certain development.

2.1 Ten Design Quality Principles

1. Context

Context defines the natural and built features of an area. Good design responds to context by reinforcing positive or desirable character elements in the locality.

2. Scale

Good design provides an appropriate scale in terms of bulk and height that suits the scale of the street and the surrounding elements.

3. Built form

Built form refers to a building's alignments, proportions, type and combinations of elements (eg: roofs, podiums, courtyards, garages, etc) Good design provides an appropriate built form for a site and the building's purpose.

4. Density

Density refers to a building's floor space (or dwelling numbers) relative to the site. Appropriate densities respond to the context, environmental qualities and the availability of infrastructure, including social/community infrastructure and public transport.

5. Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle. Ecologically sustainable development principles are integral to the design process.

6. Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system. Good design enhances the development's natural environmental performance, and results in greater aesthetic quality and amenity for both occupants and surrounds.

7. Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. It includes considering aspects of accessibility, sunlight, ventilation, visual and acoustic privacy, the size and configuration of rooms and spaces.

8. Safety and Security

Good design optimises safety and security, both internal to the development and for the public domain. It includes providing quality and clearly defined public and private spaces, with safe access points.

9. Social Dimensions and housing affordability

Good design responds to the social context and needs of the local community. For example, it includes housing developments that optimise provision of housing to suit the current and/or future social mix and needs in the neighbourhood.

10. Aesthetics

Aesthetics refers to the composition of building elements, textures, materials and colours. It includes their placement, articulation, detailing and proportion. It should reflect the use and structure of the development, and respond to the environment and context.

2.2 Urban form

The form of development is the physical expression of urban design. It responds to a site's context and consists of the relationships, shape and size of buildings, structures and spaces. High quality design addresses all aspects of urban form, and is fundamental to the success of a place.

All DAs requiring a context analysis (see 3: DA Requirements) must address the contextual aspects influencing urban form identified below.

Contextual aspects influencing urban form

Location

Neighbourhood/locality context, including;

- a site's location in relation to a neighbourhood or local centre, and the availability of infrastructure, transport and services
- street layout and hierarchy
- the range and combinations of building uses in the locality
- prevailing development densities

Spatial characteristics

- open spaces and quality of the public domain
- the rhythm of built form and intervening spaces
- topography of the surrounding landform
- views and vistas to, from or through a site

Streetscape

The three-dimensional pattern and characteristics of the street, including:

- subdivision pattern, lot sizes and configuration
- cross sectional street dimensions and characteristics
- heights, alignments and massing of buildings
- public domain elements including street trees and footpaths

Built form and character

- elements of heritage value
- prevailing character elements, such as roof forms, building articulation and modulation
- the range and combinations of materials and details

Natural and Environmental characteristics

- distribution and characteristics of landscaping and open space
- significant natural features such as watercourses, rock formations, habitat corridors and significant trees
- microclimate, including prevailing thermal, wind and solar radiation effects

3 DA Requirements

3.1 Context analysis

Explanation

Good design responds and contributes to its context. Responding to context involves identifying the desirable elements of a location's current character, or the key aspects of its character that are important to its future.

The aim of a context analysis is therefore to identify existing prevailing built and natural features in the locality that positively contribute to the area, and should inform the design of new development, as well as the inconsistencies that could detract from it.

This section applies to all DAs involving new buildings, or those with external alterations or additions where these are visible from the public domain (excluding minor works, ancillary structures and outbuildings).

Objectives

- To ensure that development demonstrates an understanding of and an appropriate response to the existing form of a locality, and specific conditions of both the site and surrounds.
- To identify the key contextual features and characteristics of the surrounding urban form to which the design should respond.

Controls

- i) Submit a context analysis with the DA. This shall include an analysis of the urban form of the locality, addressing as a minimum the sub-headings in 2.2: Urban Form:
 - Location
 - Spatial characteristics
 - Streetscape
 - Built form and character
 - Natural and Environmental characteristics

Provide a written statement describing how the design proposal has considered and responded to the context.

- ii) The context analysis shall be submitted in the format as described in the DA Guide.

3.2 Site analysis

Explanation

A site analysis identifies the existing conditions of a development site, and provides a basis to ensure that the development is of a high quality and is sensitive to its environment.

The context of an area may be referred to as being “in transition”.

Transitional areas can be areas of mixed character, without clearly prevailing characteristics or features. Transitional areas can also be localities in the process of undergoing change. In both these situations, the context analysis can be more complex, but also more critical to establish the desirable contextual characteristics that should inform the design of a development.

The extent of the area to be included in the Context Analysis, and the level of detail required will vary according to the size and type of development, and the location and characteristics of the site.

For smaller proposals the Context Analysis and Site Analysis may be combined.

The site analysis will identify the opportunities and constraints of the site to be addressed through site planning and design, such as minimising issues relating to noise, overshadowing, community safety, access, views, privacy, energy consumption and waste generation.

This section applies to all DAs for new buildings, or external alterations and additions to existing buildings.

Objective

- To ensure that the opportunities and constraints of a site are fully considered and incorporated into the design proposal.

Controls

- i) Submit a site analysis with all DAs for a new building or external alterations or additions to an existing building. Information shall include, but is not limited to:
 - Property details including site boundaries, dimensions and area
 - Encumbrances such as easements or rights of way
 - Orientation, aspect, views and microclimate
 - Existing noise sources, light spillage and overshadowing
 - Landform including contours or spot levels, areas of landfill
 - Landscape including existing trees, vegetation and natural features
 - Services and infrastructure including stormwater drainage
 - Access and street features including roads, poles, footpaths, driveways
 - Existing development including buildings, fences, driveways
 - Existing heritage or archaeological features on or adjoining the site
 - Existing land and development adjoining the site
 - Proposed development
- ii) Submit a written statement, supported by photographs, demonstrating how the design responds to the constraints and opportunities identified in the site analysis.
- iii) The site analysis shall include a plan drawn to scale, addressing the specific details and format requirements identified in the DA Guide.

4 Additional requirements for certain development

4.1 Design Excellence

Explanation

SEPP 65: Design Quality of Residential Flat Buildings has established a process under which DAs for certain residential flat buildings are required to demonstrate design excellence. RLEP also requires development proposals on certain sites and certain additional development types to demonstrate design excellence. Typically these occur on larger sites and institutions, in commercial centres and on surplus lands, and cover a range of potential uses and building types.

These design excellence guidelines aim to establish a consistent standard and criteria for high quality design for significant development across Randwick City.

Under Randwick LEP (Clause 6.11) design excellence must be demonstrated for new buildings and existing buildings (where external alterations are proposed):

- With a height of 15m or greater anywhere in Randwick City, and
- To development on land with an area of 10,000 square metres or greater, and
- To key sites identified under RLEP clause 6.12 requiring the preparation of a site specific DCP.

Objective

- Establish a consistent standards and criteria for high quality design for significant developments in Randwick City.

Controls

- i) The context analysis must include an analysis of the design proposal's response to 2.1: Ten Design Quality Principles, in addition to the requirements of 3.1: Context Analysis.

Note:

The proposed development will be referred to a Design Review Panel as part of the assessment process.

5 Guidelines for Site Specific Development Control Plans

Explanation

Under RLEP, a site specific DCP must be prepared for land identified as a Key Site, or having a site area of 10,000 square metres or greater, before development on that land can be considered and determined by Council.

The preparation of a site specific DCP should be made in consultation with Council to identify and resolve key issues early in the process.

A DCP is not required to be prepared if Council is satisfied that such a plan would be unnecessary or unreasonable in the circumstances, such as where there is already a masterplan or DCP in place, or the proposal is for minor or ancillary development.

Guidelines

- i) Consult with Council, in the early stages of preparation, and prior to submitting the draft site specific DCP, to identify key matters needing to be addressed in the DCP.
- ii) Include a minimum of one preliminary meeting to discuss the intentions of the proposal prior to submission of the draft site specific DCP.
- iii) In addressing the requirements of RLEP clause 6.12, submit:
 - i. Background documents, research and data supporting the draft DCP which explain and justify the proposed development, including a concept/ masterplan.
 - ii. A detailed response to how the requirements of clause 6.12(5) of the LEP have been addressed.
- iv) The draft site specific DCP should include suitably dimensioned plans, elevations, figures, photographs and text to adequately explain the desired outcome for the site.

Note:

Under the Regulation (clause 21A) Council will refer any DCP containing residential flat development to the Design Review Panel as part of the assessment process.

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1 Introduction

Randwick City's heritage is rich and diverse and includes buildings, structures, Aboriginal and archaeological sites, parks and reserves. They are valued because they are associated with phases of history, or important people or events. Collectively, this heritage contributes to the community's cultural life, sense of place and identity.

This section of the DCP applies to all relevant development in Randwick City and should be read in conjunction with:

- Part A – Introduction
- Part B - General Controls
- Part C – Residential Controls of this DCP; and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the application.

To the extent of any inconsistency between this section and any other DCP sections, this section will prevail.

1.1 Objectives

- To clarify the consent requirements for the conservation of Aboriginal objects, Aboriginal places of heritage significance and archaeological sites.
- To provide detailed guidelines for change to heritage items and properties within heritage conservation areas, which will allow their heritage significance to be retained.

1.2 Heritage places in Randwick City

This DCP section applies to the following types of heritage sites and places within Randwick City:

- Aboriginal objects and places of heritage significance
- Archaeological sites
- Landscape elements
- Heritage items
- Heritage conservation areas

The requirements, objectives and controls in this section apply **in addition** to the heritage conservation requirements of RLEP Clause 5.10 and development requirements of other relevant parts of this DCP.

Heritage items, heritage conservation areas, some archaeological sites and significant landscape elements are listed in Schedule 5 of the RLEP.

1.3 Heritage Advice

Prior to lodging a DA or undertaking maintenance works to a heritage item or a property located within a heritage conservation area, or if works are likely to affect an Aboriginal object, Aboriginal place of heritage significance or archaeological site, applicants are advised to discuss their proposal with Council's specialist Heritage Officer.

Where major work is contemplated, applicants are strongly advised to obtain professional assistance from a recognised expert in heritage conservation. A list of suitably qualified heritage consultants is available on the NSW Office of Environment and Heritage website (www.heritage.nsw.gov.au).

1.4 Burra Charter

Development affecting a heritage item or property within a heritage conservation area is assessed having regard to the principles and practices contained in the Australia ICOMOS *Charter for the Conservation of Places of Cultural Significance* (the *Burra Charter*). The Charter is widely adopted as the standard guidelines for heritage conservation in Australia and sets out a standard of practice for those who provide advice, make decisions about or undertake works to places of cultural significance, including owners, managers and custodians.

1.5 Aboriginal Cultural Heritage

Aboriginal objects and places of heritage significance provide evidence relating to Aboriginal habitation of an area and are of special cultural significance to Aboriginal people because of their spiritual, ceremonial, historic, social or educational values. Aboriginal objects and places of heritage significance are protected under the *NSW National Parks and Wildlife Act 1974*.

The RLEP Schedule 5 identifies the former Prince Henry Hospital site as an area containing Aboriginal cultural heritage. Other Aboriginal objects and places of significance located in Randwick City are not listed in the RLEP due to the sensitive nature of these sites, consistent with common practice in NSW for protecting Aboriginal cultural heritage.

Development consent is required to disturb or excavate land containing Aboriginal objects or an Aboriginal place of heritage significance.

Under RLEP Clause 5.10(8) Aboriginal Places of Heritage Significance Council may require a Heritage Impact Statement to assist in its consideration of the effect of the proposed development on the heritage significance of the Aboriginal object or place of heritage significance, or to identify the potential for the discovery of Aboriginal cultural heritage on a particular site. As part of the heritage impact assessment results of consultation with local Aboriginal groups must be provided.

It is an offence to harm or desecrate an Aboriginal object or place of heritage significance. Works likely to impact on Aboriginal object or place of heritage significance are only permitted where an Aboriginal heritage impact permit has been issued by the NSW Department of Environment and Conservation.

1.6 Archaeological Sites

Archaeological sites provide physical evidence of the past and can include objects and artefacts from the lives of previous generations, such as tools and household items, as well as remains of early buildings and structures.

Note:

Further information on permits relating to Aboriginal objects and places of significance is available at

www.environment.nsw.gov.au

Note:

Further details on obtaining approvals relating to archaeological sites is available

www.environment.nsw.gov.au

A number of archaeological sites are listed in Schedule 5 of the RLEP. Archaeological sites or relics that have local or state significance are protected under the *NSW Heritage Act 1977*.

Development consent is required for disturbing or excavating an archaeological site while knowing or suspecting that the work may result in a relic being discovered, exposed, moved, damaged or destroyed. Council may request an archaeological assessment to confirm the likelihood and potential significance of relics on the site and recommend appropriate action in the context of the proposed development.

When intending to disturb or excavate land where such archaeological relics have been identified or are considered likely to occur, it is the responsibility of the property owner to seek relevant approvals, including an excavation permit or an exception under section 139 and section 140 of the *Heritage Act 1977*.

RLEP Clause 5.10(7) Archaeological Sites outlines consultation requirements with respect to carrying out development on an archaeological site.

1.7 State Heritage Items

Heritage items of State Significance in Schedule 5 of the RLEP are also listed on the NSW State Heritage Register. The NSW Heritage Council is the consent authority for any development proposal affecting State Heritage Items, or for any site covered by an Interim Heritage Order under the *NSW Heritage Act 1977*.

Consent from the NSW Heritage Council requires either the submission of an Integrated DA, or a prior Section 60 application under the *NSW Heritage Act 1977*. Applicants are advised to consult with either Council or the Heritage Branch of the NSW Office of Environment and Heritage, in relation to works affecting State Heritage Items.

Note:

The NSW Heritage Register is available at www.environment.nsw.gov.au

1.8 Consent Requirements

1.8.1 Development not requiring consent

Maintenance and Repair Works

Maintenance and repair works are encouraged for heritage items and properties in heritage conservation areas and generally do not require development consent from Council if they are of a minor nature and would not adversely affect the heritage significance of the item or heritage conservation area.

Maintenance and repairs can include non-structural *external* works such as:

- Replacing broken windows, fly screens etc
- Minor repairs to roofing, brickwork, timberwork and metal work
- Repainting surfaces which are already painted (Council may be able to assist with suggesting sympathetic colour schemes) including timberwork and metalwork.

Maintenance and repairs can also include non-structural *internal* works such as:

- Patching, painting and decoration to the interior to the house and installation of joinery items
- Repairing timber floors
- Plumbing and gas fitting work
- Electrical work and communications cabling
- Installation of insulation

RLEP Clause 5.10(3) contains some exemptions where development consent is not required if in the opinion of Council the proposed development is of a minor nature or consists of maintenance and would not adversely affect heritage significance.

Applicants must notify Council prior to undertaking any maintenance or repair work to determine whether development consent is required. A written response must be received from Council prior to the commencement of works.

Exempt Development

Under *State Environmental Planning Policy Exempt and Complying Development Codes 2008* (The Codes SEPP) some categories of minor internal works are permitted as Exempt Development for buildings within heritage conservation areas, but not for heritage items. The classification of Exempt Development refers to works that have minimal environmental impact and therefore does not require Council's consent. The Codes SEPP does not permit external building alterations to heritage items or properties located within heritage conservation areas.

Note:

To view the Codes SEPP refer to www.legislation.nsw.gov.au

1.8.2 Development requiring consent

A DA is required for the carrying out of development which relates to a heritage item, development in a heritage conservation area, Aboriginal place of heritage significance or archaeological site (unless it falls into the minor development categories outlined in section 5.1). RLEP Clause 5.10 (2) identifies those instances where development consent is required.

Buildings within a heritage conservation area fall into one of two categories:

Contributory Buildings

Contributory buildings provide good evidence of the main development period(s) and make a positive contribution to the character and/or heritage significance of heritage conservation areas. They have a collective significance and their retention is essential if the character of the area is to be maintained.

Non Contributory Buildings

Non-Contributory buildings display qualities which do not add to the character of the heritage conservation area. They are not to be considered as a precedent for new work when assessing the merit of an application. Non contributory buildings may be demolished and replaced by new development sympathetic to the character of the heritage conservation area (see section 7 Infill Buildings).

Note:

Applicants will need to assess whether their building is contributory or non-contributory based on the statements of significance contained in this section of the DCP and relevant heritage studies. A suitably qualified heritage specialist may be required. Council's Heritage Officer can also assist applicants in clarifying whether a building is contributory or non-contributory.

1.9 Demolition

Demolition of a heritage item or contributory building in a heritage conservation area is generally **not** supported, unless there are

overriding reasons such as structural damage. The demolition of a non-contributory building and replacement by an appropriately designed infill building is generally supported.

In assessing a DA for the demolition of a heritage item or a contributory building, Council will consider:

- The heritage significance of the item or building
- The structural condition
- Comparative analysis of all options; and
- The contribution the item or building makes to the streetscape.

Council may require the submission of a **report by a structural engineer with heritage experience** to determine whether the building is, or is not, structurally capable of reasonable and economic use.

Where demolition of a heritage item or a contributory building within a heritage conservation area is approved it will generally be conditional upon the submission of a photographic archival recording using either film or digital capture to provide a stable and long term record. A photographic plan sheet of the building should be used to show the location and direction of all photographs and the sequence in which they were taken. The Heritage Branch guidelines include requirements for cameras, film and digital image storage.

Applications for demolition of a heritage item or buildings in a heritage conservation area are required to provide details on the replacement development.

1.10 Infill buildings

A new building within a heritage conservation area, referred to as an infill building, must respect and be sensitive to its neighbours, and should be in keeping with the street's established setbacks, scale, form and materials. In accordance with the Burra Charter principles, an infill building should however be clearly seen as a new building and not attempt to replicate original buildings or copy traditional detailing.

1.11 Adaptive Reuse

Council supports the continuation of the original use of a building as it achieves the retention of the original floorplan and decorative features and enhances its heritage significance. However due to changes in technology and market/social trends, adaptive reuse of a heritage item may be acceptable on heritage grounds, provided the use is compatible and the heritage significance of the item is not adversely affected. The Burra Charter includes a definition for compatible use as follows:

"Compatible use means a use which involves no change to the culturally significant fabric, changes which are substantially reversible, or changes which require a minimal impact."

Note:

An archival report must be prepared in accordance with the guidelines "Photographic Recording of Heritage Items using Film or Digital Capture" available on the NSW Heritage Branch website (www.heritage.nsw.gov.au).

Note:

Refer to the publication "New Uses for Heritage Places: Guidelines for the Adaptation of Historic Buildings and Sites" prepared by the Heritage Branch, Office of Heritage and Environment, for further guidance on the adaptation of heritage buildings.

1.12 Development in the vicinity of heritage items and heritage conservation areas

All new development adjacent to or in the vicinity of a heritage item or heritage conservation area needs to be considered for its likely effect on heritage significance and setting.

Applicants should address in their Statement of Environmental Effects any potential impacts of the development on a heritage item or heritage conservation area and measures to minimise this impact, with reference to Part 12 of this section of the DCP and the relevant statement of heritage significance.

1.13 Heritage Management Documents

Heritage Conservation Management Plan

A Heritage Conservation Management Plan may be required where Council considers the significance of a heritage item or the changes proposed warrant more detailed and rigorous assessment.

A Heritage Conservation Management Plan identifies conservation policies and management mechanisms to enable heritage significance to be retained and is particularly useful where building fabric has deteriorated, and to facilitate master planning and asset management for a large site. A Heritage Conservation Management Plan should be prepared by a specialist heritage consultant.

RLEP Clause 5.10(6) Heritage Conservation Management Plan outlines Heritage Conservation Management Plan considerations.

Heritage Impact Statement

A Heritage Impact Statement (or heritage impact assessment) considers the extent to which a proposal would affect the heritage significance of a heritage item or heritage conservation area. A Heritage Impact Statement establishes the heritage significance of a place, makes an assessment of the impact of the development on this significance, and proposes measures to minimise impact.

A heritage impact assessment is generally required for development relating to a heritage item or property within a heritage conservation area including alterations and additions, demolition or construction of a replacement building. A heritage impact assessment may also be required for development adjacent to or in the vicinity of a heritage item or heritage conservation area.

For major changes or demolition, the required Heritage Impact Statement should be prepared by a specialist heritage consultant able to advise on options to minimise heritage impact.

1.14 Conservation Incentives

Council recognises the need to be flexible with heritage items in terms of providing for their long term conservation. RLEP Clause 5.10(10) Conservation Incentives enables Council to approve development relating to a heritage item or the site of a heritage item or Aboriginal Place of heritage significance, which would otherwise be prohibited in the zone.

Note:

For more information, refer to “*Assessing Heritage Significance*” and “*Statements of Heritage Impact*” within the *NSW Heritage Manual (1996)* prepared by the NSW Heritage Office and the Department of Urban Affairs and Planning (DUAP).

Note:

Council’s Heritage Planner can clarify whether a DA requires the submission of a Heritage Impact Statement and/or Heritage Conservation Management Plan.

Further details on preparing a Heritage Conservation Management Plan is available at www.heritage.nsw.gov.au

If an applicant seeks approval for development under the conservation incentives clause, Council must also be satisfied that the development is in accordance with an approved Heritage Management Document and ensure that the necessary conservation work will be carried out in conjunction with the development.

2 Development Controls

2.1 Heritage Items and Heritage Conservation Areas

Explanation

Heritage buildings and heritage conservation areas are not museum exhibits, they are our homes, workplaces and public places, and need to adapt to modern lifestyle requirements. Such adaptation can be successfully accommodated without detracting from the building's heritage significance.

This section contains objectives and controls to protect and enhance Randwick City's heritage items and heritage conservation areas. It aims to ensure that development to heritage items or properties within heritage conservation areas is sympathetic to the heritage values while achieving a reasonable balance between contemporary design expectations, environmental sustainability and protecting heritage significance.

All new development in a heritage conservation area should be treated as infill development and respect the design of its neighbours and the key values of the heritage conservation area.

Alterations and additions to heritage items and contributory buildings within a heritage conservation area are to be designed and sited to ensure the retention of any contributory features or characteristics of the building and the streetscape of the heritage conservation area in which they are located.

Streetscape Analysis

Any proposal to alter or add to a heritage item or building in a heritage conservation area should start by assessing the heritage significance of the item and its various parts or the area, and also its relationship to neighbouring properties and the streetscape.

A new building, or additions which will be visible from the street, should fit into its streetscape context. The site analysis which is required for any DA must include a detailed streetscape analysis to identify consistent streetscape features.

The following section will assist in identifying streetscape features which contribute to the special qualities of the heritage conservation area and which should be maintained in new development.

2.2 Design and Character

Explanation

The design of development should ensure a sympathetic blend of old and new. This may be achieved by maintaining consistency

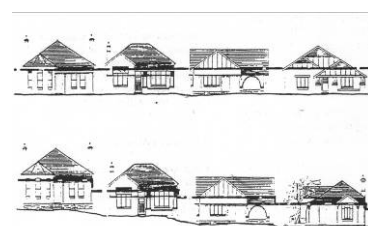
Note:

This section does not apply to land located within the commercial centres and Prince Henry masterplan site.

“Design in Context: Guidelines for Infill Development in the Historic Environment” jointly produced by the Heritage Council of NSW and the Royal Australian Institute of Architects (NSW Chapter) provides illustrated guidelines.



The characteristic massing and spacings between buildings can create a rhythm in the streetscape



Note and maintain existing horizontal lines, whether straight or stepped with the land.

with the street's established scale and form, siting and setbacks, and materials and finishes, without being overly imitative. Careful attention should be paid to adjacent development and the existing streetscape.

Objectives

- To promote high quality design that complements the streetscape character and heritage significance of the heritage item or heritage conservation area.
- To ensure that new development does not adversely impact on the setting, streetscape or views associated with any heritage item or heritage conservation area.
- To ensure that additions or changes to the external appearance of heritage items and contributory buildings within heritage conservation areas respect the original, built form, architectural style and character.

Controls

All Development

- i) Development must demonstrate how it respects the heritage values of the heritage item or the heritage conservation area (as detailed in the statements of significance and key characteristics outlined in this section of the DCP).
- ii) Common elements and features of the streetscape are to be identified in a streetscape analysis and incorporated into the design (e.g. view corridors, built form, fencing styles, extent of soft landscaping, significant trees and driveway locations).
- iii) New development should be consistent with important horizontal lines of buildings in the streetscape, in particular ground floor levels and eaves lines, where appropriate.
- iv) Large blank areas of brick or rendered walls should be avoided. Where this is not possible in the design, contrasting building materials and treatments must be used to break up the expanse of wall.

Heritage Items and Contributory Buildings

- v) Street elevations and visible side elevations must not be significantly changed. Additions must be located to the rear or to one side of the building to minimise impact on the streetscape.
- vi) The design of any proposed additions or alterations must complement the existing building in its scale, form and detailing. However, it should be possible to distinguish the new work from the old, on close inspection, so that old and new are not confused or the boundaries/junctions blurred.
- vii) All new work and additions must respect the proportions of major elements of significant existing

fabric including doors, windows, openings and verandas.

Non-Contributory Buildings

- viii) Contemporary design is acceptable where it is sympathetic to the heritage conservation area and/or heritage items in the vicinity.

2.3 Scale and Form

Explanation

Bulk and scale refers to the height and size of a building. Form and massing are terms which refer to the arrangement of the component parts of a building.

Objectives

- To ensure that alterations and additions to heritage items and contributory buildings are consistent with the scale and form of these items or buildings, and do not dominate or compete with the existing significant heritage fabric.
- To ensure that the scale and form of development is consistent with the predominant scale and form of the heritage conservation area, and of adjacent heritage items or contributory buildings.

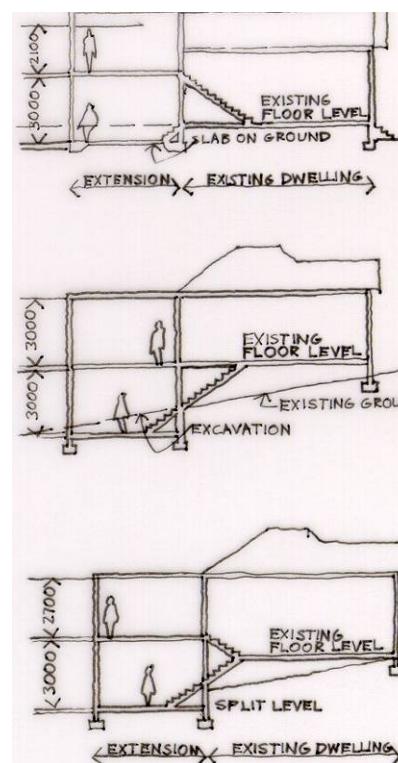
Controls

All Development

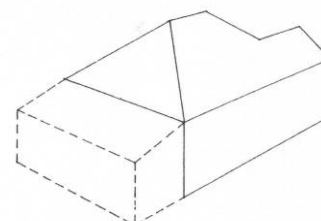
- In streetscapes where development is of a consistent single storey height, upper floor additions are appropriate only if not readily visible from the street. However, ground floor rear addition remains the preferred option.
- Attic style additions may be permissible, but there should be no visible alteration to the front of previously unaltered buildings. Front dormer windows are especially discouraged where a building itself is a heritage item, or part of a relatively unaltered semi-detached pair or row.
- Dormer windows and skylights must not be located to street elevations or where they will be prominent from a public place or dominate the original roof form. The design of dormer windows should generally be appropriate to the style of the building.

Heritage Items and Contributory Buildings

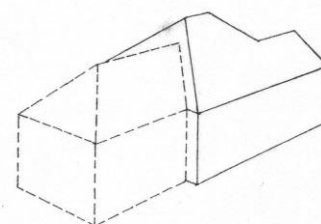
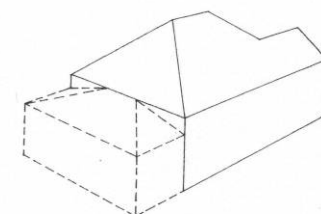
- Additions must not visually dominate, compete with or conceal the original form and massing of the existing buildings.
- Additions to heritage items must not contain any major or prominent design elements which compete with the architectural features or detailing of the existing building.



Second level additions where the land falls to the rear



Ground floor rear additions



- vi) Where single storey rear additions are proposed to dwelling houses, the addition must not compromise the integrity of the main roof and is to be lower in scale and secondary to it.
- vii) Upper floor additions to the main roof of any single storey dwelling house may be acceptable if contained wholly within the existing roof space without change to the roof pitch or eaves height.
- viii) Upper floor additions to the rear of any single storey dwelling house should preferably use pavilion-type forms, with a lower scale linking structure between the original building and any double storey addition.
- ix) If a pavilion-type form is not suitable or desirable in the location, an upper floor addition may be acceptable, set well to the rear of the building to minimise impact on the main roof and to minimise streetscape visibility.
- x) Where rear lanes exist, it may be possible to provide additional floor space in an outbuilding at the rear of the site, rather than as an upper level addition to the dwelling itself.
- xi) Where rear additions are proposed to semi-detached dwellings, the additions must not compromise the symmetry and integrity of the front elevation or dominate the other house in the pair.
- xii) Where rear additions are proposed to attached dwellings (e.g. terrace houses), the additions must not compromise the integrity of the front elevation or the forms of relatively intact rear wings.

Non-Contributory Buildings

- xiii) The scale of new buildings must be compatible with the streetscape, (i.e. - single storey, or single storey to the front with two storey to the rear). The form should also be compatible, including roof form and articulation.

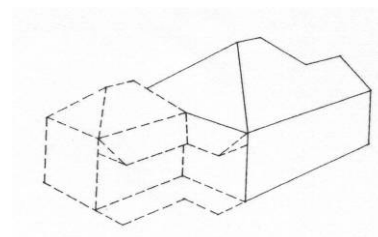
2.4 Siting and Setbacks

Explanation

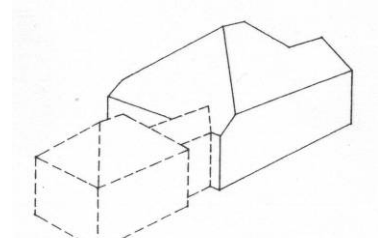
Front and side boundary setbacks are a major contributor to the character and significance of a heritage item or heritage conservation area. Existing patterns should be maintained in new development to continue the established rhythm of buildings and spaces.

Objectives

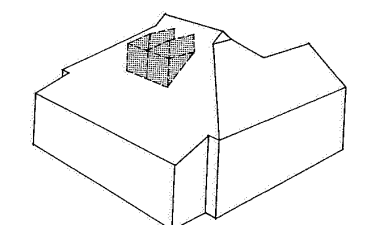
- To conserve and maintain established setbacks to streets.
- To ensure adequate curtilage and landscape setting for the building.
- To ensure the integrity of the heritage item and its setting, or the heritage conservation area is retained by the careful



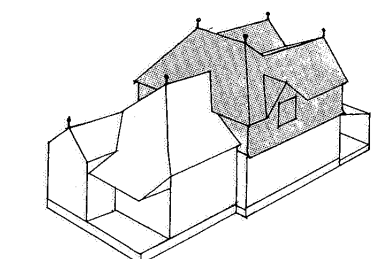
Ground level additions- Wing form



Ground level additions- Pavilion form



Upper level additions contained within the existing roof space- dormer windows to rear



Upper level additions set well to rear

Figures above sourced from "Getting the Details Right – Restoring Australian Houses 1890s-1920s. Ian Evans & NSW Department of Planning. 1989. Flannel Flower Press Pty Ltd

siting of new buildings and alterations and additions to existing buildings.

Controls

All Development

- i) Development must conform to the predominant front setbacks in the streetscape.
- ii) Development must respect side setbacks and rear alignments or setbacks of surrounding development.
- iii) Front and rear setbacks should be adequate to ensure the retention of the existing landscape character of the heritage item or conservation area and important landscape features.
- iv) Any significant historical pattern of subdivision and lot sizes must be retained. Subdivision or site amalgamation involving heritage items or contributory buildings must not compromise the setting or curtilage of buildings on or adjoining the site.

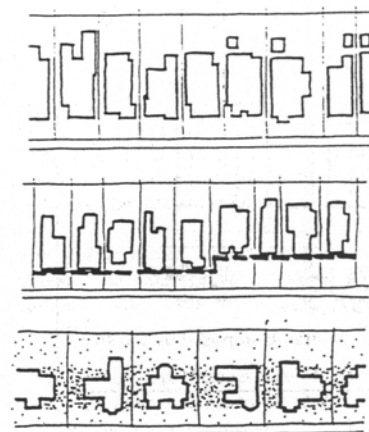


Figure 3.7 Maintain the established pattern of setbacks and building siting

Heritage Items and Contributory Buildings

No additional requirements.

Non-Contributory Buildings

No additional requirements.

2.5 Detailing

Explanation

The significant features and elements of a heritage item or heritage conservation area are often reflected in details such as windows, doors and decorative woodwork, metalwork, brickwork, stonework and cement render.

Objectives

- To ensure that original detailing is retained and kept in good repair.
- To encourage the reinstatement of original elements and detail.
- To ensure that alterations and additions and new development have a level of detail which is appropriate to the architectural character and style of the heritage item or heritage conservation area setting.
- To ensure that the pattern of door and window openings is clearly related to the placement, proportions and scale of existing fenestration of the heritage fabric.

Controls

All Development

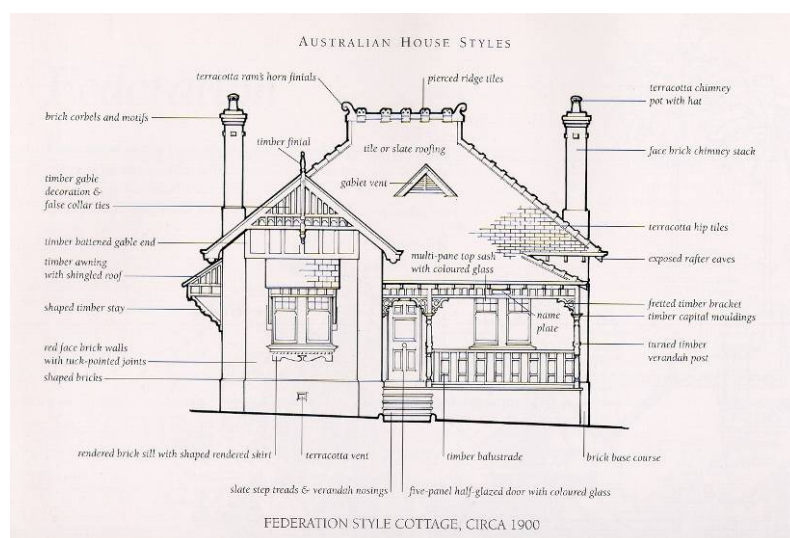
- i) Only detailing which is known to have been original to your building is acceptable. Do not add what was never there.

Heritage Items and Contributory Buildings

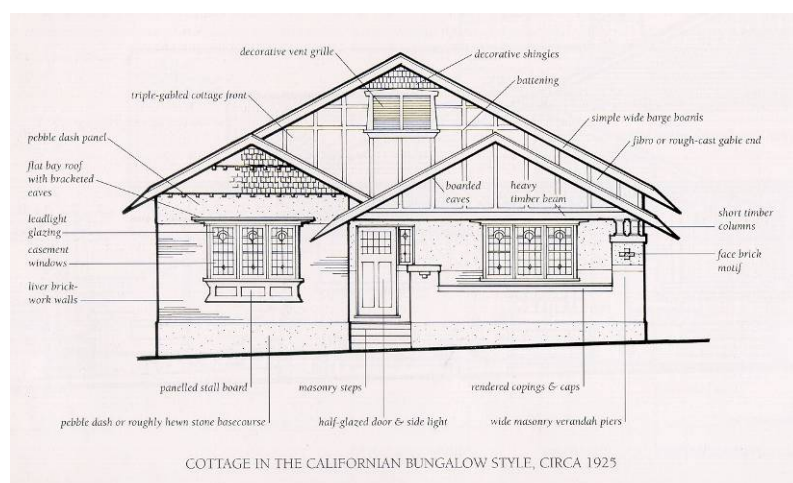
- ii) Retain and repair original doors, windows, original sunhoods, awnings, gable detailing and other decorative elements to principal elevations. Original leadlight and coloured glass panes should be retained.
- iii) Where original windows, doors and façade detailing have been removed and replaced with modern materials, consideration should be given to reconstructing original features.
- iv) Authentic reconstruction is encouraged. Decorative elements must not be introduced unless documentary or physical evidence indicates the decorative elements previously existed. Undertake thorough research before attempting to reconstruct lost detail and elements.
- v) Alterations and additions should incorporate new doors and windows which are compatible with the position, size, and proportions and detailing of original windows and doors.
- vi) Alterations and additions should adopt a level of detailing which complements the heritage fabric and should (in general) be less elaborate than the original.

Non-Contributory Buildings

- vii) Decorative elements should adopt a level of detailing which is less elaborate than original buildings and does not mimic inappropriate heritage detailing.



Typical Federation style façade detailing



Typical Californian Bungalow style façade detailing

(Figures sourced from “Australian House Styles”. Maisy Stapleton and Ian Stapleton. 1997. Flannel Flower Press Pty Ltd)

2.6 Materials, Finishes and Colour Schemes

Explanation

Often it is not possible, or desirable, to replicate original materials due to cost constraints or lack of availability. The principle should be to use materials and colour schemes which visually relate to or approximate the building elements of the earlier work in size, style and type of finish. The painting of heritage items in appropriate colours can draw attention to the buildings and reinforce the historic character.

Original face brickwork should not be rendered, bagged or painted, as this will detract from the building’s heritage significance.

Objectives

- To ensure that the selection of materials and colours is based on the original finishes and matches those used in the heritage item or heritage conservation area.
- To ensure that the visual quality of the heritage conservation area is maintained and upgraded by encouraging the use of appropriate colour schemes in all development.

Controls

All Development

- i) Materials for pathways and driveways must be consistent with the character of the heritage item or heritage conservation area.

Heritage Items and Contributory Buildings

- ii) Changes to materials (including roofs and walls) on elevations visible from a public place are not favoured. Original face brickwork must not be rendered, bagged or painted. The removal of external brickwork skin is not supported.
- iii) Matching materials must be used in repairing the fabric of external surfaces. In the case of new face

Note:

Researching the original colour scheme may involve stripping existing layers of paint as well as documentary research.

Guidelines on materials and colour schemes common for different period of development are available on Council’s website

www.randwick.nsw.gov.au

It may be possible to get second hand bricks to match the original or, new bricks which will closely match.

brickwork, the colour and texture of the brick, the type of jointing and mortar colour should be carefully matched.

- iv) New or replacement roof materials must match existing materials. Alternative materials may be considered appropriate to the architectural style of the building and the streetscape context, and must be submitted for approval.
- v) Alterations and additions must use materials and colours similar to, or compatible with, the original material or colours.

Non-Contributory Buildings

New development should have regard to the original colour schemes for the heritage conservation area.

Note:

Where the roofing is tile or slate, matching replacement material may be difficult to obtain. In these circumstances, good tiles or slates from the rear or sides of the building can replace missing or damaged ones in the front. The back can then be repaired with new materials, which match the old as closely as possible.

2.7 Roofs and Chimneys

Explanation

Roof forms and details to heritage buildings vary according to building type and architectural style, and this variety makes an important contribution to the aesthetic significance and visual complexity of heritage items and heritage conservation areas. Fireplaces and chimneys were an important element in buildings up until the middle of the twentieth century, contributing to the character and skyline of the building.

Objectives

- To retain the characteristic roof forms of heritage items and heritage conservation areas.

Controls

All Development

- i) Attic rooms are to be contained within roof forms and should not dominate the street and visible side elevations.

Heritage Items and Contributory Buildings

- ii) Roofs must not be repitched or have their eaves line raised to allow for the provision of attic rooms.
- iii) Chimneys must be retained.

Non-Contributory Buildings

- iv) Roofs of new development are to be consistent to the type of roof (i.e. gabled, hipped), pitch, eaves and ridge height which are predominant in the heritage conservation area.

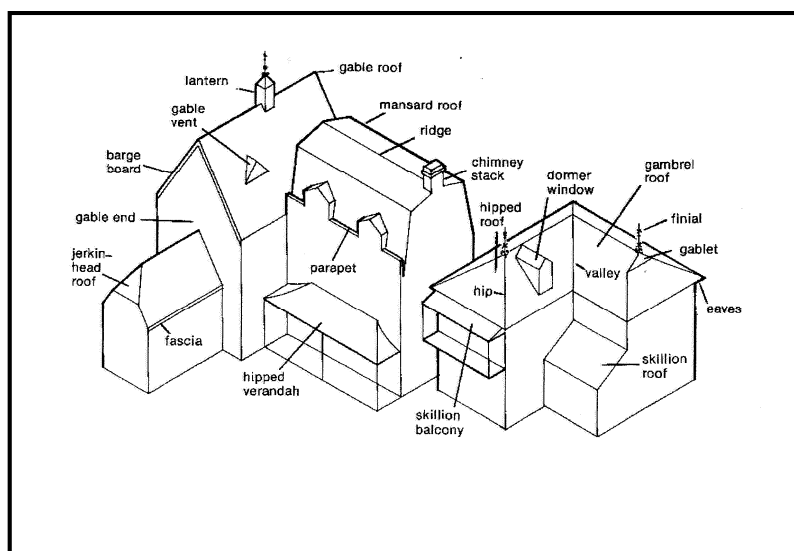


Figure sourced from "How to Restore the Old Aussie House". Ian Stapleton. Flannel Flower Press. 1983

2.8 Verandahs and Balconies

Explanation

Verandahs and balconies on the street frontage are important design features which provide an interface between the building and the street. They also provide shading and a sense of depth to the front façade.



Objectives

- To ensure the retention and encourage re-instatement of early verandah and balcony forms.
- To ensure that alterations and additions do not detract from or reduce the importance of original verandahs and balconies.

Controls

All Development

- Consider the provision of front verandahs and balconies at a compatible scale where these are a characteristic feature of the heritage conservation area.

Heritage Items and Contributory Buildings

- Original front verandahs and balconies must be retained and conserved. Consider opening up verandah enclosures or infills, to reinstate an original open verandah.
- Infilling or enclosure of front verandahs and balconies is not supported.
- Additional verandahs must not compete with the importance of the original and should be simple in design and based on existing detail or an

understanding of appropriate designs for each period or style.

Non-Contributory Buildings

No additional requirements.

2.9 Garages, Carports, Carspaces and Driveways

Explanation

Most early buildings were designed without garages or carports- the building itself was usually the only structure visible from the street. Later garages were commonly located as a separate structure to the rear of the property.

Site conditions on many older properties (including site width and front setback dimensions) preclude the provision of off street car parking. While off street parking in some instances may be accommodated forward of the building line where there is no alternative access, this must be not to the detriment of the building setting or the streetscape.

Objectives

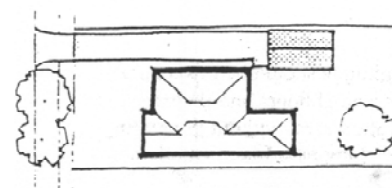
- To minimise the visual impact of carparking on heritage streetscapes.
- To ensure parking structures and paved areas are visually discreet and do not dominate or compete with original character buildings.

Controls

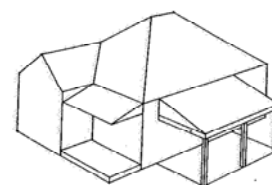
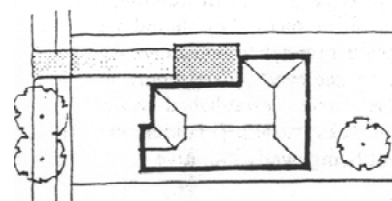
All Development

- Existing rear lane access or side street access (where available) must be utilised for carparking in preference to front access.
- Carparking structures are to be located to the side, or preferably to the rear of the building. Garages and carports must not be located forward of the building line.
- Open hard stand carspaces may be provided forward of the building line, but must be located adjacent to a side boundary, and generally not be greater than single car width.
- Existing building fabric, including verandahs and balconies, must not be altered to allow for the provision of a carparking structure or an open stand carspace.
- Open hard stand carspaces must not dominate the setting of the building in terms of loss of planting, fencing or retaining walls.
- Carparking structures are to be unobtrusive and must be of materials, form and details which harmonise with and do not obscure views of the building. They must not be made larger by the provision of a bulky pitched roof.

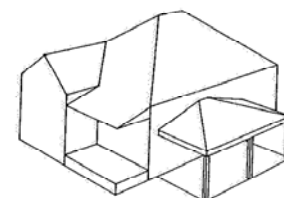
Locate towards the rear, or



Locate at the side of the house, well back.



Carports with low pitched roofs located to the side of the dwelling



Figures above sourced from "Getting the Details Right – Restoring Australian Houses 1890s-1920s. Ian Evans & NSW Department of Planning. 1989. Flannel Flower Press Pty Ltd

- vii) Existing driveways constructed of two separate wheel strips contribute to the character of the streetscape and must be retained where possible.
- viii) Large areas of concrete should be avoided and alternative materials such as pavers, gravel or permeable paving must be considered.
- ix) Buildings housing original stables, coach houses and interwar motor garages should be retained and conserved wherever possible.

Heritage Items and Contributory Buildings

No additional requirements.

Non-Contributory Buildings

No additional requirements.

2.10 Fences

Explanation

Front fences are an extremely important streetscape element in heritage conservation areas with each architectural style having an individual characteristic style of fencing.

Objectives

- To encourage the retention, repair or reconstruction of original fencing.
- To encourage fencing in character with original buildings.
- To encourage consistent fencing where this is a significant element in the heritage conservation area.
- To encourage side and rear boundary fencing which is consistent with height and materials of original fencing.

Controls

All Development

- (i) New and replacement front fences must not obscure building facades. High solid front fences are not appropriate.
- (ii) New fence heights and form must be appropriate to the character of the heritage item, or to the heritage conservation area.
- (iii) Lych gates must not be provided unless there is evidence that they originally existed.
- (iv) Side fencing forward of the building line must be simple with a level of detail and of materials and height compatible with the heritage item, contributory building or heritage conservation area.
- (v) Side and rear boundary fences should be preferably of traditional timber construction or otherwise of masonry

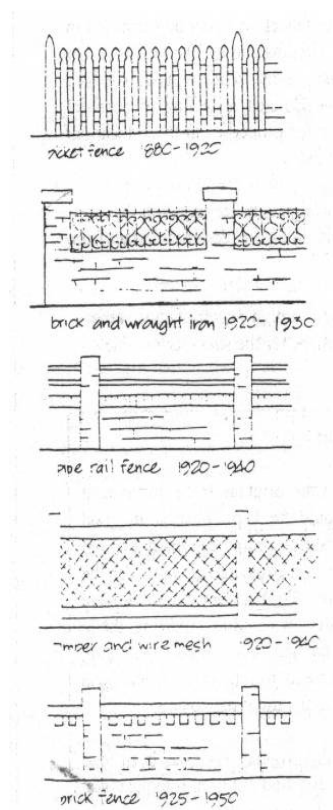


Figure 2.6 Some of the many possible original fences found in the West Kensington area

Note:

This can be done through researching the form of the original fence (old photographs, drawings) or by looking at fencing on houses of similar age and style.

construction. Colorbond metal fences are not appropriate.

Heritage Items and Contributory Buildings

- (vi) Retain, repair or reconstruct original fences and retaining walls where possible.
- (vii) Where an original fence has been lost, new fencing should try to match the original style.

Non-Contributory Buildings

No additional requirements.

2.11 Gardens, Garden Elements and Swimming Pools

Explanation

Period gardens enhance the relationship of the house to its setting. The garden softens and enhances views of the house and screens out unsympathetic buildings or alterations and additions.

Objectives

- To retain or reinstate landscaped settings and elements (particularly pathway location and materials) for heritage items or buildings within the heritage conservation area.
- To provide attractive front garden areas in keeping with those of the areas original houses.
- To improve the streetscape setting of all buildings in the heritage conservation area.

Controls

All Development

- (i) Significant trees and landscape elements such as pathways, garden beds and structures must be retained.
- (ii) Large areas of hard paving are to be minimised.
- (iii) Garden and ancillary structures must be appropriate to primary buildings in terms of scale, style and materials.
- (iv) Swimming pools must be located at the rear of the property and where possible should retain important trees and areas of soft landscaping. Swimming pools must not result in significant changes to ground levels on the site.

Heritage Items and Contributory Buildings

No additional requirements.

Non-Contributory Buildings

No additional requirements.

Note:

Guidelines on garden styles and elements are available on Council's website

www.randwick.nsw.gov.au

2.12 Access and Mobility

Explanation

Heritage places should be accessible to everyone including people with disabilities, the elderly and families with small children. Owners and managers of heritage properties should commit themselves to creating a situation in which this can be achieved. Access solutions will be unique to each historic building.

Objectives

- To ensure that development to facilitate access and/or adaptable dwelling and universal housing provision does not adversely affect the heritage fabric of the heritage item or heritage conservation area.

Controls

All Development

- (i) Modifications and alterations to facilitate access and mobility must be sympathetic to the heritage values and heritage fabric of the original building.
- (ii) Alterations and additions to facility access and mobility must be reversible.
- (iii) Preserve heritage items or heritage fabric of higher significance if a compromise is required.

2.13 Commercial Properties

Explanation

Randwick City has a number of commercial buildings listed as heritage items and some heritage conservation areas also include a number of commercial buildings, such as corner stores. These building types represent a traditional land use mix and contribute to diversity of built form.

Objectives

- To ensure that original characteristics of traditional neighbourhood retail buildings are retained and enhanced

Controls

All Development

No additional requirements.

Heritage Items and Contributory Buildings

- (i) Original forms, details, materials and finishes must be retained, including original shopfronts, original suspended awnings and open balconies at first floor level.
- (ii) Where the property is part of a single larger building, changes to ground level shopfronts and upper level facades must not detract from the integrity and group value.

Non-Contributory Buildings

No additional requirements.

2.14 Services and New Technologies

Explanation

Council encourages the installation of devices, which improve water conservation and energy efficiency. For heritage items and in heritage conservation areas new technologies (such as solar energy systems and telecommunications structures) should not be prominent from a public place nor intrude on any significant views or vistas gained from neighbouring properties. The siting and appearance of such devices should be discrete and not intrusive.

Objectives

- To minimise the prominence of new building services and technical equipment in heritage conservation areas and on heritage items.

Controls

All Development

- (i) Air exhaust or ventilation systems, skylights, air conditioning systems, solar energy panels, TV antennae and satellite dishes should not be visible on the main elevation of the building or attached to chimneys where they will be obvious. Services and equipment should be installed at the rear, within the roof space or flush with the roof cladding and at the same pitch. They are to be of modest size and not prominent from the street.
- (ii) Essential changes to cater for electrical or telecommunications wiring, plumbing or other services should be limited to what is essential to permit the new use to proceed.
- (iii) Rainwater tanks are to be located at the rear or side of the dwelling and suitably screened. They should not be obvious from the street.

3 Landscape Elements

Explanation

Randwick City's physical environment comprises a unique and complex pattern of natural and man-made elements. Some of the most identifiable features are the result of the adaptation of buildings and infrastructure to dramatic coastal topography, and of the powerful influence of the sandstone and the sand on which our City is built. Such elements include sandstone and brick retaining walls, stairs, embankments and road cuttings.

A number of significant landscape elements are listed as heritage items in Schedule 5 of the RLEP as having heritage significance. There are also a number of landscape elements located within heritage conservation areas which contribute to the heritage values of these areas. While most landscape elements are located on Council owned land, both public and private works can impact on their heritage value. A number of other landscape elements throughout do not warrant individual heritage listing, but collectively contribute to the built character of Randwick City.

Objectives

- To ensure that significant individual retaining walls and associated landscape elements are retained and conserved.
- To ensure that other contributory landscape elements are retained and conserved to the greatest extent possible.
- To ensure that private works including provision of vehicular access, modifications and repairs do not impact on the heritage value of the landscape elements.
- To ensure that infrastructure works do not impact on the heritage value of landscape elements.
- To ensure that Council repair and maintenance works are carried out in a timely manner using technically sound and appropriate construction methods.

Controls

- (i) Significant sandstone and brick retaining walls must not be removed or replaced.
- (ii) Significant sandstone and brick retaining walls or natural rock faces must not be modified to accommodate vehicular access.
- (iii) New surface mounting of infrastructure including water and gas supply pipes, storm water and sewerage pipes, service conduits and other fixings on retaining walls must be minimised.
- (iv) Maintenance and repairs by Council must use the same materials and techniques as the original construction, and should be carried out by experienced tradespeople.



Note:

RLEP Schedule 5 provides item numbers with an "L" prefix for landscape elements.

- (v) Any reconstruction by Council works are to match the existing retaining wall in terms of block size, texture, bond pattern, alignment of blocks, mortar joint colour and capping detail.
- (vi) Replacement by Council of associated elements such as handrails should preferably be carried out to match existing materials and details.
- (vii) Cyclical maintenance programs (including inspections) should be established by Council to ensure that significant and contributory landscape elements are conserved.
- (viii) New plantings by Council associated with retaining walls and associated landscape elements should be consistent with Council's Street Tree Masterplan and of a type that will not cause physical damage by excessive root growth etc.
- (ix) Retaining walls and natural rock faces must not be modified by adjacent property owners, including rendering and painting or replacement of handrails.
- (x) Other landscape elements which are not heritage listed should be individually assessed for their contributory value if threatened.



4 Heritage Conservation Areas: Statements of Significance, Values and Guidelines

Heritage conservation areas have distinctive historic and streetscape qualities that represent particular phases in the development of Randwick City. Components which contribute to this special character of heritage conservation areas should be retained and all new development should reflect and reinforce this character.

This subsection contains the Statements of Significance for Randwick City's heritage conservation areas. The special characteristics for each heritage conservation area, together with the specific development guidelines for protection of these characteristics, are included under the following headings for each area:

- **brief history of development and significance** of the conservation area
- **significant characteristics and key values** or themes of the conservation area, to enable an understanding of the heritage significance of the conservation area
- **existing character values** to be retained for contributory buildings. New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings. These key values and characteristics need to be considered in addition to the general guidelines and controls contained in this DCP.
- **guidelines for change** identify issues which need to be addressed for development affecting contributory buildings in the heritage conservation area.

A detailed description of each heritage conservation area is provided in the Conservation Areas Review (2000) prepared by Perumal Murphy Wu and the Randwick Heritage and Visual Character Study (2003) prepared by Godden Mackay Logan. Both studies are available from Council's administration centre and Council Libraries.

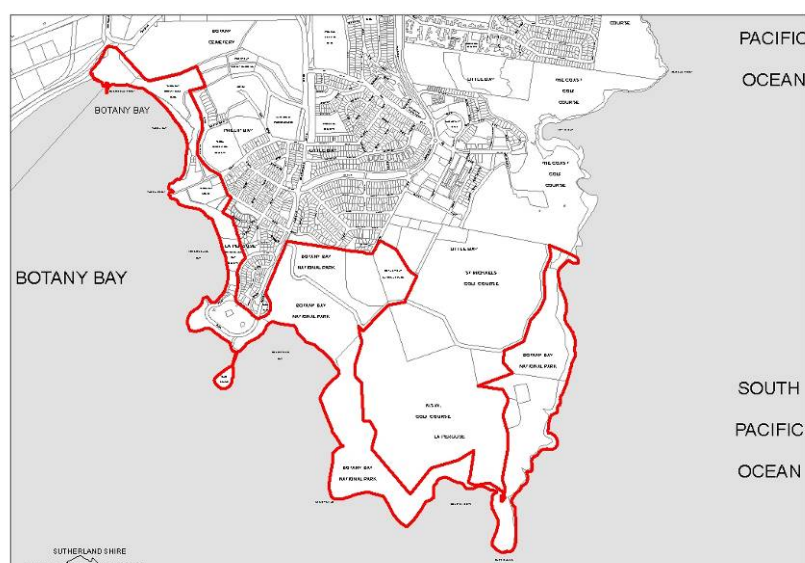
List of heritage conservation areas

- 4.1 Botany Bay National Park
- 4.2 Bunnerong Power Station-
- 4.3 Caerleon Crescent-
- 4.4 Dudley Street
- 4.5 Gordon Square
- 4.6 High Cross
- 4.7 Malabar Headland
- 4.8 Moira Crescent
- 4.9 North Randwick
- 4.10 Old Tote/Fig Tree Theatre (UNSW)
- 4.11 Prince Henry Hospital
- 4.12 Racecourse Precinct
- 4.13 Randwick Environment Park
- 4.14 Randwick Junction
- 4.15 Sacred Heart
- 4.16 The Spot
- 4.17 St Judes
- 4.18 St Mark's
- 4.19 Struggletown
- 4.20 West Kensington

4.1 Botany Bay National Park Heritage Conservation Area

The area comprises an extensive stretch of dramatic coastline including several areas of remnant bushland and a number of sites of early Aboriginal and European contact. La Perouse is also the location of one of the oldest urban Aboriginal communities in Australia.

The Botany Bay National Park Heritage Conservation Area covers the entire coastal strip facing Botany Bay and the Pacific Ocean, from Yarra Bay to Prince Henry Hospital. The heritage conservation area consists of four precincts: Yarra Bay and Frenchmans Bay; the La Perouse Headland; Botany Bay National Park and Prince Henry Hospital.



4.1.1 What is the area's significance?

Aesthetic Significance

The aesthetic significance of the heritage conservation area as a whole arises from the scenic value of the natural landscape, and a number of man-made features within it. The heritage conservation area is in a topographically prominent position in Sydney, at the entrance to Botany Bay, opposite Kurnell.

Yarra Bay and Frenchmans Bay are mostly modified natural landscapes. Some areas of original native vegetation remain. The landscape is characterised by wide sand beached in the two bays, separated by low rocky headlands, and low dunes with scrub vegetation behind. This landform contrasts with the mostly treeless hill of Botany Cemetery, dotted with rows of headstones, which forms a backdrop to the north. The Federation period Yarra Bay House is a prominent feature of the headland between Yarra Bay and Frenchmans Bay.

The La Perouse headland is part of, but physically distinct from, the remainder of Botany Bay National Park, to the east. The peninsula is bare and grassy. It has a rounded form, sloping gently to the shoreline, with some low cliffs. The fortified Bare

Island juts into Botany Bay and is connected to the mainland by a wooden bridge. The other major man-made physical features of the peninsula are the Macquarie Watchtower, the Cable Station and the La Perouse Monuments.

Botany Bay National Park, to the east of the La Perouse peninsula, preserves a large area of indigenous bushland. Most of the area of the NSW Golf Course and St Michaels Golf Course is open space, though there are some remnant areas of native bushland between the fairways. An area of native bushland adjacent to Jennifer Street is also preserved in this part of the conservation area.

Prince Henry Hospital is built above the rocky foreshore of Little Bay. The hospital is set in an open landscape, and there is some surviving native vegetation. The hospital contains groupings of weatherboard and brick buildings dating from Federation period and later. The hospital cemetery is located to the south of the main group of hospital buildings, next to St Michaels Golf Course. The open space of the sea-side landscape extends to the north of the hospital site, on land which is owned by the University of New South Wales.

Historic Significance

The heritage conservation area was the location of some of the earliest contacts between Aboriginal people and Europeans on the east coast of Australia. The existing landscape and man-made features provide evidence of and are associated with, numerous historical events and processes, in the intervening period of more than two centuries.

Governor Phillip first set foot on Australian soil in the vicinity of Yarra Bay, on January 18 1788. Yarra Bay was the location of Chinese market gardens from the 1860's. Some market gardens still survive in the area. In 1901 the Yarra Bay Pleasure Grounds were established. Leisure pursuits have been a major use of the area for all of the 20th Century. Botany Cemetery was established in 1872.

The La Perouse headland represents Australia's 'front door', where the early Colony encountered the rest of the world, through the processes of exploration, settlement, defence and overseas communication.

The La Perouse Monuments are internationally significant because of their association with the La Perouse expedition of 1788. The Macquarie Watchtower, constructed c1820, is nationally significant in representing the earliest permanent occupation of the Botany Bay area by Europeans. It is the oldest building in the Randwick City area. Bare Island Fort, constructed from 1881 to 1885, is one of the finest examples in Australia of a Victorian period military fortification. The Cable Station, constructed in 1882, represents an important stage in the development of Australia's overseas communications, following establishment of cable telegraph in 1876. The Snake Pit demonstrates the history of the use of the area for tourism, which intensified after introduction of the tram service in 1902.

La Perouse is also the location of one of the oldest urban aboriginal communities in Australia, established in c1870.

Botany Bay National Park was created in 1970.

Prince Henry Hospital was established in 1881 on an isolated site at Little Bay, as a result of a smallpox epidemic. Its original name was the Coast Hospital. New development occurred in 1919 as a result of an influenza epidemic.

Social Significance

The natural and man-made landscapes of the conservation area have social significance because of their value to the community as a recreational resource. Many of the historical uses of the heritage conservation area are remembered by groups in the community, or continue today.

The La Perouse area has special significance to the aboriginal community because of its history of use before and after European contact. La Perouse headland provided access to plentiful food sources in the sea and on the land. The occupants of the area in 1788 were of either the Bidjigal or Cadigal group of Eora language speakers. Aboriginal occupation around Botany Bay continued until the early 1800's. The population was decimated by disease, disrupted lives and colonial policy.

The second phase of aboriginal occupation began as early as 1870. Aboriginal groups, primary from the South Coast, settled at La Perouse after being displaced from camps in the city. The area still suited a subsistence lifestyle, primarily fishing. Commercial income came from fishing and the sale of souvenirs to tourists.

The presence of the Aboriginal community at La Perouse was a factor in the government creating an Office for the Protector of Aborigines. The community had its status formalized by the creation of a reserve under the Aborigines Protection Board in 1883. The La Perouse aboriginal community has maintained a strong sense of identity over the intervening years.

Technical/Research Significance

There are several remnant bushland areas in the Yarra Bay area. Hill 60 is the largest. There is an area of scrub between Baragollar Avenue and Yarra Road which contains regionally rare indigenous plant species. On Yarra Point there is a significant stand of *Casuarina glauca*.

More than 95 hectares of remnant bushland is preserved in Botany Bay National Park and parts of the NSW and St Michaels Golf Courses. The bushland is regionally significant. A number of plant communities are present, including sclerophyll forest, scrub and heath and some wetland types. One plant community, Eastern Suburbs Banksia Scrub, is listed as an endangered ecological community under the Threatened Species Conservation Act (NSW) and the Threatened Species Protection Act (Commonwealth).

The site of Prince Henry Hospital and the neighbouring properties contain numerous areas, totalling almost 20 hectares, of regionally

significant bushland. The bushland includes Eastern Suburbs Banksia Scrub. Two nationally rare and several regionally rare plant species are present. There are two large ponds on the University of NSW property which are a habitat for native bird species and a vulnerable bat species under the Threatened Species Conservation Act (NSW).

The Little Bay Geological Site is an area of approximately 6 hectares, to the rear of the University of NSW Sports Field. The geological site is of national significance. It is the only site containing peat of Miocene age known on the coast of NSW.

4.1.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Modifying the landscape
- Government and institutions
- Recreation, entertainment and leisure
- Transport and communications

The following theme is indirectly represented:

- Promotion of culture, religion and education

4.1.3 Guidelines for Change

The majority of the heritage conservation area is managed by the NSW Office of Environment and Heritage to maintain its natural and cultural heritage values. The parts of the area managed by Council are generally subject to Plans of Management which recognise heritage values.

4.1.4 Existing Character Values and Controls

Controls relating to the Prince Henry Hospital site are included in Part E of this DCP.

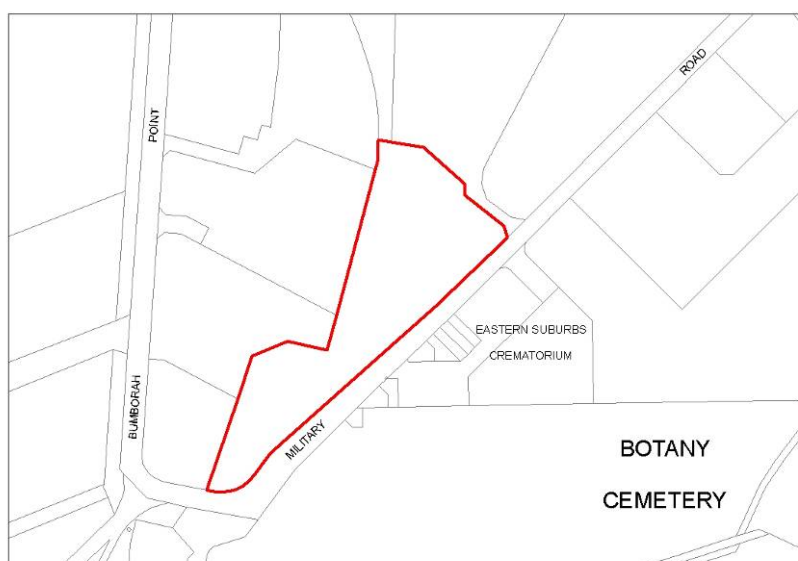
Any development within the area of Botany Bay National Park should refer to any Plans of Management prepared by the NSW Office of Environment and Heritage.

4.2 Bunnerong Power Station Heritage Conservation Area

The site retains structures and mature landscape elements dating from its use by the Bunnerong Power Station.

The Bunnerong Power Station Heritage Conservation Area is located on the north-western side of Military Road, in Matraville.

This section provides objectives and controls for the extension of the Eastern Suburbs Memorial Park into part of the old Bunnerong Power Station Site, in order to safeguard the site's heritage values. It also provides objectives and controls which should be addressed for the existing Eastern Suburbs Memorial Park, while outside the heritage conservation area.



4.2.1 What is the area's significance?

Aesthetic Significance

The site of the former Bunnerong Power Station is an open landscape with considerable visual appeal. There are a large number of mature trees, mostly introduced species, in avenue plantings and set in lawn areas. The tree species include brush box, Canary island date palm, Cape chestnut, Coral tree, cypress, eucalyptus, ficus, Kaffir plum, lily pilly, melaleuca, Norfolk Island hibiscus and Norfolk Island pine. Other evidence of the original design of the power station garden areas survives in the form of roadways, paths, garden beds and fence posts on the street boundary. The concrete retaining walls of the site of the power station building are a major element in long distance views from the west. The remains of the Switching Station gardens show their strong relationship to features of the site.

The heritage conservation area complements the landscapes of the Eastern Suburbs Crematorium and Botany Cemetery on the opposite side of Military Road. The art deco style of the

Crematorium building reflects the mostly rectangular layout and forms of the Cemetery.

Historic Significance

Both parts of the site show evidence of twentieth century development: the mass cultural expression of the burial sites of a suburbanising population and the coal fired generation of electric power for domestic consumption.

Bunnerong Power Station was constructed between 1925 and 1929. The association with the power generation and distribution industry is continued by the modern Bunnerong Substation No 7340, just outside the north-east boundary of the heritage conservation area.

Social Significance

The Cemetery and Crematorium have established the site as a major focus for burial ritual in Sydney.

The remnants of the Switching Station's formal 1920s entry, lily ponds and terraced gardens represent the sense of involvement and pride that the Station's employees had in their workplace. The Paperbark Grove is also significant as the site of the workers' recreation area.

The heritage conservation area is an Inter-War period landscape which is appreciated by the community for its aesthetic values.

Technical/Research Significance

The original frontal dunes that marked the edge of Botany Bay before reclamation would have contained Aboriginal archaeological relics. The heritage conservation area may have the potential to yield information on the design and characteristics of Inter-War period power stations.

Natural significance

The area originally contained vegetated dunes including the Eastern Suburbs Banksia Scrub which is now restricted to a few remnant pockets in Sydney.

4.2.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Modifying the landscape
- Government and institutions
- Industry and commerce

The following theme is indirectly represented:

- Transport and communications

4.2.3 Visual Character

The subject site covers an undulating area of broad sandy ridge leading to Bumborah Point on the northern side of Botany Bay. It is bounded on the south and west sides by steep slopes down to, respectively, Yarra Bay and reclaimed land used for port purposes.

To the south east of Military Road is the existing Eastern Suburbs Memorial Park. It includes the Crematorium and surrounding gardens, existing memorial gardens and monumental burial grounds, Pioneer's Memorial Park, administrative building, funeral home, café and maintenance compound.

Strong visual elements are:

- Crematorium – the most prominent feature on the site; a strong art deco architectural form with axial vistas east-west and north-south
- Cemetery main access road with palm avenue
- Bare open character of the cemetery, furnished in dressed stone on a grid layout, with expansive views to the south
- Informal tree plantings in memorial gardens and car parking areas.

To the north west of Military Road is part of the former Bunnerong Switching Station site, including the remains of gardens associated with the Switching Station and sub-floor structures of part of the old building.

Strong visual elements are:

- Site entry, with 1920s garden, palm avenue and vista west to Port Botany and the bay beyond
- Platforms of the former Switch House, demolished down to floor slabs
- Ponds and terraced gardens
- Paperbark grove
- Retaining walls

Although only partially screened from Military Road by boundary planting of mature figs, the site orients itself to the west because of its dramatic position, presenting as a series of terraces overlooking Port Botany and the Bay. The predominant character is of the garden setting, with formal and informal elements of the former buildings. Views out are framed by mature tree plantings and at the southern end, screened by shrubs.

Negative elements are:

- The mixture of styles and forms in gardens surrounding the Crematorium
- The separation of the two sites by Military Road
- Some over mature trees.

4.2.4 Desired Future Character

Development in the area should maintain and enhance the positive elements of its character and correct negative elements. This will involve:

- Maintaining the open landscape character of the area
- Achieving a legible and coherent layout
- Fitting buildings, structures and the access/circulation system within the landscape and garden framework
- Using consistent design language based on:
 - unifying the two sites
 - recognising and where appropriate incorporating major elements of the previous use
 - the major existing site axes
 - rectangular building forms
 - solid structural elements in light coloured masonry
- Minimising changes to the existing landform, except over the former Switch House platforms, which may be raised to accommodate burial.

4.2.5 Site Planning

Objectives

- To achieve a coherent site layout that provides a pleasant, attractive, manageable, resource efficient and sustainable cemetery facility.
- To maximise the positive attributes of the site, correct or mitigate negative attributes and minimise any negative impacts of development.
- To ensure that local site conditions, constraints and opportunities are taken into account in the design process.
- To ensure that the relationship of new development to adjoining development is considered in the design process.

Controls

- viii) Development is to be carried out in accordance with the masterplan.
- ix) Building, streetscape and landscape design must relate appropriately to the topography, built and landscape character of the locality.
- x) Development must include a safe and legible pedestrian and vehicular access and circulation system.
- xi) The site layout must take into account and, where appropriate, retain and integrate any item or natural feature of identified conservation value.
- xii) The siting and building layout must maximise microclimate opportunities related to solar access and prevailing breezes.

4.2.6 Conservation

Objectives

- To ensure development respects the landscape and built heritage significance of the site and surrounds.
- To ensure development is in keeping with the bulk, scale and character of any identified items of heritage significance

Controls

- i) Ensure that siting does not disrupt views to and from built and landscape elements.
- ii) New development must be a similar scale and proportion to existing elements to ensure that it does not dominate or overwhelm the heritage items or heritage conservation area.
- iii) New development is to complement, but not replicate, the design features of the heritage item and heritage conservation area.
- iv) Building height is limited to two storeys, however, special building features such as spires may exceed the height limit provided that such building features do not dominate or overwhelm the heritage item or heritage conservation area.

Notes:

Any major excavation must be monitored by a qualified archaeologist and a representative of the La Perouse Land Council.

Minor excavation works associated with burials, tree planting, roadworks and footing excavation may not require archaeological monitoring.

Council's Heritage Officer can clarify whether archaeological monitoring is required.

4.2.7 Internal Roads and Manoeuvring Areas

Objectives

- Provide adequate space for the efficient movement of vehicles within the site.
- Minimise the potential for conflict between vehicles and pedestrians.
- Minimise the amount of hard paved areas.
- Integrate driveway and manoeuvring areas with landscape features.

Controls

- i) Internal roads must be between 5-6 metres in width and designed to allow for carparking in designated adjoining areas and at the kerbside where the road width is not less than 5 metres.
- ii) Intersections must be designed to avoid conflict by positioning opposing roads either directly opposite or at a minimum separation of 60m where adequate sight distance is available.

4.2.8 Excavation and Fill

Objectives

- To ensure that earthworks are minimised and buildings are sited and designed to complement the existing topography.
- To minimise noise from excavation machinery during construction.
- To ensure that fill imported to the site is free of contaminants.

Controls

- i) DAs involving building construction or significant earthworks must be accompanied by:
 - a geotechnical assessment
 - an assessment of the likely impacts on existing trees on or adjacent to the site
 - details of the amount of cut and fill and methods of transportation of materials to or from the site.

4.3 Caerleon Crescent Heritage Conservation Area

An unusual cul-de-sac subdivision with a wide planted median, featuring dwellings from the turn of the nineteenth century.

The area covers Caerleon Crescent properties and also includes a number of properties in Frenchmans Road and Chapel Street, Randwick.



Caerleon Crescent is a rare example of a heritage cul-de-sac in Randwick. Its proximity to Frenchmans Road, the region's oldest thoroughfare and its place on the plateau of upper Randwick gives the Crescent quite a prominent place in the locality.

It is one of the few subdivisions in Randwick that is separate from the main street grid, Caerleon Crescent is an intimately-scaled contained precinct, with a wide central planted median and sandstone kerbing edged by single-storey houses with narrow setbacks from the front boundary.

Some of the houses have unsympathetic alterations such as painted face brickwork and high front fences but the overall form, particularly the cohesive roofscape, is largely intact.

4.3.1 What is the area's significance?

Caerleon Crescent, which is not crescent-shaped, was an early twentieth century construct. It belonged to a block of land owned by the Moore family and fronting onto Frenchmans Road.

Caerleon Crescent is a thoughtfully planned street with a wide, planted median strip and a passage linking it to Frenchmans Road. Caerleon Crescent also has aesthetic significance as an intimate, contained precinct where the original buildings from the turn of the nineteenth century remain largely intact. The street trees contribute to the aesthetic values of the precinct.

4.3.2 What are the area's key values?

- Historical value as a substantially intact example of subdivision in Randwick City at the turn of the nineteenth century.
- Central planted median, provides focus for the precinct.
- Pedestrian passageway to Frenchmans Road.
- Intimately scaled, contained precinct.
- Contributory street tree planting.
- Consistency of single storey scale and semi detached form of the contributory buildings.
- Consistency of roofscape.
- Federation Queen Anne style, featuring face brickwork, hipped and gabled roofs in terracotta tiles and timber trim.
- Some original early front fences.
- Consistent narrow setback from street boundary.



4.3.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

<i>Landscape and public domain elements</i>	Planted median provides focus for the precinct
<i>Scale & Form</i>	Single storey, semi-detached cottages
<i>Siting & Setbacks</i>	Minimal setbacks from street
<i>Roofs</i>	Consistent roofscape of traditional pitched roofs, hipped and gabled forms.
<i>Materials</i>	Face brickwork walls. Terracotta tiled roofs.
<i>Detailing</i>	Timber trim contributes to Federation Queen Anne character.
<i>Verandahs & Balconies</i>	Characteristic Queen Anne style front verandahs.
<i>Carparking</i>	Minimal side setbacks do not allow parking to side or rear of dwelling
<i>Fences</i>	Some original/early front fences

4.3.4 Guidelines for change

Alterations & Additions

Changes should not be made to front elevations of semi-detached dwellings which detract from the integrity of the pair. Rear additions should not be prominent in the streetscape nor compromise the integrity of the original roof. Rear additions to attached and semi-detached cottages should be consistent with the scale and form of surrounding rear wings.

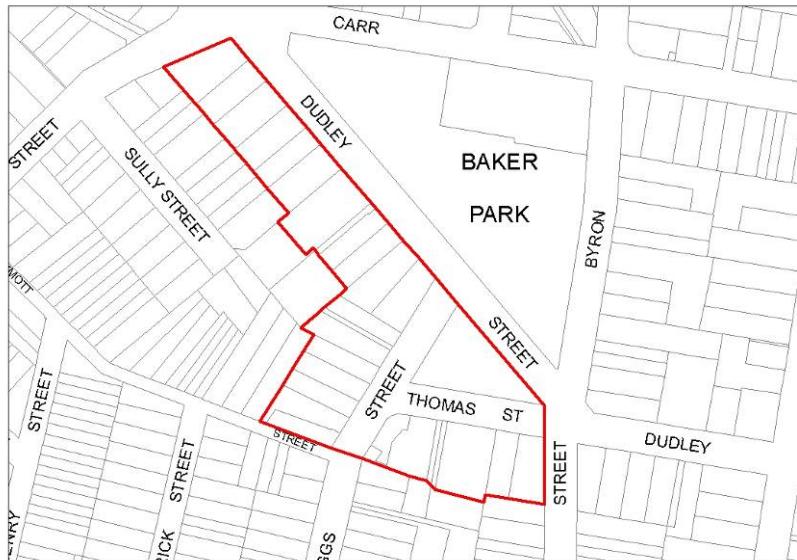
Carparking

Where sites are of sufficient width, a rear garage or a side carport can be provided (set back from the front of the dwelling). On site carparking may not be able to be provided on narrow sites with minimal front setbacks

4.4 Dudley Street Heritage Conservation Area

Fine quality Federation and Interwar detached houses in an outstanding elevated setting.

The Dudley Street heritage conservation area consists of rows of houses on Thomas Street, Higgs Street and Dudley Street Coogee, facing Baker and Leete Parks.



4.4.1 What is the area's significance?

Aesthetic Significance

The heritage conservation area includes fine quality groupings and individual examples of large Federation and Inter-War period detached houses. Several styles are represented, including Federation Bungalow and Queen Anne and Inter-War Mediterranean and Functionalist. The most outstanding individual examples are the Federation Queen Anne style houses at Nos 16, 22, 34 and 36 Dudley Street and Nos 1 and 7 Thomas Street. Their large and bowed windows take maximum advantage of views.

The houses are situated on elevated sites, with views of the Pacific Ocean to the east and north over the adjacent Baker and Leete Parks. The front gardens, fence designs, sandstone kerbing, steep and undulating topography, and the palm, pine and fig tree plantings in the parks, all contribute to the aesthetic quality of the setting.

Historic Significance

The existing houses demonstrate the process of development of the area in the first few decades of the twentieth century. The social class and aspirations of the original occupants are demonstrated by the design of these large houses, on desirable sites with ocean views.

Social Significance

The heritage conservation area has social significance because its physical qualities are appreciated by its residents and the general community. The heritage conservation area continues in its traditional residential use.

4.4.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Speculation and promotion
- Suburbanisation

The following themes are indirectly represented:

- Modifying the landscape
- Transport and communications

4.4.3 Existing Character Values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

<i>Landscape and public domain elements</i>	Front gardens, steep and undulating topography, and palm, pine and fig tree plantings in the parks contribute to the aesthetic quality of the setting
<i>Scale & Form</i>	Large detached houses, single storey and two storey.
<i>Siting & Setbacks</i>	Houses generally well set back from and elevated above street
<i>Roofs</i>	Traditional pitched roofs, includes a number of steeply pitched gabled roofs.
<i>Materials</i>	Walls predominantly face brickwork, some stucco. Terracotta tiles and slate roofing.
<i>Detailing</i>	Predominantly timber decoration to verandahs, gables etc.
<i>Verandahs & Balconies</i>	Front verandahs integral to each of the architectural styles which are represented in the area.

<i>Carparking</i>	Steep topography allows for garages to be provided within a retaining wall, below the level of the house.
<i>Fences</i>	Fence design varies according to style of dwelling and contributes to the quality of the setting. Many sandstone fences.

4.4.4 Guidelines for Change

Alterations & Additions

Rear additions should not be prominent in the streetscape nor comprise the integrity of the original roof. As the dwellings are on generous blocks, it is generally feasible to increase the floor space with a single storey rear addition, without detracting from its garden setting of the dwelling

4.5 Gordon Square Heritage Conservation Area

A unique precinct of nineteenth century workers housing including several fine terraces

Located in the suburb of Randwick, it comprises a rectangular area generally bounded by Gordon Street in the north, Waverley Street in the west, and Sydney and Hodgson Streets in the south.



4.5.1 What is the area's significance?

Aesthetic Significance

The Gordon Square heritage conservation area is unique in Randwick for its unusual street and subdivision layout. The centre block development, with its narrow streets and small lots, was an inventive attempt to maximize yields from subdivision.

The housing stock is an interesting mix of small and large terraces, semi-detached, single storey row houses and freestanding cottages. The mixture of periods and styles, from Victorian to Federation, results in a remarkably varied streetscape for such a small area. The combination of street layout and architecture produces an intimate scale and some interesting internal vistas, enhanced by the small park at the corner of Gordon and Randwick Streets.

Despite intrusions by a number of Post-War flat buildings, and some unsympathetic alteration to older houses, the area retains several reasonably intact period buildings. Most notable are the fine terraces on Gordon and Waverley Streets. The stepping of the Gordon Street terraces with the topography, and the projecting boundaries, produce a particularly impressive streetscape.

Historic Significance

The Gordon and Waverley Street terraces are also of special historical significance as examples of nineteenth century workers'

housing. The terraces have a special connection with Randwick Racecourse, one of the oldest and most enduring institutions in the area. The terraces are individually listed as heritage items.

Although the area developed later than Struggletown, it retains a greater degree of integrity and its streetscapes remain unmistakably Victorian and Federation in character.

Social Significance

The precinct is now the best surviving example of early workers' housing in Randwick.

The subdivision layout has produced a quiet enclave with a strong sense of identity.



4.5.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Speculation and promotion
- Suburbanisation

The following themes are indirectly represented:

- Modifying the landscape
- Transport and communications

4.5.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

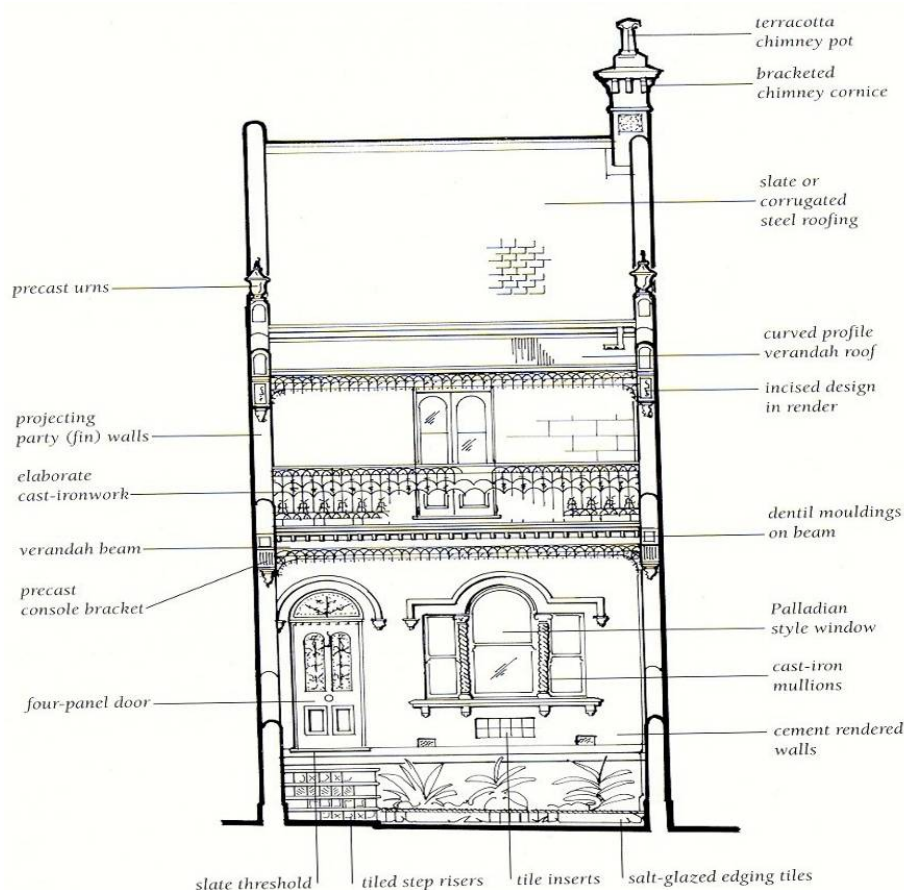
These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

Subdivision	Unusual street and subdivision layout with narrow streets and small lots.
Scale & Form	Single storey and two storey. Mixture of small and large terraced dwellings, as well as detached and semi-detached cottages.
Siting & Setbacks	Minimal or zero front setbacks.
Roofs & Chimneys	Includes both pitched roof forms and skillion roofs with parapets.
Materials	Walls are painted stucco, originally in consistent colour schemes, some face brickwork.

	Generally corrugated iron roofs.
Detailing	Cast iron decoration to verandahs and balconies.
Verandahs & Balconies	Projecting upper floor balconies contribute to an impressive streetscape
Carparking	Narrow lots without rear lanes do not allow for on site carparking.
Fences	A number of the terraces are built to the street alignment, so that dwellings do not have front fences and front gardens. Where fencing exists it is predominantly open metal or timber fencing.

4.5.4 Guidelines for change

The Gordon Square heritage conservation area includes both single storey and two storey buildings. Rear additions should not be prominent in the streetscape nor comprise the integrity of the original roof. The attached dwellings were originally of modest size and have generally been subject to subsequent rear additions. Further changes should be consistent with the scale and form of surrounding rear wings.



ITALIANATE, CIRCA 1880

Typical Victorian terrace façade detailing

Sourced from "Australian House Styles". Maisy Stapleton & Ian Stapleton. Flannel Flower Press Pty Ltd. 1997.

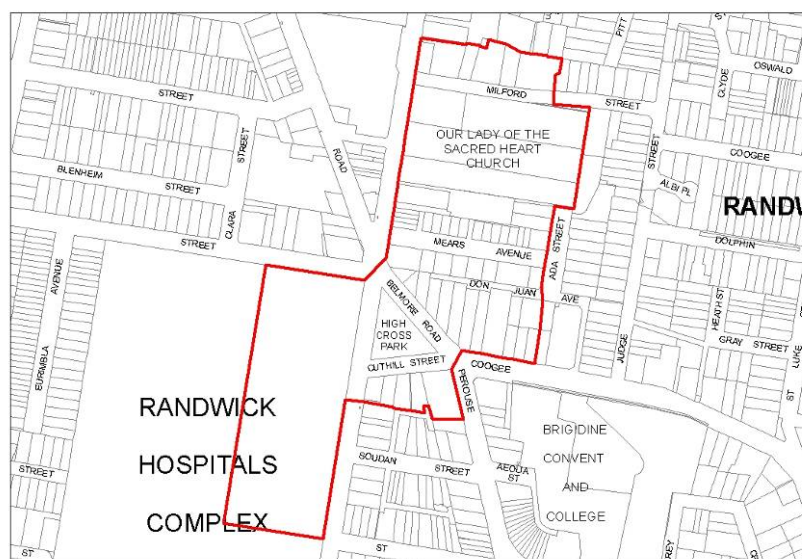
Carparking

On site carparking is generally not able to be provided due lack of rear lane access, narrow width of properties.

4.6 High Cross Heritage Conservation Area

A major urban space providing a focus for nearby institutional buildings with many important religious and residential buildings in the surrounding area.

The High Cross Conservation Area, within the suburb of Randwick, includes High Cross Park, as well as urban areas to the north-east and south, and part of the Prince of Wales Hospital to the west.



4.6.1 What is the area's significance?

Aesthetic Significance

High Cross Park has aesthetic significance as one of Randwick's major urban spaces. It is a feature in vistas along Belmore Road, Avoca Street, Perouse Road and Coogee Bay Road. The Norfolk Island Pines in the park provide a visual link between the surrounding urban areas.

The sandstone and iron palisade fence and sandstone buildings of the former Superintendent's residence, former Destitute Children's Asylum and former Catherine Hayes Hospital, on the western side of Avoca Street, are part of the urban space formed by the park. The southern and north-eastern boundaries of this space are defined by Victorian, Federation and Inter-War period residential buildings, on Cuthill Street and Belmore Road. The Victorian Filigree style Royal Hotel is on the corner of Cuthill Street and Perouse Road.

In the north-eastern half of the heritage conservation area there are excellent groupings of Victorian and Federation detached and attached houses, and Inter-War period flat buildings. The row of ten Victorian Free Gothic style two storey terraces, Nos 2-20 Mears Avenue, is outstanding. "Nugal Hall", at No 18 Milford Street, is one of Randwick's grandest early Victorian houses. "Ventnor", near the south-east corner of Milford Street and Avoca

Street, is a fine quality Victorian period sandstone house. It is now in the grounds of the Sacred Heart School.

Our Lady of the Sacred Heart Church, on Avoca Street, is an excellent example of a Victorian Free Gothic style church. The church, “Ventnor” to the north, the Victorian period commercial buildings to the south, and the avenue plantings of fig trees, make a major contribution to the streetscape character of Avoca Street.

Visually, the connections to the statue of Captain Cook, and the buildings behind on the corner of Belmore and Avoca Streets, are an important part of the cross-roads character of the precinct.

Historic Significance

The heritage conservation area is located on a ridge in the centre of Randwick. Most of Randwick’s early roads cross or originate from High Cross. The existing buildings around High Cross demonstrate its use as a major civic space, since the foundation of the village of Randwick in the mid-nineteenth century. The sandstone buildings in the grounds of the Prince of Wales Hospital, and the Royal Hotel are the best examples. Our Lady of the Sacred Heart Church is another example of a communal use which was established in the area, due to its central location.

This part of “Randwick Ridge” was one of the first parts of the City to be developed, and was historically the most important. It has strong associations with Simeon Pearce, who first promoted the locality as a prestigious living environment. The residential buildings in the heritage conservation area provide evidence of the subdivision, development and subsequent redevelopment of the area in the Victorian, Federation and Inter-War periods. The heritage conservation area has excellent examples of housing from all three periods.

Social Significance

High Cross is widely recognized by the community as a central and identifying element of Randwick’s historic landscape. High Cross Reserve was an early focal point for social gatherings in the village. Its proximity to the former Destitute Children’s Asylum (now the Prince of Wales Hospital) was also significant. The reserve was used as a drill ground for the Randwick Volunteer Rifles in the nineteenth century, based on English village militia. This reinforced Simeon Pearce’s vision of an idealized English village for the elite of the Colony.

The physical presence of the Hospital marks its continuing importance in the local and regional community. The Royal Hotel is the other major building overlooking the central space.

The streetscape character of the residential parts of the heritage conservation area is also widely appreciated.

4.6.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Speculation and promotion
- Government and institutions
- Promotion of culture, religion and education
- Recreation, entertainment and leisure
- Transport and communications

The following themes are indirectly represented:

- Modifying the landscape
- Industry and commerce
- Suburbanisation

4.6.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

<i>Landscape and public domain elements</i>	Avenue plantings of fig trees within the Sacred Heart Church make a major contribution to the streetscape character of Avoca St.
<i>Scale & Form</i>	Dominated by the imposing scale of the buildings of the former Destitute Children's Asylum, the Royal Hotel and the Lady of the Sacred Heart Church. Also a number of grand two storey houses. Housing predominantly two storeys.
<i>Siting & Setbacks</i>	Wide range of block sizes result in a wide variation in setbacks. Views of the large Victorian period buildings from the streets, across their forecourts and gardens.
<i>Roofs</i>	Traditional pitched roofs.
<i>Materials</i>	Walls of sandstone, stucco, some face brickwork. Slate roofs.
<i>Detailing</i>	Decorative metalwork to verandahs and balconies, cement render detailing.
<i>Verandahs & Balconies</i>	Front verandahs integral to each of the architectural styles which are represented in

	the area.
Carparking	Generous setbacks generally allow for carparking to rear
Fences	Victorian metal palisade fencing.

A conservation management plan should be prepared if any major development is planned for the grounds of the Sacred Heart Church and Primary School. The conservation management plan should develop policies for preservation of significant tree specimens and vistas, as well as the period fabric of the site.

4.6.4 Guidelines for change

Alterations & Additions

Rear additions should not be prominent in the streetscape nor comprise the integrity of the original roof. Additions to terraced buildings should not compromise the integrity of relatively intact rear wings and should be consistent with the scale and form of surrounding rear wings.

Carparking

Where driveway access along the side of the dwelling was available, garages were traditionally provided in the rear yard of the dwelling, and this remains the preferred location. Otherwise an open carport can be provided to the side of the dwelling, set back from the front wall of the dwelling.

4.7 Malabar Headland Heritage Conservation Area

Malabar Headland contains two significant bushland remnants - referred to as the coastal section and the western section. Together, these contain what is probably the largest area of essentially unmodified bushland in Sydney's Eastern Suburbs. The bushland is a significant part of one of two semi-natural corridors between Botany Bay and Port Jackson. The two sections support at least seven distinct plant communities. This diversity of habitats is only matched in the Eastern Suburbs in Botany Bay National Park.



4.7.1 What is the area's significance?

Aesthetic Significance

Malabar Headland demonstrates much of the range of landscapes which originally occurred in the Eastern Suburbs, including coastal rock platforms, sea cliffs and headlands in the coastal section, and sandstone escarpments and aeolian sand dunes in the western section.

Historic Significance

The place includes a World War Two coastal defence site of historic significance, the Boora Point Battery. This is an imposing, purpose built coastal landmark which is important for providing tangible evidence of Australia's coastal defence efforts in the Sydney area during World War Two. The battery features a number of particularly unusual attributes, including a rare example of 6 inch Mark XII gun mountings, a completely underground counter bombardment facility, with gun crew ready rooms, ammunition supply and engine room and a small gauge sunken railway associated with an imposing observation post. The area includes a number of additional sites of cultural heritage value, including World War Two graffiti, and features associated with a significant town service - the south-west ocean outfall sewer.

Social Significance

The battery has particular social significance to World War Two veterans and those involved in its war time operations, or interested in the history of fortifications.

Technical/Research Significance

The vegetation communities of Malabar Headland are of scientific and educational significance because they contain rare examples of coastal communities growing on Pleistocene sand deposits within the Sydney region. These communities have different species composition to those found elsewhere in the Sydney region.

Both the coastal and western sections of Malabar Headland support a high diversity of plant species, with species composition reflecting changes in aspect. At least three hundred plant species occur within the place and only fifty percent of the place's flora is common to both sections.

Eastern Suburbs Banksia Scrub, a nationally endangered ecological community occurs as heath and scrub in the coastal section and as a low woodland in the more protected western section. Eastern Suburbs Banksia Scrub is regarded as of extremely high conservation significance, due to the extent of previous clearing. The community was once common on Quarternary sands in the Eastern Suburbs of Sydney; now less than one percent of the original community remains and is restricted to Malabar Headland and La Perouse.

The western section contains remnants of dunes believed to have been formed as a result of the last major glacial period. These occur adjacent to sandstone outcrops and provide an opportunity to study the place's geomorphological formation.

The place contains the last known population of the once extensive Port Jackson mallee (*Eucalyptus obstans*, formerly *obtusiflora*) in the Eastern Suburbs of Sydney.

Local Aboriginal people in the area used the site for fishing and cultural activities - rock engravings, grinding grooves and middens remain in evidence.

4.7.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Modifying the landscape
- Government and institutions
- Recreation, entertainment and leisure
- Industry and commerce

The following themes are indirectly represented:

- Promotion, culture, religion and education
- Transport and communications

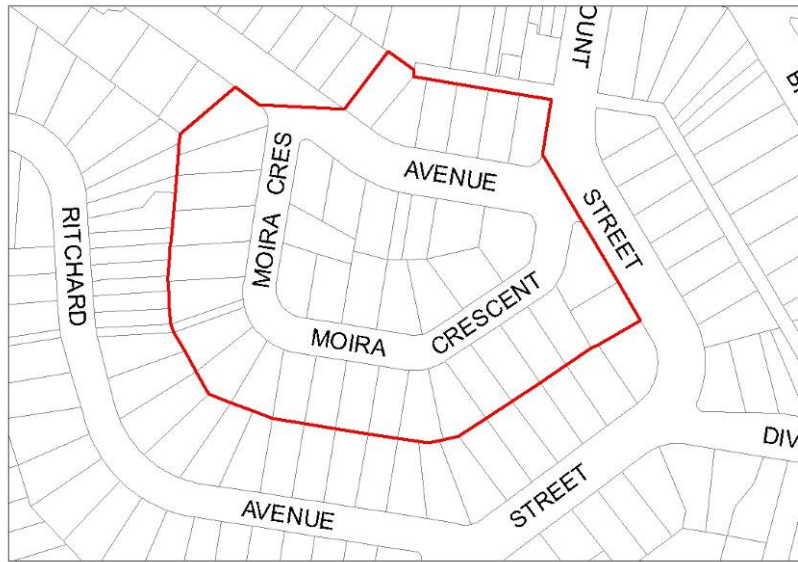
4.7.3 Existing Character Values and Controls

A conservation management plan should be prepared if any major development is proposed within the Malabar Headland Conservation Area. The CMP should develop policies relating to scenic value, landscape features, bushland features, and defence fortifications.

4.8 Moira Crescent Heritage Conservation Area

Randwick's best grouping of Inter-War residential flat buildings.

A hilltop heritage conservation area (partly within the suburb of Clovelly and partly within the suburb of Coogee) includes Moira Crescent as well as part of Marcel Avenue.



4.8.1 What is the area's significance?

Aesthetic Significance

The heritage conservation area has aesthetic significance because of the high integrity of its Inter-War streetscapes. Most buildings are constructed of red or liver coloured face brickwork, which is complemented by the red terracotta tile roofs. The most common building types are detached single storey Inter-War Bungalows and two or three storey flat buildings in Functionalist, Spanish Mission, Art Deco, Stripped or Free Classical or Bungalow inspired styles.

The area includes the best preserved and most consistent grouping of Inter-War flat buildings in the City of Randwick, which were so characteristic of the City's development in that period.

Most properties have dwarf piers face brick boundary fences which allow the gardens in front of the buildings to become part of the streetscape. The landscape quality of the streetscapes is also enhanced by the curved streets and wide nature strips. Some steeper sites have sandstone walling.

The precinct of Inter-War period housing has a close spatial connection to the small commercial centre on Clovelly Road. Most of the shops are two storeys and date from the Inter-War period.

Historic Significance

The existing buildings, lot and street pattern demonstrate the process of the rapid subdivision and development of this part of the Randwick City area in the Inter-War period. This development followed the opening of the Clovelly tram line earlier in the century.

The heritage conservation area is a well preserved example of an entire Inter-War period neighbourhood. The design of the buildings and the range of types are representative of the lifestyles and economic conditions which were current in the Inter-War period.



Social Significance

The heritage conservation area has social significance because its physical qualities are appreciated by its residents. The area continues in its traditional residential and commercial use.

4.8.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Speculation and promotion
- Industry and commerce
- Suburbanisation

The following themes are indirectly represented:

- Modifying the landscape
- Transport and communications

4.8.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

Subdivision	Curved streets and wide nature strips.
Landscape and public domain elements	Streetscapes have a strong landscape quality.
Scale & Form	Consistency of scale, generally two and three storeys.
Siting & Setbacks	Main rooms and balconies of individual apartments oriented to the street.
Roofs	Includes both traditional hipped roofs and flat roofs with parapets.
Materials	Walls of red or liver coloured face brickwork. Red terracotta tiles.
Detailing	Decorative elements in stone, brickwork and cement render.
Verandahs & Balconies	Recessed balconies a design feature of the front elevation.
Garages, carports, carspaces & driveways	Garages often incorporated to the rear of buildings.
Fences	Dwarf pierced face brick front boundary fences allow front gardens to become part of the streetscape.
Gardens & garden elements	Private rear garden accessed by back stairs

4.8.4 Guidelines for Change

Alterations & Additions

Balcony additions to residential flat buildings can be provided to the rear of residential flat buildings to provide outdoor living areas and take advantage of views. Additional balconies should not be provided to the front or visible side elevations of buildings. Additional balconies should be part of a comprehensive scheme for the whole rear elevation, rather than for a single apartment in isolation.

Carparking

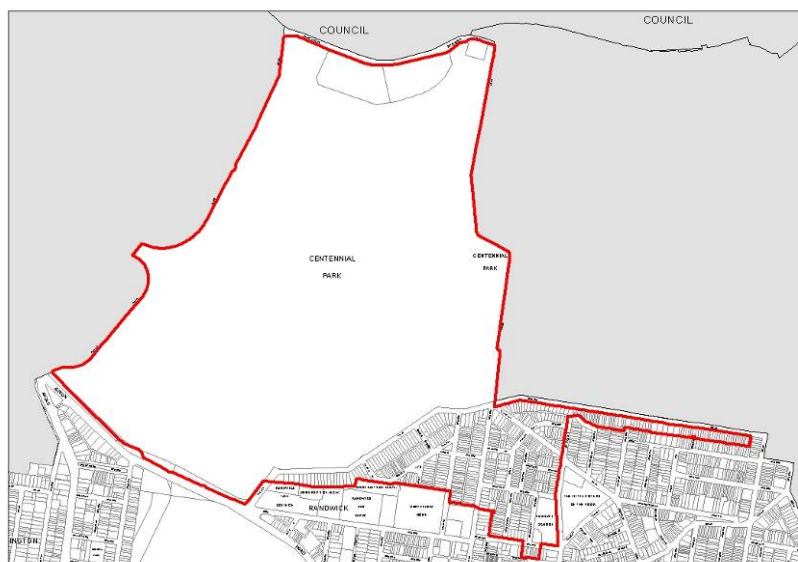
Garages were traditionally provided in the rear yard of the dwelling or residential flat building, and this remains the preferred location. Otherwise an open carport can be provided to the side of the dwelling, set back from the front wall of the dwelling.



4.9 North Randwick Heritage Conservation Area

Federation and Inter-War housing associated with the development of Centennial Park.

A large area to the south of Centennial Park, originally reserved for water supply purposes, delaying its release for housing.



4.9.1 What is the area's significance?

Aesthetic Significance

Centennial Park is one of Sydney's largest expanses of urban parkland and provides a much needed breathing space for Sydney's inner eastern suburbs. The park has high scenic and landscape significance. It has a strong rural character, but also incorporates remnant natural vegetation, formal garden areas, tree lined avenues, playing fields and formal and informal water features. The melaleuca wetlands are a distinctive and important character element. Notable architectural elements include two residences, several kiosks and shelters, magnificent sandstone entry gates, the perimeter palisade fence, reservoir fences and steps, statues and monuments and an amphitheatre.

The North Randwick heritage conservation area is significant for its persistent, strongly Federation streetscapes. The imposition of a varied subdivision pattern, on the north facing slopes adjoining Centennial Park, has created numerous internal views and vistas of special interest. The combination of street pattern, topography and native and cultural plantings, set off the areas original buildings to good advantage.

The heritage value of the area largely derives from its Federation and Inter-War housing, its predominantly single storey scale, face brick construction, dominant slate and terra cotta tiled roofs and well established cultural plantings. The mixed building stock adds to the area's interest, ranging from larger Federation houses on Darley Road to small semi-detached on Dangar Street. Whilst

many buildings have been substantially altered, there has been, very little redevelopment relative to other parts of Randwick. Most buildings and streetscapes retain their essential period character.

Historical Significance

Centennial Park has considerable historical significance. It originated as a Common, set aside by Governor Macquarie and later become the main source of Sydney's water supply. It was dedicated as a park to celebrate the first centenary of European settlement in Australia. It was also the focus of Sydney's celebration of Federation in 1901. Busby's Bore and the lakes persist as important visual reminders of the area's historical role as a water supply catchment.

The consistency of the architecture in North Randwick is partly a reflection of the unusual historical circumstances which delayed the release of the area for housing. Most of the area originally formed part of the Sydney Common. For many years it was reserved for water supply purposes. The eventual residential release saw the area develop reasonably quickly, despite the slow start in the 1890s recession. As a consequence, most housing dates from the early twentieth century. There are a few particularly notable examples of Victorian housing, as well as more numerous Inter-War houses. The latter filled in remaining empty lots in the 1920s and 30s.

The street and subdivision pattern is Victorian in origin, though the area developed over a long period. This has produced an interesting juxtaposition of Federation and Inter-War housing on often narrow Victorian allotments. There was a resultant modification of standard house designs to suit narrow frontages.

The continuing physical and historical connection with Centennial Park is important and gives special significance to houses fronting Darley Road. These buildings tend to be larger and grander, with more generous allotments. These allotments were created to help fund the establishment of Centennial Park.

The area still retains a few horse stables connected with the historic racing industry in the area. There are also historical and physical connections with the adjoining former tramway workshops.

Social and Historical Significance

Centennial Park has a high social significance at a regional level. It remains one of the most popular recreation areas in the Sydney region.

Scientific Significance

Centennial Park has special scientific significance for its natural values. It preserves remnant native vegetation and provides important wildlife habitat. The melaleuca wetlands are regionally significant.

4.9.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the conservation area:

- Modifying the landscape
- Government and institutions
- Recreation, entertainment and leisure
- Suburbanisation

The following themes are indirectly represented:

- Transport and communications

4.9.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings. New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

Subdivision	Lots of consistent depth, but varying width.
Scale & Form	Predominantly single storey and two storey, with higher residential flat buildings in the former quarry site. Detached, semi-detached and attached cottages.
Siting & Setbacks	Minimal front setbacks generally, greater setbacks for larger lots fronting Centennial Park.
Roofs	Traditional pitched roofs, hipped and gabled forms.
Materials	Walls of face brickwork, smooth faced red or liver bricks, often with stone footings and stone trim elements. Marseilles pattern terracotta tiles and slate roofing.
Detailing	Predominantly timber decoration to verandahs, sunhoods, gables etc.
Verandahs & Balconies	Front verandahs provide depth to facades, an interface to the street and contribute to dwelling character.
Carparking	Generally accessed from rear lanes.
Fences	Many low brick fences, some sandstone and wrought iron fencing.



4.9.4 Guidelines for change

Alterations & Additions

Part of the heritage significance of the area is its predominantly single storey scale. Single storey rear additions are therefore preferred so as not to compromise this aspect of significance. The dwellings are generally modest workers cottages on small blocks, and in order to increase the size of the dwelling, may be necessary to provide some upper level floor space. The bulk and prominence of any upper level addition should be minimised however. Any upper level addition should be set well to the rear to minimise streetscape visibility and retain the integrity of the original roof.

Outbuildings to the Rear

The scale and bulk of outbuildings to the rear should not dominate the main building on the site. Outbuildings should be of a 1 ½ storey scale with upper floor accommodation within available attic space. The maximum wall height of outbuildings is to be 3.5m and roof pitch is to be consistent with that of the main building on the site.

Carparking

Most of the properties within the conservation area have rear lane access allowing for carparking at the rear of the site. Where rear lane access is available, carparking to the front or side of the property will not be supported.



Additions should utilise attic roof forms located to the rear of the main ridgeline



Additions set back from the existing ridgeline retain the form and detail of the existing residences. Use of simple roof forms and subtle detailing further enhances the relationship of new and existing works.

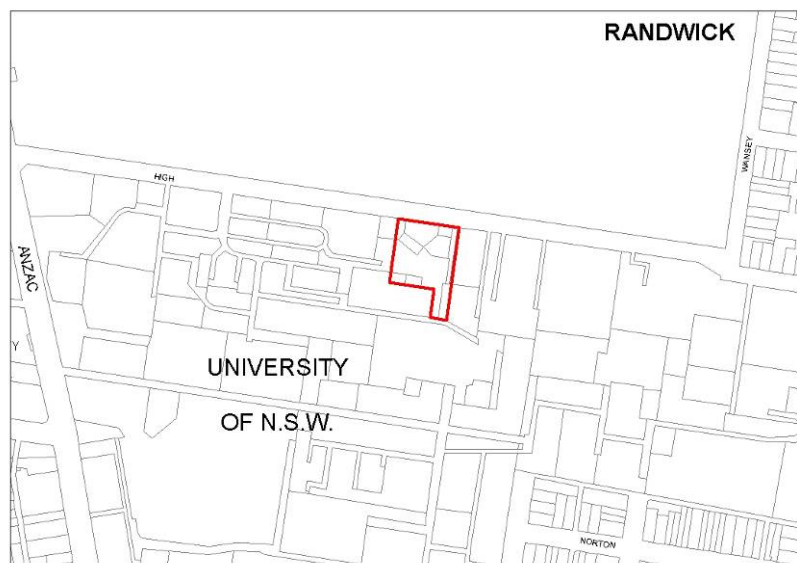


Additions to the rear of residences on corner sites should provide greater emphasis to the secondary street frontage.

4.10 Old Tote/Fig Tree Theatre (UNSW) Heritage Conservation Area

A group of buildings which date from the use of the site as Kensington Racecourse. The Fig Tree Theatre building has also been used as immigration barracks and the home of NIDA.

The Old Tote/Fig Tree Theatre heritage conservation area is on the south side of High Street, within the Kensington campus of the University of NSW. It includes three buildings which pre-date the foundation of the University, the Fig Tree Theatre, the White House and the Old Tote.



4.10.1 What is the area's significance?

Aesthetic Significance

The precinct's three period buildings are situated in an open space, surrounded by large fig trees and other campus buildings. The orientation of the Fig Tree Theatre and the White House, diagonal to the standard north/south building grid, identifies them as earlier structures. The orientation is also aesthetically distinctive. The space which is formed by the trees and the three buildings has visual qualities which are rare on the university campus. This quality is created by the traditional gabled and verandahed building forms, nestled between the larger masses of the fig trees.

The White House and the Old Tote have considerable individual aesthetic significance as rare examples of early Federation racecourse buildings. The design and detail of the White House verandah is outstanding.

The row of fig trees leading from the High Street entry gate, is an important point of arrival and orientation for the university campus.

Historic Significance

The White House, the Old Tote and the fig trees have historical significance as surviving evidence of the use of the university site as Kensington Racecourse, from 1893 to 1941. The orientation and location of the buildings and trees remain indicative of the layout of the racecourse.

The Fig Tree Theatre also provides evidence of the use of the site as an immigration barracks in the late 1940s.

The theatre was the original home of the National Institute of Dramatic Art (NIDA) prior to its relocation to the western side of Anzac Parade.

Social Significance

The heritage conservation area has social significance for the university and the wider community. It provides evidence of the historical continuity of human occupation and use of the site, which is absent in other parts of the campus.

4.10.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Promotion of culture, religion and education
- Recreation, entertainment and leisure

The following themes are indirectly represented:

- Modifying the landscape
- Government and institutions

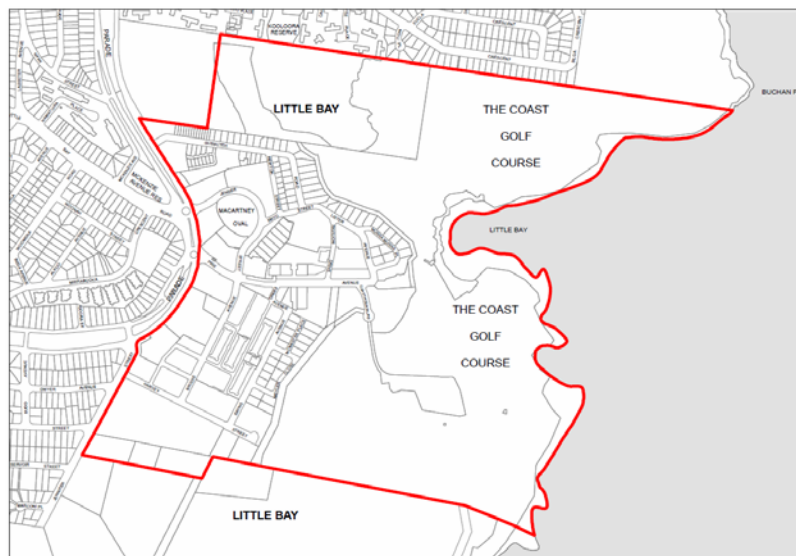
4.10.3 Existing Character Values and Controls

A conservation management plan should be prepared if any major development is planned for the grounds of the University. The conservation management plan should develop policies for preservation of open space character, interface with surrounding development and adaptive reuse of period buildings.

4.11 Prince Henry Hospital Heritage Conservation Area

A diverse complex of buildings in a coastal landscape, the hospital played an important role in the treatment of infectious diseases from the 1880s until 1986. The site is important to Aboriginal people and to the many former staff and patients of the hospital, and contains a considerable archaeological resource.

The former Prince Henry Hospital is located in the suburb of Little Bay.



4.11.1 What is the area's significance?

Historic Significance

The Prince Henry site was the most important site for the treatment of infectious diseases in New South Wales from its inception in the 1880s, when, as the Coast Hospital, it became the first public hospital in New South Wales in the post-convict era. The Hospital played a prominent role in treating and overcoming infectious diseases and later as a general hospital and teaching hospital for the University of NSW, until its closure was announced in 1988. Its isolation led to the establishment of the first ambulance service in New South Wales from within its grounds.

Aesthetic Significance

The location of the Hospital by the sea, the design and siting of buildings in a spacious open setting, their relationship with each other and the layout of the site itself, created an aesthetically distinctive complex with Pine Avenue as its central axis. The buildings and landscape provide evidence of the prevailing attitude to health care during a number of important phases of development. The Flowers Wards and the remains of the early infectious disease hospital, including Ward 16, the former Nurses Quarters, the former Nurses Dining Hall/Nurses Lecture Hall, the Bush Wards and the site of the Male Lazaret, demonstrate the isolation required for the treatment of infectious diseases and early

attitudes to public health, which saw health benefits in being by the sea.

The architectural character of these early buildings contrasts with later buildings built after 1934, after the Hospital changed its name to Prince Henry and a new phase of expansion began. The larger scaled Heffron and Delaney Medical Ward Buildings, the Matron Dickson Nurses Home, and the McIlrath Pathology Building provide evidence of changing practices in medical care and staff accommodation, as well as contributing visually to the ambience of the place. A range of ancillary buildings, such as the former Water Reservoir, the Memorial Clock Tower, Water Tower, and 'Hill Theatres' (Operating Theatres No.2 and No.3) add visual as well as technological interest.

A number of cultural landscape features including the Norfolk Island Pine trees along Pine Avenue, plantings of palms, New Zealand Christmas trees and banksias, rock cuttings, retaining walls, early road alignments and sandstone kerbs, provide evidence of human intervention in this coastal landscape. The North Cemetery, although separated from the present hospital site, is an important component of the cultural landscape.

Social Significance

The history of the Prince Henry site is interwoven with Aboriginal people and wider communities, many of whom were patients or worked on the site and still visit it. The site is valued by Aboriginal people for its historical associations and Aboriginal occupation prior to European occupation, as well as its associations with Aboriginal people treated for infectious diseases. The Prince Henry site is also important to many of the thousands of nurses, doctors and administrators who value their training and achievements at the hospital, which gained them a high reputation throughout New South Wales and Australia. Many former nurses have remained actively associated with the site, and have created a museum to conserve its history and artefacts. They come to the site to enjoy its ambience and continue to use the Interdenominational Australian Nurses War Memorial Chapel, built in memory of service nurses, many of whom died at sea. (Godden Mackay Logan, May 2002)

Technical/Research Significance

A coastal landscape of high scenic and scientific value is enhanced by the beach, headlands and pockets of indigenous vegetation. A geological exposure area has research and educational value relating to the development of the present coastline and to the climate and vegetation of the area twenty million years ago.

Much more about the history of the Prince Henry site is yet to be learnt from the rich array of known and potential Aboriginal and historical archaeological sites, from further research and archival recording, and from the oral histories of those who worked or trained there. The Prince Henry site contains both identified archaeological features and areas of known archaeological potential. These elements are part of the total physical record of the first post-convict era hospital in New South Wales.

The physical evidence at the site documents, and therefore provides opportunities to investigate, evolving medical practice associated with the treatment of infectious disease. In a wider context the site reflects changes and development in state health policy for more than 100 years. The research value of the site's historical archaeological resource is only moderate, however, because of the physical impact of ongoing development. Although the extant archaeological resource is therefore not intact, and there are extensive documentary sources available, the place has potential to yield information about site use and occupation. The spectrum of archaeological features across the site also provides a rare opportunity to use archaeology as an investigative tool on a wide scale. The historical archaeological resource at the Prince Henry site also contributes to the total ensemble providing an indication of former activities or features. They are therefore part of the site's wider social and historic value and have educational and interpretive potential (Godden Mackay Logan, 2002).

4.11.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Modifying the landscape
- Government and institutions
- Evolution of culture- religion and education

The following themes are indirectly represented:

- Transport and communications
- Suburbanisation

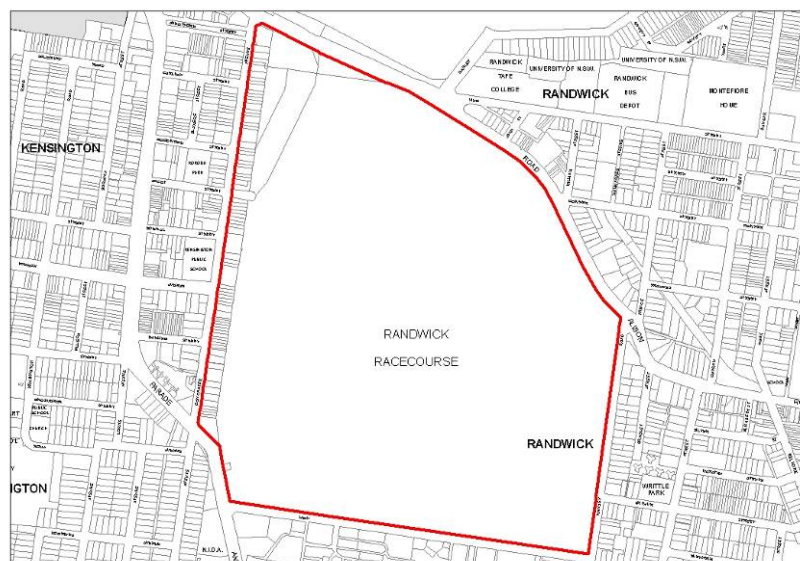
4.11.3 Existing character values and controls

Refer to the site specific controls for Prince Henry Site, Little Bay in Part E of this DCP.

4.12 Racecourse Precinct Heritage Conservation Area

A number of early buildings surround the historic track itself, while Doncaster Avenue includes some fine groups of nineteenth and twentieth century houses.

The Racecourse Precinct includes Royal Randwick Racecourse and all properties on the eastern side of Doncaster Avenue., Kensington, which adjoin the racecourse at the rear.



4.12.1 What is the area's significance?

Aesthetic Significance

The Racecourse, together with Centennial Park and Moore Park, further to the north and east, forms one of the largest areas of open space in the eastern suburbs of Sydney.

The Racecourse provides an outlook for parts of the suburb of Randwick on higher ground to the east, and the University of NSW South Wales, to the south. The major built features of note are the stands, particularly the 1910 Members Stand, and the oval shaped course. Other racecourse buildings are located behind the stands in the north-west corner of the site, and close to the street frontages. The large modern grandstand is out of scale with its older neighbours but has become a local landmark.

The frontages to Alison Road, Wansey Road and High Street have avenue plantings of Port Jackson and Moreton Bay Figs, Plane trees and Brush Box, which enhance the visual amenity of these streets. In the north-west corner of the site there are Canary Island Date Palms and formal garden plantings.

The residential properties on the eastern side of Doncaster Avenue form a straight street frontage almost a kilometre in length, with a predominantly Victorian and Federation period character. This housing is representative of the larger Kensington precinct, on either side of Anzac Parade.

The most common building types are single storey Federation period detached and semi-detached houses. These mostly stand on narrow lots and have consistent setbacks and verandah and roof designs. There are also a large number of Victorian period one and two storey houses, and two storey terraces. The unity of the streetscape is disturbed to some degree by Post-War period three storey flat buildings, but to a lesser degree than the remainder of the historical Kensington precinct.

Historical Significance

The racecourse is historically significant for its early reservation as an official racecourse, in 1833. It has been in continuous use as a racecourse since the first regular meetings held in 1863. This is probably the longest period of any racetrack in Australia. The racecourse retains much original fabric from the nineteenth and early twentieth centuries. It is the best preserved Victorian and Federation period racetrack in Sydney.

Randwick Racecourse developed in parallel with the present City of Randwick. The racecourse, and the many stables and workers' cottages in the surrounding area, demonstrate the process of development of the racing industry, and its importance to the commercial life of the district. This includes housing and stables on some of the properties fronting Doncaster Avenue.

The residential properties on Doncaster Avenue demonstrate the process of suburbanisation which took place in the late nineteenth and early twentieth centuries. This was the first part of Kensington to develop, and has a higher proportion of Victorian housing as a consequence. The housing (Victorian/Federation) is representative of the first stage of Kensington's suburban development, prior to West Kensington (Federation/Inter-War). The street also has a close connection with the racecourse and the racing industry.

Social Significance

Randwick Racecourse is held in high esteem by members of the Australian Jockey Club, the racing industry, and past and present race-goers. Royalty has visited the facility on several occasions, giving the course special prestige in Australian thoroughbred racing. The physical environment of 'Royal Randwick' is an important part of the experience of a race day.

Doncaster Avenue shares a close physical and visual link with the racecourse. It is a major route for pedestrian access to the racecourse. Doncaster Avenue is also appreciated by the community as part of an important local period landscape and streetscape.

4.12.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Modifying the landscape
- Government and institutions
- Recreation, entertainment and leisure

The following themes are indirectly represented:

- Speculation and promotion
- Transport and communications
- Suburbanisation

4.12.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings. New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP, and the site specific controls for Royal Randwick Racecourse in Part E.

<i>Subdivision</i>	Narrow lots.
<i>Scale & Form</i>	Major built features are the stands within the Racecourse. Single storey detached and semi-detached cottages, two storey detached houses and terraces, some intrusive 3 storey buildings. Historic significance of stable buildings at the rear of sites.
<i>Siting & Setbacks</i>	Consistent setbacks.
<i>Roofs</i>	Traditional pitched roofs, many with gabled forms.
<i>Materials</i>	Walls predominantly face brickwork, some painted stucco. Walls that are painted stucco, originally in consistent colour schemes. Terracotta tiles and slate roofing.
<i>Detailing</i>	Predominantly timber decoration to verandahs and gable screens.
<i>Verandahs & Balconies</i>	Federation detailing of front verandahs contributes to the character of the area
<i>Carparking</i>	Narrow lots without rear lanes generally do not allow for on site carparking.
<i>Fences</i>	Low brick fences and simple picket fences typical.

4.12.4 Guidelines for change

A Conservation Management Plan has been prepared for the Randwick Racecourse and should be addressed in any development proposal for the site.

Alterations & Additions

Rear additions should not be prominent in the streetscape nor comprise the integrity of the original roof. Rear additions to attached and semi-detached cottages should be consistent with the scale and form of surrounding rear wings.

Original stables

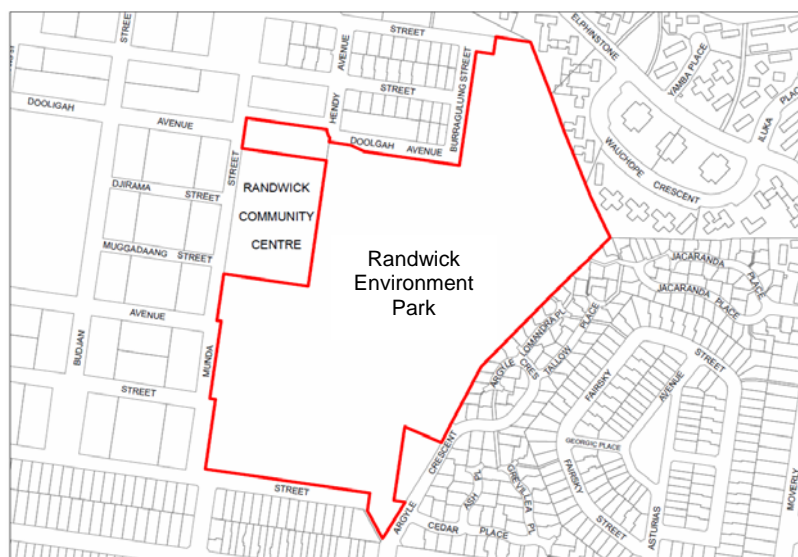
There are a number of original stables building in the area, associated with the racecourses which were located in the vicinity. These should be retained and conserved wherever possible.

Carparking

Where sites are of sufficient width, a rear garage or a side carport can be provided (set back from the front of the dwelling). On site carparking may not be able to be provided on narrow sites with minimal front setbacks.

4.13 Randwick Environment Park Heritage Conservation Area

Comprises 13 hectares of parkland, bushland and wetland containing 92 species of indigenous plants. It includes the endangered Sunshine Wattle and 3.6 hectares of Eastern Suburbs Banksia Scrub, which is an endangered ecological community. The bushland and wetland provide valuable habitat for a range of fauna.



4.13.1 What is the area's significance?

Aesthetic Significance

The heritage conservation area has considerable scenic value, providing an attractive natural backdrop for many views in the local area.

Historic Significance

Some historical significance is attributed to the use of the land by the military since the late 1800s, and its continuity as a large land holding within Randwick. The park was originally part of the Randwick Army Barracks with the eastern part used during World War II as the site for storage sheds.

Technical/Research Significance

The vegetation structure, species richness and natural regeneration of seedlings varies greatly within Randwick Environment Park. Since 1995, 92 indigenous plant species have been recorded within Randwick Environment Park. Of these, 27 species are considered to be characteristic of Eastern Suburbs Banksia Scrub. This is relatively high, given its location within the northern and more densely developed part of Randwick City. The high number of species is partly attributable to the variety of habitats present on the site. One of the species present, *Acacia terminalis* sub.sp. *terminalis*, has been listed as a 'threatened species' under both the TSC and EPBC Acts. Twelve other species recorded on the site have local significance in Sydney's Eastern Suburbs.

Eastern Suburbs Banksia Scrub, is an endangered ecological community of state and national significance, occurring on the nutrient poor sands between Botany Bay and Port Jackson. It has been reduced to 1% of its former extent due to fragmentation, clearing, urban development and weed invasion, and is likely to become extinct unless factors threatening its survival cease. Eastern Suburbs Banksia Scrub is thus regarded as of extremely high conservation significance.

The Randwick Environment Park contains an ephemeral wetland which contains some aquatic flora species, the presence of which is influenced by periods when water is present in the wetland. The wetland is a window to the groundwater table forming part of the extensive Botany Aquifer, and drains an urban catchment of 89 hectares. The wetland has a sparse to open cover of vegetation, reflecting both past disturbance and extended periods of dryness over recent years.

Although degraded as a result of past clearing, some of the vegetation present in the Randwick Environment Park has considerable significance as fauna habitat. The park supports 4 main habitat types: shrub land; exotic grassland; wetland; and rock outcrops. The shrub land provides shelter and food for small animals such as birds and reptiles, while the grassland supports birds such as Australian magpies, galahs, and masked lapwings. The ephemeral wetland has some periodic habitat values for waders, waterfowl and frogs. In a 2002 study, a Great Egret (a migratory water bird listed under the Commonwealth's EPBC Act 1999) was observed foraging within the shallow waters of the wetland. However, no Great Egret roosting colonies have been recorded on or in the vicinity of the Randwick Environment Park. The small areas of rock outcrops provide shelter for some reptile and frog species.

4.13.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the conservation area:

- Modifying the landscape
- Government and institutions
- Industry and commerce

The following themes are indirectly represented:

- Recreation, entertainment and leisure

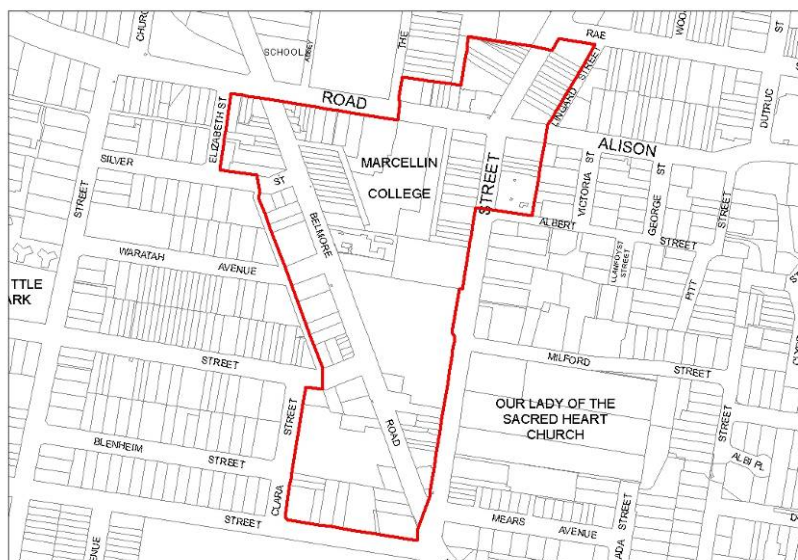
4.13.3 Existing Character Values and Controls

Randwick City Council manages its remnant areas of Eastern Suburbs Banksia Scrub, including that within Randwick Environment Park, in accordance with relevant management documents, in order to restore remnant vegetation and to enhance and expand native fauna habitat. These documents include a Recovery Plan for the Conservation of Eastern Suburbs Banksia Scrub; and the Best Practice Guidelines for the Management of Eastern Suburbs Banksia Scrub, both published by the NSW Office of Environment and Heritage. Volunteer Bushcare maintenance works are carried out in accordance with the Recovery Plan and Management Guidelines.

4.14 Randwick Junction Heritage Conservation Area

A largely intact traditional commercial centre with many good examples of buildings from the Victorian, Federation and Inter-War period.

The Randwick Junction heritage conservation area is centred on the Randwick Junction commercial centre. It is generally bounded by Belmore Road, Alison Road and Avoca Street, Randwick.



4.14.1 What is the area's significance?

The Randwick Junction heritage conservation area is the only heritage conservation area within the City of Randwick that is focused on a commercial centre. It retains a coherent streetscape character of nineteenth and early twentieth century buildings. Within the heritage conservation area there are two distinct groupings of commercial buildings. These are Belmore Road and the "Coach and Horses" grouping (centred on the intersection of Alison Road and Avoca Street).

Aesthetic Significance

The heritage conservation area is a good and generally intact example of a traditional commercial "strip" (linear) style centre. Buildings are typically two or three storeys and are generally built to the street alignment, for the full width of the allotment. The urban spaces formed by the buildings impart a strong linear character, particularly along Belmore Road. There are many good examples of building from the Victorian, Federation and Inter-War periods.

In the Coach and Horses grouping the Victorian Italianate style is dominant, interspersed with other later styles such as Federation Freestyle. There are significant groups of these buildings on the south-west corner of Avoca Street and Alison Road, as well as on the east side of Avoca Street, north of Alison Road. There are

excellent examples of Victorian Italianate commercial and residential buildings on Alison Road, between Avoca Street and Belmore Road as well as three outstanding Victorian Italianate residences on Avoca Street, adjacent to Marcellin College.

The single most striking building within the heritage conservation area is the former Star and Garter Inn, at the corner of Avoca Street and Belmore Road, notable for its distinctive castellated sandstone tower and the adjacent statue of Captain James Cook. The pairing of the Coach and Horses Hotel and the former Post Office, located on diagonally opposite corners of the intersection of Alison Road and Avoca Street is also prominent.

Historic Significance

Randwick Junction has been the centre for commercial activity in Randwick since the establishment of the village in the mid-nineteenth century. The buildings in the heritage conservation area provide physical evidence of the process of growth and development of Randwick as a commercial centre. The heritage conservation area is at the intersection of three roads that have been the principal routes for travel between Randwick and other parts of Sydney since the establishment of the suburb. The first Randwick-Sydney horse omnibus and the first mail service were established on the site of the Coach and Horses Hotel in 1859, reflecting a strong relationship between Randwick Junction and early transport and communications in the district.

Many of the important sites in the early development of the commercial area were at the street intersections. The former Star and Garter Inn (circa 1859) was one of the earliest hotels in Randwick. No.119 Belmore Road, at the corner of Short Street, was the site of the post office from 1878 to 1897.

The most rapid period of growth began after the introduction of steam trams in 1881. The 1880's were a period of large scale subdivision in Randwick. In the Federation and Inter-War periods development of the commercial centre continued. There was considerable expansion on the western side of Belmore Road. Earlier, less intense residential uses, such as "Sandgate" at No.128 Belmore Road, were displaced.

The foundation stone for Randwick Post Office 1897, is on the northwest corner of Alison Road and Avoca Street. This building provides historical evidence of the importance of the heritage conservation area as a centre of communication and reflects the connection to government and institutions within Randwick.

Social Significance

The heritage conservation area continues as Randwick's main commercial centre, developing around the earliest hotels in Randwick, namely the former Star and Garter Inn and the Coach and Horses Hotel. The Victorian, Federation and Inter-War buildings provide a sense of historical continuity throughout the centre and the streetscape character of the conservation area are well recognized throughout the community. In 1923, the Catholic Church acquired the Brisbane Villa Estate on Alison Road for a monastery. This site later became the Marcellin College, an

important and enduring centre for education within the local community.

When considered further in the context of the two adjacent conservation areas of St Judes and High Cross, with their significant administrative, cultural and institutional roles, Randwick Junction may be seen as the focal point of the city, as many of the enduring symbols of Randwick's development are located either within or immediately adjacent to the conservation area. Important community services such as mail services and government savings bank (initially operated from the post office), as well as educational and commercial activities have been centred in and around Randwick Junction for as long the suburb has been established.

4.14.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Industry and commerce
- Promotion of culture, religion and education
- Recreation, entertainment and leisure
- Transport and communications

The following themes are indirectly represented:

- Speculation and promotion
- Government and institutions
- Suburbanisation

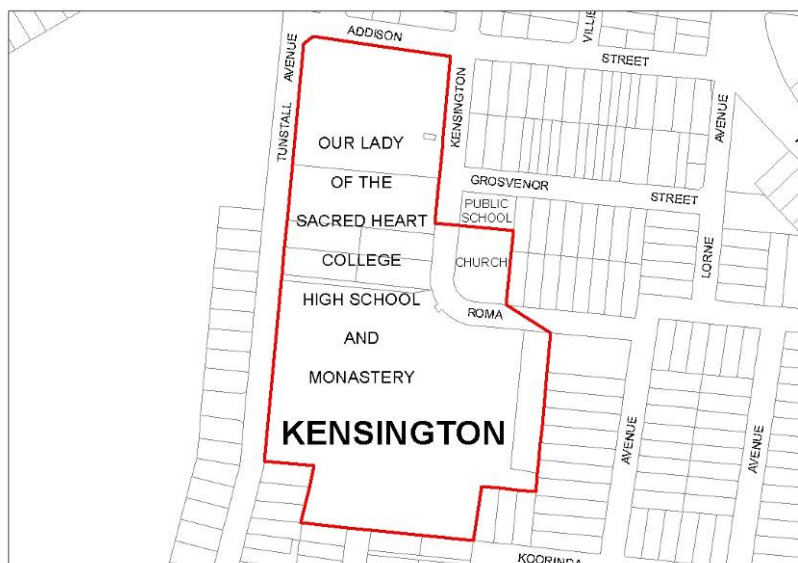
4.14.3 Existing character values and controls

Refer to the site specific controls in Part D of this DCP.

4.15 Sacred Heart Heritage Conservation Area

A landmark church precinct which includes the Sacred Heart Monastery and Chapel, Convent and Our Lady of the Rosary Church.

A large area of church-owned land bounded by Addison Street in the north, and Tunstall Avenue in the west and extending east of Kensington Road and south of Roma Avenue, Kensington.



4.15.1 What is the area's significance?

Aesthetic Significance

The Sacred Heart precinct is dominated by a notable group of brick religious buildings with tile roofs, mostly Federation Gothic style, located on a prominent knoll in the western half of the City of Randwick.

The buildings are highly visible from many parts of Randwick City, due to their height, elevated siting, and roof turrets and spires. The Monastery and Chapel are located on the axes of two streets, Kensington Road and High Street. The buildings' appearance is enhanced by their setting in spacious grounds, with large areas of lawn, large copses or Moreton Bay figs, plantings of palms, camphor laurels and other mature trees, and brick walling on most street frontages.

Historic Significance

The Monastery and Chapel, Convent and Church have historic significance. They demonstrate the pioneering role of the Catholic Church in the early development of this part of the City of Randwick, and the contemporary religious and institutional practices of the Church. The grouping has been in continuous use since the completion of the monastery, convent and school in 1897.

The site has significance as an early land grant to Samuel Terry, a convict who became the Colony's first millionaire. The monastery and convent site have an association with the flour mill and early industries of the Lachlan Mills Estate. These preceded the area's dedication as a water catchment. The boundaries of Terry's grant are still reflected in the street pattern. This part of the grant was favoured by its elevated position, above surrounding wetlands, and made it the logical site for the first development of the area.

Social Significance

The Sacred Heart precinct has particular social significance for the school community and other current and former users of the site. The precinct is readily identifiable by the wider Randwick community as a landmark element in the suburb of Kensington. The elevated position was the original reason for the site's selection.

4.15.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the conservation area:

- Modifying the landscape
- Government and institutions
- Promotion of culture, religion and education

The following themes are indirectly represented:

- Industry and commerce
- Transport and communications
- Suburbanisation

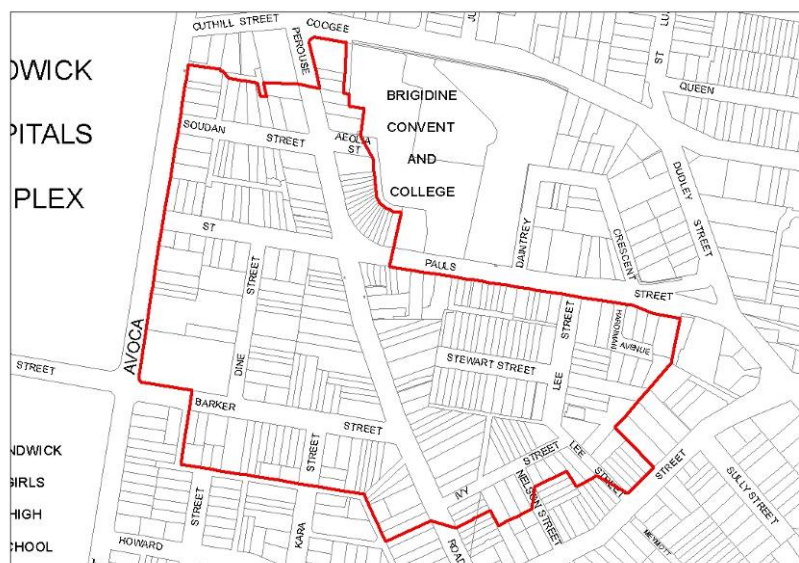
4.15.3 Existing Character Values and Controls

A conservation management plan for the church/school precinct should be prepared if any major development is planned by the Church. The conservation plan should develop policies for preservation of significant garden areas and vistas, as well as the period fabric of the buildings.

4.16 The Spot Heritage Conservation Area

Groupings of nineteenth and twentieth century residential and commercial buildings including the outstanding Art Deco Ritz cinema.

Located within the suburb of Randwick, The Spot heritage conservation area consists of the commercial centre on Perouse Road and St Pauls Street, and surrounding residential areas.



4.16.1 What is the area's significance?

Aesthetic Significance

The Spot is a large precinct exhibiting an interesting diversity of streetscapes. In the commercial centre the facades are mostly two storeys, continuous and built to the street alignments. They create a distinctive urban space, particularly at the curved corner of Perouse Road and St Pauls Street. The most common building styles of the commercial buildings are Victorian Italianate and Federation Free Classical. There are also Inter-War Art Deco style buildings. The Randwick Ritz, at No39 St Pauls Street is an excellent example of an Inter-War Art Deco style cinema.

The residential areas contain representative groupings of buildings from the Victorian, Federation and Inter-War periods.

Residential buildings from the Federation period are the most common. Most are Bungalow style. The row of detached houses at Nos 77-93 Perouse Road is only one example of several excellent groupings of Federation period detached or semi-detached houses in the conservation area.

There is a concentration of Victorian period houses in the western half of the conservation area, north of Barker Street and west of Perouse Road. Some are Italianate style detached houses. There

are several rows of Filigree style two storey terraces, which give streetscapes such as St Pauls Street, a distinctive character.

The most common types of Inter-War period residential buildings are California Bungalow style detached and semi-detached houses, and two or three storey residential flat buildings. A large number of the Inter-War period flat buildings are in the western half of the conservation area. However, the most intact grouping of Inter-War period buildings is on Hardiman Avenue. These buildings are detached houses or flat buildings, and are characterised by their liver brick external walls and fences.

Tree plantings, such as the Moreton Bay Figs in St Pauls Street, make a major contribution to the visual quality of streetscapes in the conservation area.

Historic Significance

The Spot heritage conservation area has historic significance for its origins as “Irishtown”, a poor working area on the fringe of Randwick Village, dominated by Irish Catholics. It came to be considered a settlement in opposition to Simeon Pearce’s “Struggletown”, the housing area he developed for his own workers. The original group maintained a long association with the area and contributed to its strong sense of local identity.

The original shanties, located along Perouse Road, have long since disappeared. The redevelopment of The Spot, in the late 1800’s, was an attempt to clear the temporary dwellings of Irishtown and displace the inhabitants.

The Spot is now a cohesive residential and commercial neighbourhood. It demonstrates the later processes of large scale urban subdivision and development, which began after the establishment of the tramway route between Randwick and Coogee in 1883. The commercial centre developed around a tram stop at the intersection of Perouse Road and St Pauls Street.

The Inter-War period flat buildings demonstrate the intensification of land use which resulted from increases in population and scarcity of other land for subdivision.

The design of the Victorian, Federation and Inter-War period dwellings and commercial buildings, and their range of types, are representative of contemporary lifestyles and economic conditions.

Social Significance

The Spot is a popular local name for the precinct and there is a strong sense of individual identity, dating back to its origins as “Irishtown”. The precinct remains something like a suburban “village”. The existing neighbourhood character has social significance for local residents and the general community. The heritage conservation area continues in its traditional residential and commercial use.

4.16.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the conservation area:

- Speculation and promotion
- Industry and commerce
- Transport and communications
- Suburbanisation

The following themes are indirectly represented:

- Modifying the landscape
- Promotion, culture, religion and education
- Recreation, entertainment and leisure

4.16.3 Existing character values and controls

Refer to the Part D for site specific controls for the business zoned part of The Spot conservation area. The table below provides a summary of key values or characteristics of the residential zoned part of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

<i>Landscape and public domain elements</i>	Character of some streets enhanced by sandstone retaining walls and mature street planting.
<i>Scale & Form</i>	Diversity of scale including single storey detached cottages and villas, single storey and two storey semi-detached houses and two or three storey residential flat buildings.
<i>Siting & Setbacks</i>	Diversity of setbacks including smaller setbacks for cottages and larger setbacks for villas.
<i>Roofs</i>	Traditional pitched roofs.
<i>Materials</i>	Walls are stucco for Victorian buildings, face brickwork for Federation and Interwar buildings. Terracotta tiles and slate roofing.
<i>Detailing</i>	Decorative metalwork and timberwork.
<i>Verandahs & Balconies</i>	Front verandahs integral to each of the architectural styles which are represented in the area.
<i>Carparking</i>	Wider lots provide access for parking to the rear. Narrower lots do not allow for on site carparking, unless a rear lane is available.
<i>Fences</i>	Front fencing is sympathetic to the style of the dwelling.

4.16.4 Guidelines for change

Alterations & Additions

The Spot heritage conservation area comprises a range of building types including single storey detached cottages and villas, single storey and two storey semi-detached houses and two or three storey residential flat buildings. Rear additions should not be prominent in the streetscape nor comprise the integrity of the original roof. Rear additions to attached and semi-detached cottages should be consistent with the scale and form of surrounding rear wings.

Outbuildings to the rear

The scale and bulk of outbuildings to the rear should not dominate the main building on the site. Outbuildings should be of a 1 ½ storey scale with upper floor accommodation within available attic space. The maximum wall height of outbuildings is to be 3.5m and roof pitch is to be consistent with that of the main building on the site.

Carparking

Where rear lane access is available, carparking to the front or side of the property will not be permitted.

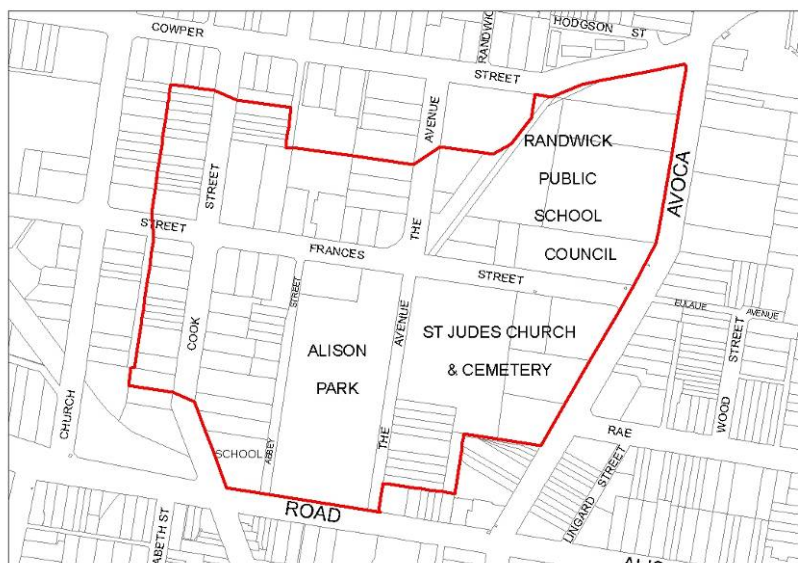
Where driveway access along the side of the dwelling was available, garages were traditionally provided in the rear yard of the dwelling, and this remains the preferred location. Otherwise an open carport can be provided to the side of the dwelling, set back from the front wall of the dwelling.

On site carparking is generally not able to be provided to narrow properties with minimal front setbacks and no rear lane access.

4.17 St Judes Heritage Conservation Area

Randwick's earliest church and civic buildings together with some fine groups of nineteenth and twentieth century houses.

Located within the suburb of Randwick, this area falls into two distinct precincts. One is the historic St Judes grouping. The other is the residential precinct centred on Alison Park and the intersection of Cook and Frances Streets.



4.17.1 What is the area's significance?

Aesthetic Significance

The St Judes precinct is an outstanding building grouping centred on early church and civic buildings. The church and civic groupings are prominent on Randwick's original main thoroughfare, the Frenchman's Road.

The church group includes two notable early stone buildings, set in open grounds, with St Jude's cemetery in the background. Each of the three main buildings in the group is significant in its own right, namely St Judes Church, the Rectory, and the former Borough Council Chambers. The buildings and their setting have changed little since the time they were built.

The civic group consists of the late nineteenth century Town Hall, the buildings of the former Randwick Public School, and a fire station. These buildings remain distinctive despite the presence of a number of more recent buildings.

The Alison Park precinct survives as a notable grouping of late nineteenth and early twentieth century houses. The building stock is a rich mixture of types, ranging from small semis and row houses, to Victorian terraces, Federation and Inter-War cottages, and grand mansions on generous allotments. Alison Park provides an important focus, as does the intersection of Cook and Frances Streets.

Immediately adjoining the church group there is a fine three storey terrace known as “Avonmore”, overlooking Alison Park. This terrace precedes the Federation and Inter-War housing to the north and west. The row is an outstanding Victorian grouping in its own right. Such grand London style terraces are rare for the Sydney region.

Particularly prominent in the Federation housing area is the ornate home at the Cook and Frances Street intersection. This building has achieved landmark status and is prominent on approaches from both streets. Despite intrusions by a number of Post-War flat buildings, and some unsympathetic alteration to older houses, this grouping persists as one of the best preserved examples of Federation housing in Randwick.

Historic Significance

The establishment of St Judes Church assisted Simeon Pearce's promotion of Randwick as a semi-rural retreat for the Colony's elite. The church symbolised the strength and stability of the new community. The church, cemetery and grounds continue as a clear reminder of the original English village model Pearce sought to imitate.

The establishment of the Borough Council was another of Pearce's initiatives. The council was one of the first established in the Colony. The later Town Hall, close by, marked the considerable progress of the early municipality.

The 1883 public school was typical of many established following the passing of the Public Instruction Act. The Act made education “free, compulsory and secular”. The route of the former tramway, now part of the school grounds, has considerable historical interest. The tramways greatly assisted the establishment and growth of the settlement. Its boundaries are still well marked by fencing and different landscape treatments.

Housing in the Alison Park precinct is representative of the range of housing types and styles built in the City during the Late Victorian and Federation periods. The grander homes are in keeping with Simeon Pearce's original ambitions for the area, but the presence of smaller and simpler cottages adds to the historical interest and diversity.

Social Significance

The church, school and civic precinct remains a major community focus and its institutions have been held high in local esteem for over 100 years.

The mixture of grand homes and simple cottages is notable as a continuing record of the area's rich social mix.

4.17.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Speculation and promotion
- Government and institutions
- Promotion of culture, religion and education
- Recreation, entertainment and leisure
- Transport and communications
- Suburbanisation

The following themes are indirectly represented:

- Modifying the landscape

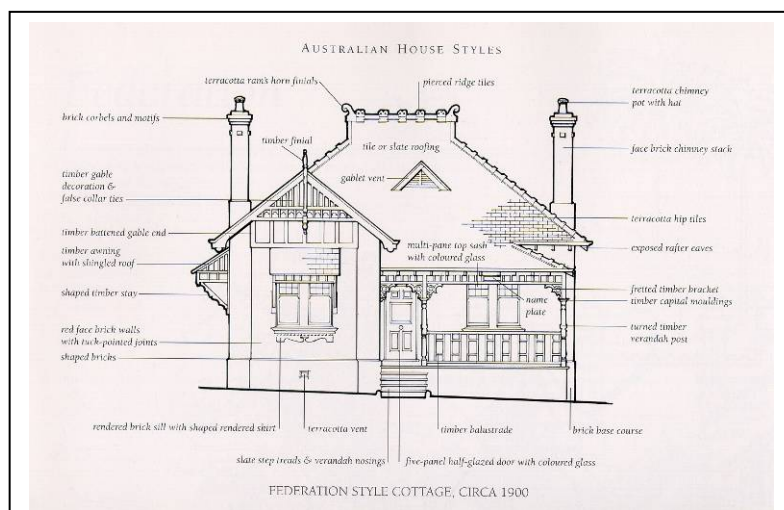
4.17.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

Subdivision	Varied subdivision pattern including larger and smaller lots.
Landscape and public domain elements	Alison Park provides a landscape focus for the area.
Scale & Form	Diversity of scale including landmark church buildings, three storey terraces, two storey villas and single story detached and semi-detached cottages.
Siting & Setbacks	Diversity of setbacks including smaller setbacks for terraces and larger setbacks for villas.
Roofs	Traditional pitched roofs.
Materials	Walls are stucco for Victorian buildings, face brickwork for Federation and Interwar buildings, stone for the church group. Terracotta tiles, slate roofing.
Detailing	Decorative elements in stone, metal, timber and brick.
Verandahs & Balconies	Front verandahs integral to each of the architectural styles which are represented in the area.
Carparking	Wider lots provide access for carparking to rear. Narrower lots do not allow for on site carparking.
Fences	Front fencing is sympathetic to style of dwelling.



Typical Federation style façade detailing

Sourced from “Australian House Styles”. Maisy Stapleton & Ian Stapleton. Flannel Flower Press Pty Ltd. 1997.

4.17.4 Guidelines for Change

Alterations & Additions

The St Judes heritage conservation area comprises a range of building types including single storey and two storey villas, two storey terraces and attached and semi-detached cottages. Rear additions should not be prominent in the streetscape nor compromise the integrity of the original roof. Rear additions to attached and semi-detached cottages should be consistent with the scale and form of surrounding rear wings.

Outbuildings to the rear

The scale and bulk of outbuildings to the rear should not dominate the main building on the site. Outbuildings should be of a 1 ½ storey scale with upper floor accommodation within available attic space. The maximum wall height of outbuildings is to be 3.5m and roof pitch is to be consistent with that of the main building on the site.

Carparking

Where rear lane access is available, carparking to the front or side of the property will not be permitted.

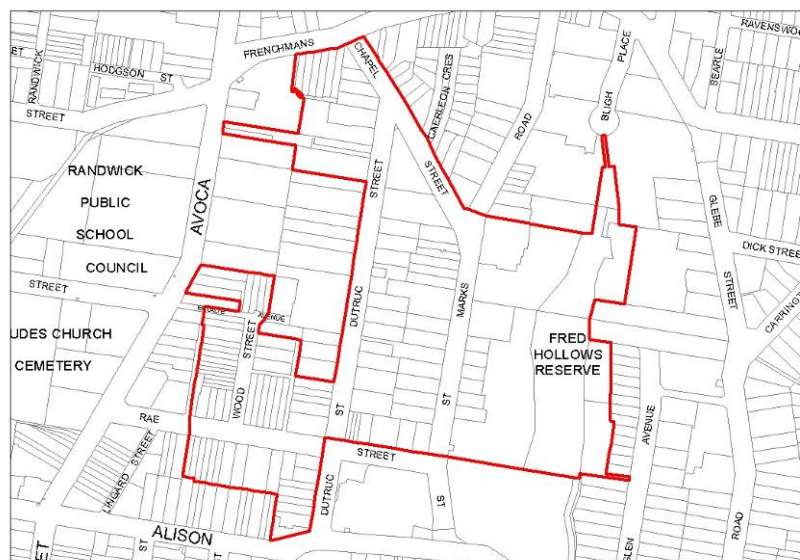
Where driveway access along the side of the dwelling was available, garages were traditionally provided in the rear yard of the dwelling, and this remains the preferred location. Otherwise an open carport can be provided to the side of the dwelling, set back from the front wall of the dwelling.

On site car parking is generally not able to be provided to narrow properties with minimal front setbacks and no rear lane access.

4.18 St Mark's Heritage Conservation Area

A fine collection of residential buildings, including nineteenth century villas and terraces and twentieth century cottages, adjacent to an important area of remnant bushland.

The area extends west from Glebe Gully to include parts of Dutruc Street, St Marks Road, Rae Street and Wood Street, Randwick.



4.18.1 What is the area's significance?

Aesthetic Significance

The St Mark's precinct boasts the City's largest, most consistent collection of nineteenth century dwellings. There are two or three main building groupings, which together provide a very good representation of styles, types and densities.

The first main grouping features several outstanding Victorian villas, on large lots, fronting St Mark's Road and Dutruc Street. The second includes impressive terraces, and more modest Victorian, Federation and Inter-War cottages and semi-detached, centred on Rae and Wood Streets. A third grouping consists of a mixture of styles and periods extending north to Frenchmans Road.

Although there are several modern and disruptive buildings present, there are two fine rows of intact buildings, one on the west side of St Mark's Road, and one on the north side of Rae Street. Most of these are individually listed as heritage items. The recently restored house on the pivotal corner of Rae and Dutruc Streets has become something of a landmark, and is an outstanding example of a Late Victorian villa.

Buildings and gardens combine well with the topography and some good street planting. The street pattern provides some interesting internal vistas, and there is a notable view south along Dutruc

Street to the Brigidine Convent on the other side the Coogee valley.

Historic Significance

St Mark's Road and Dutruc Streets have considerable historical interest. They were created by subdivision of the former Church of England Glebe Estate in 1888. The strong demand for land in the area ensured the establishment of substantial homes for the well-to-do, all within the significant Late Victorian "boom period".

The Church's continuing ownership of the adjoining Glebe gully was also of interest, as it ensured the gully's eventual preservation.

Other housing in the precinct is historically representative of the wide range of house types and styles built on smaller lots during the Victorian, Federation and Inter-War periods.

Scientific Significance

The Glebe gully, now the Fred Hollows Reserve, has considerable natural heritage value. It is a rare surviving example of a well vegetated watercourse in the midst of an intensely developed residential area. The reserve is a habitat for significant local flora and fauna, including the rare Gully Skink.

Social Significance

The surviving villas on St Mark's Road and Dutruc Street have social significance for what they reveal of the tastes and life styles of Randwick's elite, in the late nineteenth century. Randwick had, by now, become a settled residential area, in contrast to its semi-rural origins. The subdivisions of the Glebe lands provided generous lots for those wishing to build prestigious homes close to the commercial and civic centre. The highly ornamented "Boom Style" buildings reflected the prosperity of the time.

4.18.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the heritage conservation area:

- Modifying the landscape
- Speculation and promotion
- Promotion of culture, religion and education
- Recreation, entertainment and leisure
- Suburbanisation

The following themes are indirectly represented:

- Government and institutions
- Transport and communications

4.18.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

Subdivision	Varied subdivision pattern including larger and smaller lots.
Landscape and public domain elements	Glebe gully, now Fred Hollows Reserve has natural heritage value as a rare surviving example of a well vegetated watercourse in an intensively developed residential area.
Scale & Form	Diversity of scale including two storey villas and single storey detached, semi-detached and attached dwellings.
Siting & Setbacks	Diversity of setbacks including smaller setbacks for cottages and larger setbacks for villas.
Roofs	Traditional pitched roofs.
Materials	Walls are stucco for Victorian buildings, face brickwork for Federation buildings. Terracotta tiles, slate roofing.
Detailing	Decorative metalwork and timberwork.
Verandahs & Balconies	Front verandahs integral to each of the architectural styles which are represented in the area.
Carparking	Wider lots provide access for carparking to the rear. Narrower lots do not allow for on site carparking.
Fences	Front fencing is sympathetic to style of dwelling.

4.18.4 Guidelines for change

Alterations & Additions

The St Marks heritage conservation area comprises a range of building types including single storey and two storey villas, two storey terraces and attached and semi-detached cottages. Rear additions should not be prominent in the streetscape nor compromise the integrity of the original roof. Rear additions to attached and

semi-detached cottages should be consistent with the scale and form of surrounding rear wings.

Outbuildings to the rear

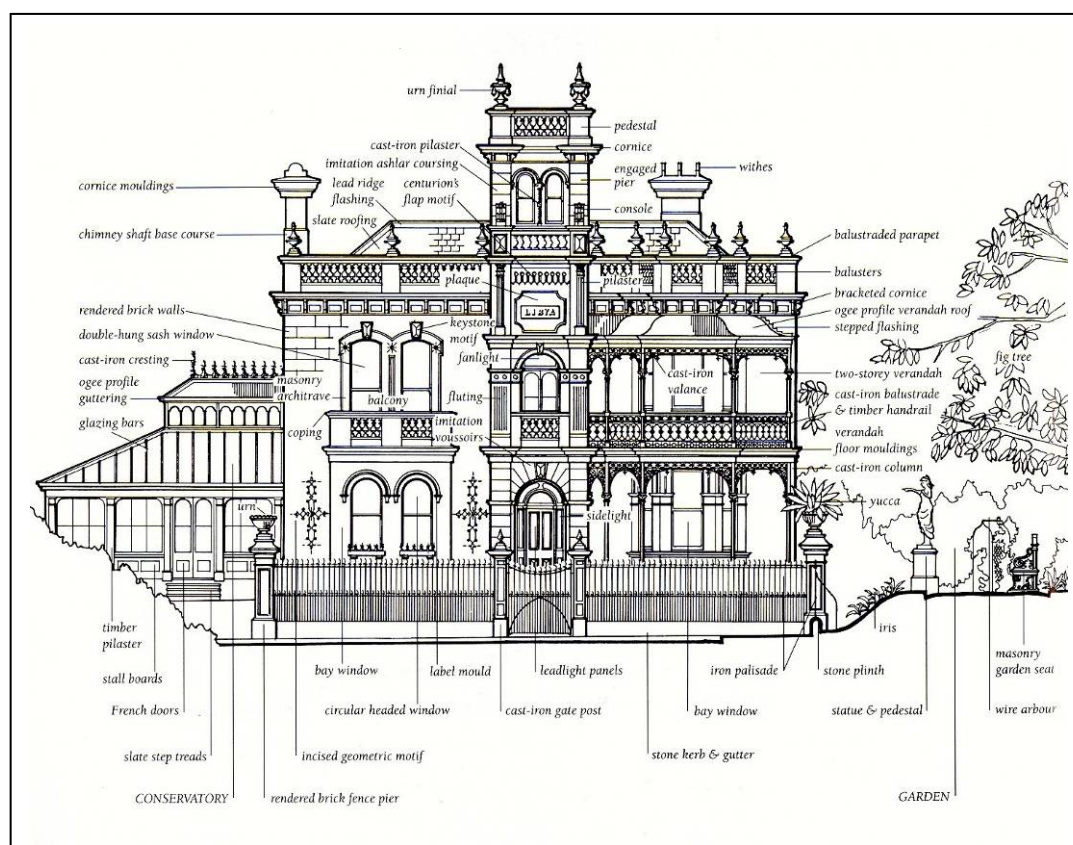
The scale and bulk of outbuildings to the rear should not dominate the main building on the site. Outbuildings should be of a 1 ½ storey scale with upper floor accommodation within available attic space. The maximum wall height of outbuildings is to be 3.5m and roof pitch is to be consistent with that of the main building on the site.

Carparking

Where rear lane access is available, carparking to the front or side of the property will not be permitted.

Where driveway access along the side of the dwelling was available, garages were traditionally provided in the rear yard of the dwelling, and this remains the preferred location. Otherwise an open carport can be provided to the side of the dwelling, set back from the front wall of the dwelling.

On site carparking is generally not able to be provided to narrow properties with minimal front setbacks and no rear lane access.



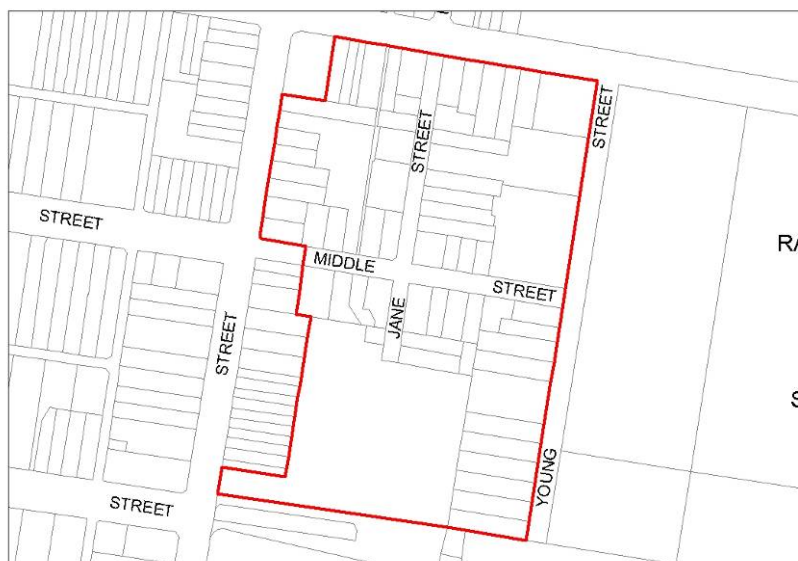
Victorian Italianate villa façade detailing

Sourced from "Australian House Styles". Maisy Stapleton & Ian Stapleton. Flannel Flower Press Pty Ltd. 1997.

4.19 Struggletown Heritage Conservation Area

One of the earliest settlements in Randwick, it includes a number of mid nineteenth cottages and stables buildings associated with the horse racing industry.

The Struggletown heritage conservation area consists of several street blocks of housing and stables between Young Street, Barker Street and Botany Street in Randwick.



4.19.1 What is the area's significance?

Aesthetic Significance

The heritage conservation area has a streetscape character which differs markedly from other parts of Randwick. The heritage conservation area has a rectilinear layout of narrow streets with sandstone kerbing, on a flat topography. Building allotments are narrow and buildings are set back a small distance from the streets.

Many of the buildings in the heritage conservation area are single-fronted weatherboard, stone or brick Victorian Georgian workers' cottages. There are also cottages from the Federation period, in Bungalow or Georgian style and the Inter-War period.

There is a small grouping of Federation and Inter-War period shops, at the corner of Barker Street and Jane Street.

The range of housing types and styles is complemented by stables buildings, often at the rear of sites. The Newmarket Complex, on the eastern side of Young Street, is not in the heritage conservation area. However, the trees and buildings on the site, including the Big Stable, and the main residence, make a major contribution to the visual amenity of the conservation area and its character as a precinct for the horse racing industry.

Historic Significance

The heritage conservation area has historic significance as one of the earliest settlements in the Randwick City area, and its connection with Simeon Pearce. Pearce created a market garden here in the 1850's. Stone cottages were constructed by Pearce for his workers from the late 1850's onwards. Many of the early inhabitants were domestic workers who were employed locally by middle and upper class residents of Randwick. St Jude's Mission Hall, on the north-east corner of Jane and Middle Streets, was built on land granted by Pearce for the building of a church for the community.

In the 1860's Struggletown became a centre for the horse racing industry. More stabling was introduced into the area when the Sydney Omnibus Company moved its operations to the Newmarket complex, in 1870.

The primary uses of the heritage conservation area for housing and the horse racing industry, have continued throughout the twentieth century. The Randwick Equine Centre, on the block between Jane Street, Middle Street, Young Street and Barker Street, is currently the largest horse racing establishment within the conservation area.

Social Significance

The heritage conservation area has social significance for local residents and the wider Randwick community. The area is well recognised for its streetscape qualities, its rare Victorian period workers' housing, and its long-term associations with the horse racing industry.

4.19.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the conservation area:

- Speculation and promotion
- Industry and commerce
- Suburbanisation

The following themes are indirectly represented:

- Modifying the landscape
- Transport and communications

4.19.3 Existing character values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

Subdivision	Rectilinear layout of narrow sites.
Landscape and public domain elements	Trees on the Newmarket site and sandstone kerb and guttering contribute to the amenity and character of the area.
Scale & Form	Two storey shops on the corner of Barker St and Jane St, but otherwise modest single storey cottages. Stables buildings at the rear of sites.
Siting & Setbacks	Minimal front setbacks
Roofs	Simple pitched roofs.
Materials	Walls of weatherboard, stone or brick. Generally corrugated iron roofs.
Detailing	Plainly detailed metalwork and timberwork.
Verandahs & Balconies	Early buildings incorporate a simple verandah across the entire front of the cottage.
Carparking	Narrow lots without rear lanes do not allow for on site carparking
Fences	Traditional fencing probably low timber pickets.

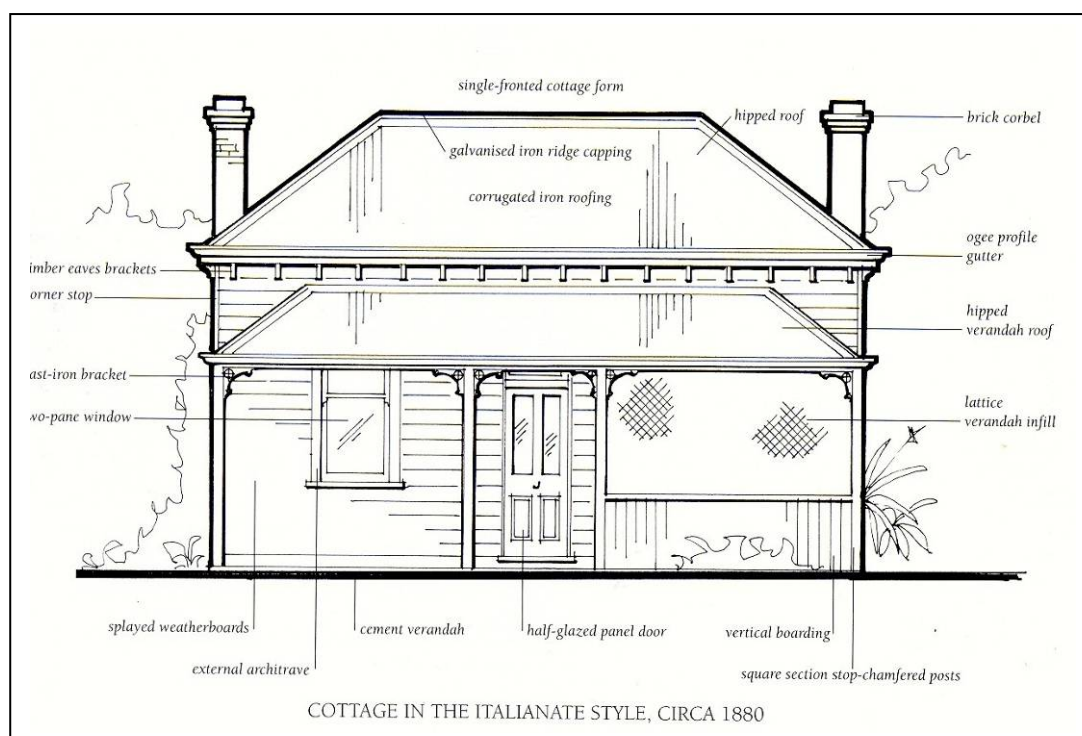
4.19.4 Guidelines for change

Alterations & Additions

The dwellings are generally modest workers cottages on small blocks, and in order to increase the size of the dwelling, may be necessary to provide some upper level floor space. The bulk and prominence of any upper level addition should be minimised however. Any upper level addition should be set well to the rear to minimise streetscape visibility and retain the integrity of the original roof. As the dwellings are generally of quite early construction, they should be subject to careful and timely maintenance and repair.

Carparking

Where sites are of sufficient width, a rear garage or a side carport can be provided (set back from the front of the dwelling). On site carparking may not be able to be provided on narrow sites with minimal front setbacks.



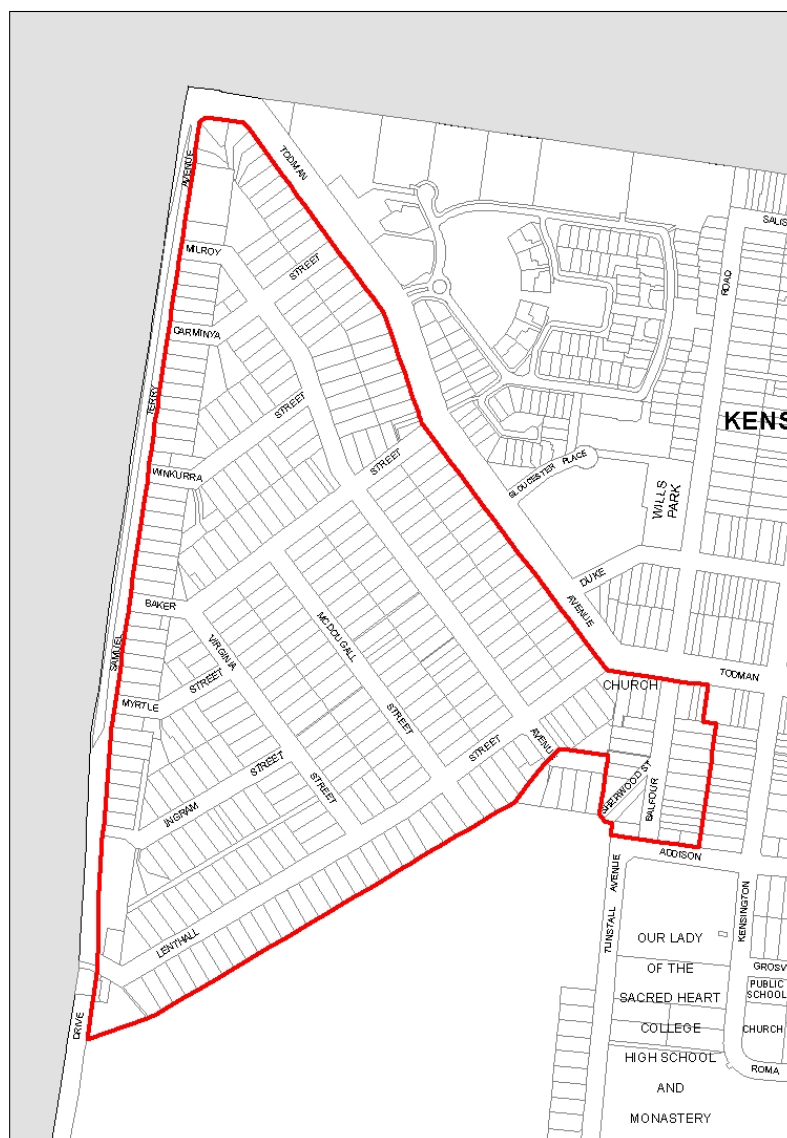
Victorian Italianate cottage façade detailing

Sourced from "Australian House Styles". Maisy Stapleton & Ian Stapleton. Flannel Flower Press Pty Ltd. 1997.

4.20 West Kensington Heritage Conservation Area

Highly consistent early twentieth century streetscapes with an unusual triangular street layout.

A large area of land generally bounded by Samuel Terry Avenue to the west, Todman Avenue to the north, and the Australian Golf Course to the south.



4.20.1 What is the area's significance?

Aesthetic Significance

The West Kensington heritage conservation area is significant for its highly consistent early twentieth century streetscapes. The unusual triangular street layout, overlaid on a former water supply catchment, has produced a unique subdivision pattern. It features interesting street junctions, many of which are T-junctions, and streets which range in length. This results in a great variety of

internal vistas, long and short, most of which are terminated by buildings at an intersection or bend. Some of the more interesting views out include views to the elevated areas to the south-east, where the Sacred Heart Church still stands.

The area's visual interest is mostly a consequence of built character, and the geometry of the subdivision, with all allotments orientated at 45 degrees to the main compass points. The landscape remains predominantly flat, though there are a few notable variations in level. Street planting is variable, but there is a particularly notable street tree canopy in Milroy Avenue.

The heritage character of the area largely derives from its Federation and Inter-War housing, its predominantly single storey scale, the originally consistent face brick construction, and the highly visible tiled and slated roofs. Whilst many buildings have been substantially altered, there has been very little redevelopment relative to other parts of Randwick. Most buildings and streetscapes still retain their essential period character.

Social and Historical Significance

The area has historical interest for its early importance as a water catchment, the boundaries of which expanded beyond those of the conservation area. This delayed its development, as did subsequent speculation and the 1890s recession. The eventual and long-awaited release in 1912 saw it develop relatively quickly. The area was almost fully settled within 15 to 20 years. The consistency of the area is strengthened by its being almost wholly residential. Commercial intrusions are minimal.

The area has important historical associations with early industries established on the Lachlan Stream.

The development of the area also has interest for its historical and physical associations with the former tobacco factory on the eastern side of Todman Avenue. The original developer of the West Kensington Estate, George Frederick Todman, was one of the founders of the factory. There was also a later association with the glass manufacturer, AGM, which had a factory nearby on Samuel Terry Avenue. There is a fine group of Inter-War buildings on Todman Avenue which was purpose built for employees of AGM. The area also has interest for its association with the local racing industry. A number of horse stables in the area are still in use, some of them quite old.

The housing (Federation/Inter-War) is representative of the second stage of Kensington's suburban development, after the Doncaster Avenue / Anzac Parade precinct (Victorian/Federation) and prior to South Kensington (Inter-War). The unusual triangular street layout was probably a simple response to the shape of the residue parcel of the former water catchment, retained by Todman after the collapse of the earlier speculative joint venture for the wider area. It was as close as the area came to the original grand town planning vision for Kensington.

4.20.2 Themes Represented

The following historical themes, identified in the 1989 Randwick Heritage Study, are directly illustrated in the conservation area:

- Modifying the landscape
- Speculation and promotion
- Suburban action

The following themes are indirectly represented:

- Industry and commerce
- Transport and communications

4.20.3 Existing Character Values

The table below provides a summary of key values or characteristics of the heritage conservation area. These character values should be retained for contributory buildings.

New development including alterations and additions to existing buildings and infill development should generally respect these character values in order to be compatible with their surroundings.

These key values and characteristics, and the guidelines for change that follow, need to be considered in addition to the general guidelines and controls contained in this DCP.

Subdivision	Unusual triangular street subdivision layout with very consistent lot sizes.
Landscape & public domain elements	Notable street tree canopy in Milroy Avenue.
Scale & Form	Single storey detached cottages.
Siting & Setbacks	Generous setbacks allow for attractive front gardens.
Roofs	Traditional pitched roofs, hipped and gabled forms.
Materials	Walls predominantly face brickwork- smooth faced red or liver bricks. Marseilles pattern terracotta tiles and slate roofing.
Detailing	Predominantly timber decoration to verandahs, sunhoods, gables etc. Heavy brick/timber verandah decoration. Timber and stucco gable decoration.
Verandahs & Balconies	Front verandahs provide depth to facades, an interface to the street and contribute to dwelling character.
Carparking	Generous setbacks allow for car parking to rear.
Fences	Many low brick fences, some plain timber picket fences.
Gardens & garden elements	A number of early stables buildings are found in the area, some retaining their original use.

4.20.4 Guidelines for Change

Alterations & Additions

Part of the heritage significance of the area is its predominantly single storey scale. As the dwellings are on generous blocks, it is generally feasible to increase the floor space with a single storey rear addition, without detracting from its garden setting of the dwelling.



Additions should utilise attic roof forms located to the rear of the main ridgeline

Outbuildings to the Rear

The scale and bulk of outbuildings to the rear should not dominate the main building on the site. Outbuildings should be of a 1 ½ storey scale with upper floor accommodation within available attic space. The maximum wall height of outbuilding is to be 3.5m and roof pitch is to be consistent with that of the main building on the site.



Additions set back from the existing ridgeline retain the form and detail of the existing residences. Use of simple roof forms and subtle detailing further enhances the relationship of new and existing works.

Original Stables

There are a number of original stables building in the area, associated with the racecourses which were located in the vicinity. These should be retained and conserved wherever possible.

Carparking

Garages were traditionally provided in the rear yard of the dwelling, and this remains the preferred location. Otherwise an open carport can be provided to the side of the dwelling, set back from the front wall of the dwelling.



Additions to the rear of residences on corner sites should provide greater emphasis to the secondary street frontage.

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1 Introduction

This section sets out objectives and controls to provide a framework for the application of sustainable development principles in the design, construction and operation of buildings across Randwick City.

The built environment is a major contributor to greenhouse gas emissions and energy consumption in Australia, accounting for approximately 22% of the nation's total greenhouse emissions (COAG July 2009). Much of this is attributed to the resources and materials used in building construction as well as pollution and waste resulting from development activity. The actual operation of a building can also contribute significantly to energy and water consumption.

Sustainable development (as referenced in this DCP) refers to a building that is environmentally responsible and resource efficient throughout its life cycle, while reducing the overall impact on the environment and human health.

Buildings that are sustainable use environmentally friendly construction materials and fittings, are energy and water smart, have healthy and comfortable indoor environments, and yield considerable cost savings to property owners and tenants.

Key environmental, economic and social benefits of sustainable development include:

- A reduction in greenhouse emissions
- Savings in household bills and business running costs
- Improved health and well being of building occupants
- Potable (drinking) water and energy conservation
- Improved indoor temperature moderation
- Assists in retaining infrastructure capacity
- Waste reduction and improved storm water management.

Sustainable development is a fundamental element of the planning framework and is part of all land use, development and environmental management decisions in Randwick City.

This section applies to all developments in Randwick City. The integration of sustainability measures into a building is the most effective and least costly when considered at the earliest stage of development.

This section of the DCP should be read in conjunction with:

- Part A – Introduction, Part B - General Controls; and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the application.

1.1 Objectives

- To ensure that the design, construction and operation of development minimises adverse impacts on the natural and built environment.
- To reduce the use of resources, pollution and waste resulting from development activity.
- To improve the quality of life, health and well being of residents and workers.
- To promote the use of renewable energy sources and materials.
- To promote education on key elements of sustainable development and maintenance.

2 Building Materials and Finishes

Explanation

The materials used in construction, renovation and/or refurbishment can significantly enhance or impact on the environment and/or the health and well being of building occupants.

Objectives

- To maximise the selection and use of environmentally responsible and robust construction materials and finishes.
- To ensure healthy indoor environments.
- To encourage use of materials that are non-polluting in manufacture, use and disposal.

Controls

- i) Submit a schedule of materials with the DA that maximises the use of the following:
 - Materials that are durable with low maintenance requirements.
 - Materials with low embodied energy content.
 - Renewable materials.
 - Locally sourced products.
 - Salvaged or recycled materials.
 - Timber from plantation or sustainable managed re growth forests.
 - Low volatile organic compound (VOC) emitting materials.
 - Mechanical fittings instead of adhesives or glues.
 - Toxin free flooring.
- ii) Rainforest timbers or timbers cut from old growth forest must not be used.

- iii) Design for the adaptive re use of existing building facades, building structures and fittings where feasible.

Notes:

1. Examples of materials that should be minimised include:

- *Chrome, cadmium, lead, mercury, cyanide and formaldehyde*
- *Materials, sealants and adhesives containing volatile organic compounds (VOCS)*
- *PVC*
- *Wood treated with Copper Chrome Arsenate (CCA)*
- *Solvents.*

2. Examples of common building materials that can contain recycled content include: concrete, steel, insulation, composite timber products, carpet, underlay and many cladding materials. Consideration should be given to recycling and re using bricks within a development.

3. Renewable natural materials encouraged for interior finishes and furnishings include: bamboo, jute, sisal and, cork. Applicants should also consider using low VOC/plant based paints and plant based oils for floor boards.

4. PVC products produced in compliance with 'Best Practice Guidelines for PVC in the Built Environment' are supported.

5. The Forest Stewardship Council (FSC) is an international, independent, not-for-profit organisation that provides standards for responsible forest management and an accreditation system for sustainable forest products. Further information is available at www.fscaustralia.org

6. Good Environmental Choice Australia (GECA) is an independent, not-for-profit organisation that runs an internationally recognised Ecolabelling Program that certifies products in line with ISO 14024. Further information is available at www.geca.org.au

7. Further information on the use of environmentally friendly materials in the design, construction or renovation of homes is available at www.yourhome.gov.au

3 Energy and Water Efficiency

Explanation

Buildings that are energy and water efficient offer substantial benefits including savings on the running costs of heating, cooling, lighting and equipment, as well as reducing greenhouse gas emissions and potable water use.

The Building Code of Australia (BCA) Section J contains minimum energy efficiency standards.

In NSW energy and water efficiency measures for most residential development is covered by BASIX (the Building Sustainability Index), a web based tool aimed at reducing water usage and greenhouse gas emissions. The tool provides a framework to assess energy and potable water consumption against specific targets which vary according to location and building type. Proposals that meet the targets are issued with a BASIX certificate which must be submitted with a DA before it is processed.

For further information on the implementation of BASIX refer to www.basix.nsw.gov.au.

These controls apply to buildings not affected by BASIX.

Objectives

- To promote energy and water efficiency in the design and operation of buildings.
- To minimise greenhouse gas emissions.
- To reduce the reliance on mechanical heating and cooling.
- To reduce energy and water bills and the whole of life cost of energy services.

Controls

3.1 Residential alterations and additions not affected by BASIX

- i) All new or replacement electrical appliances must achieve the highest available energy rating at the time of development.
- ii) All new or replacement domestic type gas hot water systems must be the most energy efficient option available at the time of development.
- iii) Electric hot water heating must not be installed.
- iv) All new or replacement products regulated for water efficiency under WELs must achieve the highest rating at the time of development (e.g. dishwashers and washing machines). WELs rated water saving devices must be installed including: 4 star dual flush toilets, 3 star shower heads, 4 star taps, and 3 star urinals.

Note:

BASIX does not apply to residential alterations and additions valued < \$50,000, swimming pools with a capacity of 40,000 litres or less or visitor accommodation.

3.2 Non- Residential Development (commercial premises, industrial and hotel and motel accommodation)

- i) Buildings are to be oriented and designed to achieve optimum solar access and natural ventilation where practical.
- ii) On site renewable energy systems (e.g. solar energy, heat pump technology and the like) are to be installed where practical and effectively integrated to complement the overall building design.
- iii) New or replacement solar and heat pump hotwater systems must be eligible for at least 24 Renewable Energy Certificates (RECs). All new or replacement domestic type gas hot water systems must be the most energy efficient option available at the time of development.
- iv) Electric hot water heating must not be installed.
- v) Heating and cooling systems are to be designed to target only those spaces which require heating or cooling at any one time, not the whole building.
- vi) All new or replacement air conditioners of domestic/residential scale are to be MEPS rated: minimum 4 star on one cycle and 3 star for reverse-cycle models.
- vii) All new or replacement electrical appliances must achieve the highest available energy rating at the time of development.
- viii) Energy efficient LED lighting, dimmers, motion detectors and/or automatic turn off switches are to be installed where appropriate. Lighting systems should be designed to target only those spaces which require lighting at any "off-peak" time, not the whole building.
- ix) Openable windows are to be installed in common areas to improve natural ventilation where appropriate (e.g. staff rooms, bathrooms etc).
- x) Internal walls and partitions are to be positioned to provide cross flow ventilation through the building.
- xi) All new or replacement products regulated for water efficiency under WELS must achieve the highest rating at the time of development (e.g. dishwashers and washing machines). WELS rated water saving devices must be installed including: 4 star dual flush toilets, 3 star shower heads, 4 star taps, and 3 star urinals.
- xii) New commercial premises and hotel and motel accommodation with a floor area of 1,000m² or more must achieve a minimum 4 star NABERS rating for the base building and undertake a Commitment Agreement. DAs must include an ESD Statement prepared by an accredited professional providing design evidence that the required NABERS rating can be achieved.

Notes:

1. Details on type and location of renewable energy systems and water heaters must be clearly marked on relevant plans and specifications. Details on energy and water efficient appliances must be provided with the DA.

2. Renewable Energy Certificates reduce the purchase cost of solar and heat pump water heaters. Further information is available at www.rec-registry.gov.au/home.shtml

3. The Federal Government's website www.energyrating.gov.au lists the Minimum Energy Performance Standards (MEPs) and Energy Rating Labels (ERLs) on a range of products and appliances including refrigerators, washing machines, televisions, air conditioners etc.

4. The Federal Water Efficiency Labelling and Standards Scheme (WELs) labels a range of products for water efficiency, helping households to save water and money. Further information is available at www.waterrating.gov.au

5. The National Australian Built Environment Rating System (NABERS) managed by the NSW Office of Environment and Heritage, measures the environmental performance of buildings and/or tenancies during their operation.

For the purposes of clause (xii), owners and/or occupiers are required to sign a NABERS – Energy Commitment Agreement to deliver the required rating and submit a copy to the Principal Certifier prior to the issue of a Construction Certificate. Further information on the NABERS rating system including a list of accredited professionals to prepare the ESD Statement is available at (www.nabers.gov.au).

6. The Green Star rating system, managed by the Green Building Council of Australia, is a voluntary environmental rating system that evaluates the environmental design and construction of buildings. A 4 star rating signifies 'Best Practice' in environmentally sustainable design and/or construction.

Although Green Star certification is not mandated by this DCP, applicants are encouraged to use the Green Star tools to improve the environmental attributes of their proposed development. Further information including guidance on the certification process is available from (www.gbca.org.au)

4 Environmental Education

Education has a fundamental role in informing the community about the sustainable design features of a development and encouraging environmentally responsible practices that will help to achieve a more sustainable built environment.

The ability to make informed choices and ways of dealing with environmental problems can assist towards sustainable living.

Note:

Tips on sustainable household/office practices are available at www.savepower.nsw.gov.au and www.yourhome.gov.au

Objectives

- To educate residents, workers and other building occupants on the sustainability features of development.
- To encourage the use and maintenance of water efficient and energy efficient design features of the development over time.

Controls

- i) Submit an Environmental Toolkit with all DAs for new residential and mixed use development containing 5 or more dwellings, and commercial and industrial development with a floor area of more than 1,000m².

The Environmental Toolkit must detail the sustainability features of the development and maintenance requirements including (but is not limited to these):

- Rainwater tanks.
 - Total water cycle management (including water conservation devices and stormwater treatment).
 - On site renewable energy systems (including information on connection options and wiring).
 - Lighting, energy and water efficient appliances, fixtures and fittings and associated ratings.
 - Composting.
 - Landscaping.
 - Transport (including access to public transport).
 - Any other site specific initiatives where relevant.
- ii) Maintenance instructions are to be attached to the particular feature where practical (e.g. rainwater tank, solar panel).
 - iii) The Environmental Toolkit may be complemented with information from Randwick City Council (such as the *Local Native Plants for Sydney's Eastern Suburbs* brochure) and/or other relevant material.
 - iv) The Environmental Toolkit is to be retained by building management with copies readily available to maintenance personnel, residents, tenancies and the like.

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1 Introduction

Randwick City has a rich diversity of natural, cultural and scenic landscapes and significant areas of remnant bushland, wetland and habitat corridors.

Landscape plays an essential role in integrating development into the streetscape and neighbourhood, enhancing appearance and amenity of the site and locality, providing for recreation and leisure, preserving natural areas and biodiversity and providing opportunities for improved stormwater management, environmental performance and micro-climatic conditions.

This section of the DCP outlines controls for preparing landscape plans and addressing various landscape design matters, including controls for development in and near areas of biodiversity significance.

This section of the DCP should be read in conjunction with:

- Part A - Introduction and other sections in Part B - General Controls (e.g. B5 – Preservation of trees and vegetation); and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the DA.

1.1 Objectives

- To promote high quality landscape design as an integral component of the overall design of a development.
- To provide landscape design and plantings that are compatible with the site and locality.
- To contribute to the preservation of and extension to native fauna and flora habitats.

2 Landscape Plan

Explanation

A landscape plan is required to accompany DAs for all new buildings, and for major alterations/additions which will impact on the existing tree coverage or landscaped area of a site.

Controls

Prepare a landscape plan in accordance with the Randwick DA Guide, including, but not limited to, the following elements and details:

- i) Details (e.g. location, height, condition, etc) of all existing trees within or adjacent to the site (including Council properties) and trees proposed to be removed/retained/relocated or pruned.

Note:

Different requirements are set out for landscape plans prepared for dwelling house development and other development types. Refer to the DA Guide for more details, including minimum qualifications required for preparing landscape plans.

- ii) Details of existing natural features (e.g. rocky outcrops, cliff lines, water bodies, etc).
- iii) Details of design, including location of hard and soft landscaped areas and open space in relation to existing and proposed buildings.
- iv) Details, including locations, of selected plant species.
- v) Basic drainage details, i.e. location of all pits and lines, irrigation, hose cocks, etc.
- vi) Erosion and sediment control measures.

3 Landscape Design

The design of landscaped areas and deep soil planting forms an integral part of the overall site planning for a development. Controls relating to location, minimum size and dimensions allocated for landscaped areas and deep soil zones are therefore incorporated into relevant DCP sections for various development types (as listed below):

- Low density residential
- Medium density residential
- Neighbourhood centres
- Local centres
- Industrial uses, and
- Specific sites

3.1 Existing vegetation and natural features

Explanation

Significant natural features and vegetation on the site, such as rocky outcrops, cliff lines, water bodies, trees, shrubs and groundcover vegetation should be retained and incorporated into the landscape design of the development.

Objective

- To conserve and incorporate significant natural features and vegetation of the site as part of the landscape design.

Controls

- i) Maximise the retention and protection of existing vegetation including trees, shrubs and groundcover vegetation.
- ii) Retain and incorporate existing natural features, such as cliffs and rock outcrops into the landscape design where possible.
- iii) Retain and stockpile topsoil for reuse in the landscaped area.

Note:

Refer to DCP section – B5 Preservation of Trees and Vegetation for more detailed requirements on tree works.

3.2 Selection and location of plant species

Explanation

Suitable location and choice of plant species for the site is essential for achieving high standards of landscape design, residential amenity and biodiversity conservation.

Objectives

- To encourage the planting of appropriate native plants to contribute to the maintenance and extension of fauna and flora habitats.
- To ensure suitable plant species are selected for the existing aspect, soil and micro-climatic conditions.
- To ensure plants are appropriately selected and located to enhance the appearance and amenity of the development.

Controls

- i) Native species must comprise at least 50% of the plant schedule, incorporating a mix of locally indigenous trees, shrubs and groundcovers appropriate to the area and surrounds. Plant species, such as noxious weeds or invasive species must not be included in the landscape design.

Note: This control may not be applicable for the setting of some heritage buildings or areas where a predominance of ornamental species may be more suitable.

- ii) Link, extend and enhance existing fauna and flora habitats through appropriate selection and location of plant species, where relevant.
- iii) Where suitable, incorporate food growing areas as part of the landscape design.
- iv) Select and locate plants to improve the environmental performance and living amenity of the development, such as:
 - a) plant deciduous shade trees to control solar access (e.g. providing shade in summer and allowing solar access in winter)
 - b) intercept glare from hard surfaces
 - c) channel air currents into the building
 - d) provide windbreaks where desirable, and
 - e) screen noise and reduce visual impacts to enhance privacy.

Note:

Refer to Appendix B5-2 of DCP Section - Preservation of Trees and Vegetation for a list of undesirable species. Please also contact Council's bushland/landscape officers for advice on appropriate native plant species.

3.3 Water efficiency

Explanation

Landscape design has a significant effect on the quality and quantity of stormwater leaving the site and amount of water needed for irrigation.

Water efficient landscaping can assist in meeting BASIX water conservation targets for residential development and provide economic and environmental benefits to other development types (e.g. commercial, industrial and public open space).

Objectives

- To minimise landscape-related water consumption.
- To facilitate rainwater infiltration and minimise run-off through landscape design and plantings.

Controls

- Maximise the capture and absorption of rainfall and prevent runoff, by:
 - minimising the amount of hard surface area,
 - directing the overland flow of rainwater to permeable surfaces, such as garden beds, and
 - utilising semi-pervious surfaces for paved areas.
- Plant low water consumption and deep rooting plants.
- Avoid large areas of lawn, which generally require greater amounts of water and fertiliser than native groundcovers, shrubs and trees.
- Design water features to function with non-potable water.
- Use water efficient irrigation systems, such as:
 - automated sub-soil drip systems,
 - soil moisture sensors, and
 - use of non-potable water sources (e.g. rainwater).

Note:

Other water conservation practices should also be considered, such as hydrozoning (grouping species with similar water needs) and providing adequate soil depth to increase water storage capacity.

3.4 Outdoor car parks & circulation areas

Explanation

Landscaping, as an integral part of outdoor parking design, offers a variety of benefits, such as shade for parked vehicles, screening the car parks from the street and public areas and softening the visual impact of large parking areas. Landscape in open car parks can also facilitate rainwater infiltration and help prevent runoff.

Objective

- To ensure outdoor ground level car parking areas are landscaped to provide shade for parked vehicles and improve the visual amenity of the car parks and adjacent areas.

Controls

- Incorporate landscape planting in outdoor ground level car parks containing 5 or more car spaces.
- If landscaping is required, it must be designed in accordance with the following:

- a) Planting should be provided along the perimeter and internal to the parking area.
- b) Perimeter planting should provide adequate screening of the car park at street level and integrate with streetscape planting.
- c) Planting must not hinder the visibility of both drivers and pedestrians, with open sightlines maintained between the car park, public roads and paths.
- d) Internal planting should provide shade for vehicles. As a guide, 1 canopy tree per 4 adjoining car spaces should be provided.
- e) Planter beds must provide adequate aeration and water to the root zones of plants.
- f) The following plant species should be used for car parks:
 - Trees with tall trunks and ample shade coverage.
 - Plants that do not drop fruits, branches, sap or bark.
 - Plants of vigorous growth and with minimum long-term maintenance requirements.
- g) Conflicts with utility services must be avoided by ensuring adequate distances between planting and lamp posts, above ground electricity lines, footpaths, kerbs and underground services, etc.
- h) Appropriate vehicle barriers are required to protect the planter beds and plants from damage by moving vehicles.

4 Green roofs and green walls

4.1 Green roofs

Explanation

A green roof is a roof top that is partially or completely covered with vegetation. It can enhance the building's appearance, reduce visual mass, improve environmental performance (e.g. thermal performance), create habitats and minimises stormwater runoff. Green roofs offer a good option for renovating and improving the amenity of existing buildings with limited landscaping.

A green roof system generally contains a waterproofing membrane and root barrier system, drainage system, filter fabric, a lightweight growing medium and plants.

Council will determine if green roofs can be considered as landscaped area on a site-by-site basis. Applications considering green roofs are encouraged to contact Council's landscape officer prior to lodgement.

Objective

- To encourage well designed and maintained green roofs in suitable buildings and locations.

Controls

Any proposal for a green roof shall:



Application of Green Roof at Council's Prince Henry Centre

- i) Undertake a detailed site analysis to assess the site suitability, including consideration of the climate conditions (e.g. solar orientation and wind loads), surrounding environment and the structural capacity, age and condition of the roof, etc.
- ii) Suitably identify roof access (e.g. frequency and types of access), growing medium type and depth, function and type of green roof and plant schedule in accordance with the roof structural capacity.
- iii) Select native and drought/heat tolerant plant species.
- iv) Be designed with high standard components, including waterproofing membrane, growing medium, vegetation layer, root barrier, insulation and drainage system, etc.
- v) Maximise retention and reuse of stormwater.
- vi) Identify the most suitable irrigation system based on growing medium characteristics and plant needs.
- vii) Consider integration of solar panels on the green roof.
- viii) Prepare a maintenance plan detailing the maintenance arrangements for the following aspects as a minimum:
 - a) Inspection and maintenance of the waterproofing roof membrane
 - b) Drain inspection
 - c) Care of plants and growing medium, and
 - d) Maintenance of the irrigation system.

4.2 Green walls

Explanation

A green wall is a vertical garden, either free-standing or part of a building, that is partially or completely covered with vegetation.

Similar to green roofs, green walls can potentially offer a range of benefits, such as enhancing the appearance of the buildings, lowering energy consumption through increased thermal performance, reducing noise transmission, improving air quality and increasing biodiversity.

Green walls can only be considered as a supplement to the required landscaped area for any development.

Objective

- To achieve well designed and maintained green walls in suitable buildings and locations.

Controls

Any proposal for a green wall shall:

- i) Design and locate green walls to suit the orientation and microclimatic conditions and enable access for maintenance.
- ii) Select a mix of native and ornamental species.
- iii) Provide details of the support system, demonstrating that the green wall can be removed without affecting the structural integrity or waterproofing of the building.
- iv) Ensure green walls are designed to function with an irrigation system using non-potable water.
- v) Suitably establish control and timing of the watering system.
- vi) Prepare a maintenance plan detailing the maintenance arrangements.

5 Development in or near areas of biodiversity significance

Areas of biodiversity significance in Randwick City are identified in the RLEP and are either zoned E2 Environment Conservation or identified on the RLEP Biodiversity Map. These identified sites are scattered across the City, including large areas of Eastern Suburbs Banksia Scrub (ESBS) and *Acacia terminalis*, listed as endangered ecological community or species.

It is of vital importance for development in or adjoining these natural areas to carefully address any potential impacts on the biodiversity values at all development stages.

Note:

S5A of the *EP&A Act* requires a series of factors be taken into account to determine whether a development or activity (under Part 4 or 5 of the Act) is likely to significantly affect threatened species, populations, EEC or their habitats. The Threatened Species Assessment Guidelines have been prepared to help proponents with interpreting and applying the factors of assessment (see OEH's website <http://www.environment.nsw.gov.au/threatenedspecies/tsaguide.htm>). This assessment of significance is the first step in considering potential impacts. When a significant effect is considered likely, a species impact statement is required to be prepared in accordance with Division 2 of Part 6 of the *Threatened Species Conservation Act 1995*.

Other legislation and policies, which also provide guidance for development within/near natural areas, include the *Environment Protection and Biodiversity Conservation Act 1999*, *SEPP 19 Bushland in Urban Areas*, *SEPP 71 Coastal Protection and Recovery Plans* prepared by the Office of Environment and Heritage.

Objective

- To ensure development in or adjacent to areas of biodiversity significance is designed, constructed and operated to appropriately manage the interface between the natural landscape and urban environment and protect the significant fauna and flora habitats.

Controls

Development (including landscape works) in or adjacent to areas of biodiversity significance:

- i) must not impact on the environmental processes of natural areas, such as:
 - a) erosion of soils
 - b) siltation of streams and waterways
 - c) overland flows and stormwater runoff
 - d) overshadowing
 - e) removal or degradation of existing vegetation.
- ii) must consider and undertake appropriate protective measures during the design, construction and operation phases, such as:
 - a) adequate buffer areas between any building structures and the natural areas
 - b) ongoing management arrangements to control invasive species and maintain natural features
 - c) silt/protective fencing
 - d) erosion and run off controls
 - e) appropriate site access points to prevent offsite disturbances, and
 - f) clear and informative signage
- iii) must select suitable plant species for landscape works with consideration of the following general criteria:
 - a) Species shall not directly or indirectly jeopardise the functioning of remnant bushland areas, ie. having potential to create monocultures, affect the local native gene pool, impact on the hydrology or alter light levels;
 - b) Species should improve on the ecological, cultural and aesthetic values of existing native plant communities and aim to link bushland remnants.

Note:

This is to ensure protection of the genetic integrity of individual species contained in the natural areas through careful sourcing and selection of plant species.

Please also contact Council's bushland/landscape officers for advice on selection of appropriate plant species. A list of appropriate site-specific species would be provided upon request.

Preservation of Trees and Vegetation

B5

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1 Introduction

A healthy urban forest provides significant aesthetic, ecological and environmental benefits to residents, workers and visitors of Randwick City. It is of vital importance to protect and enhance the City's urban environment through long term preservation and management of trees and other vegetation in our urban forest.

This DCP section applies to trees and other vegetation in Randwick City and supplements the RLEP Clause 5.9 (Preservation of Trees or Vegetation) by specifying additional types of tree works which require Council approval and providing detailed guidance for preparation of applications seeking Council approval.

This section of the DCP should be read in conjunction with:

- Part A - Introduction and other sections in Part B - General Controls (e.g. B4 – Landscaping and Biodiversity) ; and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the DA.

1.1 Objectives

- To effectively protect the urban forest in Randwick City, with particular emphasis on retaining trees with cultural, heritage and natural significance.
- To encourage the preservation of trees and vegetation that contribute to native flora and fauna habitat.
- To establish a clear framework and requirements for the proper management of trees and other vegetation.

2 Tree works requiring Council approval

RLEP sets out circumstances where development consent is required for carrying out tree works, such as works proposed to a heritage item, in a heritage conservation area, or at locations with acid sulfate soils. Clause 5.9 of the RLEP requires listing of additional circumstances in a DCP where Council approval is also required.

In response to Clause 5.9, this DCP further specifies that the following tree works require Council approval, either in the form of development consent or a tree permit, to ensure the appropriate preservation and maintenance of trees or vegetation with aesthetic, environmental and cultural values.

Refer to Appendix B5-1 for a list of matters to be considered by Council when determining applications seeking development consent or a tree permit.

An urban forest is the totality of all trees and shrubs on public and private land in and around urban areas (including bushland, open space, gardens and street trees) measured by its canopy cover.

Tree works are works affecting the form, structure or foliage of a tree including root cutting, crown lifting, reduction pruning, selective pruning, crown thinning, remedial or restorative pruning or complete tree removal.

Development consent

- i) Development consent is required for tree works to any tree listed on Council's Register of Significant Trees.

Tree permit

- i) A tree permit must be obtained for tree works proposed to any of the following (when development consent is not required):
 - a) any palm tree, cycad or tree fern of any size;
 - b) any tree on 'public land' (as defined in the *Local Government Act 1993*) by any persons not authorised by Council;
 - c) any hollow bearing trees; or
 - d) any other tree with:
 - a height equal to or exceeding 6 metres;
 - a canopy width equal to or exceeding 4 metres;
 - for a single trunk tree species, a trunk circumference equal to or exceeding one (1) metre at a height of one (1) metre above ground level; or
 - for a multi-trunk tree species, a combined trunk circumference (measured around the outer girth of the group of trunks) equal to or exceeding one (1) metre at a height of one (1) metre above ground level.

Exceptions

RLEP Clause 5.9 also specifies numerous exceptions where Council approval is not required, for example:

- if the tree is dying or dead, and is not required as the habitat of native fauna;
- if the tree is a risk to human life or property; or
- exceptions under other legislation.

This DCP identifies the following additional exceptions, such as works which are considered of a minor nature or where Council approval is not necessary. Prior written notification however must be made to Council before any work is carried out, providing information such as tree species, reasons for proposed works and digital photos.

The additional exceptions include:

- i) Tree works to undesirable species as listed in Appendix B5-2;
- ii) Minor or maintenance tree works, including :
 - a) crown thinning by a maximum 10% of the existing canopy in any two year period;
 - b) the pruning of deadwood more than 50mm in diameter;
 - c) the removal of live branches to a height of 2.5 metres from ground level; and

Note:

All trees listed on Council's Register of Significant Trees are considered to have historic, cultural and natural significance. The Register can be viewed at Council's website.

Note:

Refer to the website of Office of Environment and Heritage (OEH):
<http://www.environment.nsw.gov.au/determinations/lossofhollowtreesktp.htm>
 and
<http://www.environment.nsw.gov.au/resources/pnf/07353hollowtrees.pdf> for details on how to identify hollow bearing trees.

Note:

Refer to the information sheet prepared by the OEH
<http://www.environment.nsw.gov.au/resources/cpp/AssessHabitat.pdf> for guidance on how to identify if a tree or vegetation is required as habitat of native fauna.

- d) formative pruning of young trees and powerline clearance, as defined in Australian Standard AS 4373 – 2007 - *Pruning of Amenity Trees*;

Note: For minor/maintenance works to a heritage item, in a heritage area or in an Aboriginal place of heritage significance, Council must be notified of and support in writing the proposed activity before any work is carried out.

Note:

Refer to RLEP Clause 5.10 Heritage Conservation (3)(a) for specific requirements.

- iii) The removal of any tree growing within two (2) metres of any building (excluding an outbuilding) measured horizontally from the closest point of the trunk at one (1) metre from ground level to the closest point of the vertical alignment of the building structure which may be the eave, guttering or fixed awning of the building.

- iv) Tree works to give effect to a development consent that permits the pruning or removal of the tree/s;

Note: If approval is given for the pruning and removal of tree/s as part of DA consent, tree works can only be carried out when construction work physically and substantially commences.

- v) Tree works on public land owned by or under the care, control and management of Council and carried out by persons authorised by Council;
- vi) Anything authorised by or under the *State Emergency and Rescue Management Act 1989* or *State Emergency Service Act 1989* in relation to an emergency (within the meaning of that Act) and that was reasonably necessary in order to avoid an actual or imminent threat to life or property; and
- vii) Any emergency fire fighting act or bush fire hazard reduction work within the meaning of the *Rural Fires Act 1997* that is authorised or required to be carried out under that Act.

Note:

Applicants must refer to other legislation and policies for requirements and controls where relevant, including the *National Park and Wildlife Act 1974 (NPW Act)*, *Threatened Species Conservation Act 1995 (TSC Act)*, *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*, *State Environmental Planning Policy (SEPP) 19 Bushland in Urban Areas*, *SEPP 71 Coastal Protection and Recovery Plans* prepared by the NSW Office of Environment and Heritage. For example:

- Any proposed tree work involving a threatened species or an endangered population/ecological community or their habitats, are subject to Part 8A of the *NPW Act*, which requires any such work to be carried out with relevant approvals (e.g. development consent or a licence/certificate issued under the *TSC Act*).

- Under S5A of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*, where a development or activity (under Part 4 or 5 of the Act) is likely to significantly affect threatened species, populations, ecological communities or their habitats, assessment of likely impacts is required, which may also require a species impact statement prepared in accordance with the *TSC Act*. Refer to B4 of this DCP for controls on development in or near areas of biodiversity significance.
- *SEPP 19 – Bushland in Urban Areas* requires development consent for any disturbance of bushland zoned or reserved for public open space purposes. Tree works proposed in ‘bushland’ therefore could only be carried out with development consent.

3 Information required with applications

- i) Any application for a permit or development consent to carry out tree works must contain the following information, as a minimum:
 - a) written consent of the owner of the land where the tree is growing;
 - b) details of the reasons for the proposed tree works;
 - c) a description of the existing tree/s, including:
 - site plan showing the location of the tree/s to be removed or pruned, drainage and sewer pipes and mains, all buildings, paved areas and overhead powerlines;
 - species type (botanical name and common name, if known); and
 - approximate height, canopy spread and trunk diameter at one (1) metre above ground level of individual trees (or groups of trees). Trees to be inspected should be identified on site with tape, spray paint or non-permanent marker.
- ii) The following additional information is required when seeking development consent:
 - a) a description of existing trees (containing information as required above) on adjoining land:
 - within three (3) metres of the site boundaries (including street and park trees); or
 - where the canopy of a tree/s overhangs the site boundaries.
 - b) any proposed landscape treatments, identifying:
 - trees to be retained and protected;
 - methods of retention and/or protection during any works;

- proposed new plantings (species, mature heights and canopy spread);
 - altered soil levels, including cut and fill details;
 - site drainage, including siltation and erosion controls to be implemented where necessary; and
 - proposed horticultural details, including growing mediums, mulching and irrigation.
- iii) An Arborist's Report is required to be submitted with an application:
- a) for tree works to a tree on Council's Register of Significant Trees;
 - b) for tree works identified in Clause 5.9 (7) and 5.10 (2) of the RLEP, as activities requiring development consent; or
 - c) other circumstances where Council requires further information/clarification on the pruning or removal of the tree/s.

Refer to Appendix B5-3 for guidelines for preparing an Arborist's Report.

Note:

Where a dangerous tree is removed in an emergency situation due to obvious instability or hazard (e.g. following storm damage), evidence of the tree's condition must be retained for a period of at least six (6) months after the event and provided to Council upon request.

Such evidence should include:

- photographs of the tree/s; and/or
- a report by a qualified arborist; and/or
- a written statement from the State Emergency Service (SES), if the tree works are carried out by SES at the owner's request.

Except for specified emergency situations, expert advice from an arborist should always be obtained with respect to dangerous trees to confirm their condition and that they do not provide habitat for protected species.

Cutting or removal of threatened species, endangered communities, or their habitats, which pose a threat to life and property, can only be authorised to be done under the *State Emergency and Rescue Management Act 1989* or the *State Emergency Service Act 1989*. Otherwise, the action could be in breach of the *NPW Act* and penalty will apply.

4 Notification

In circumstances where an adjoining owner/s may be directly affected by a proposal relating to tree works, Council may determine to notify adjoining owner/s in accordance with the Public Notification section in Part A.

However, if in the opinion of Council any proposed tree works are of a minor or ancillary nature and not likely to result in any adverse impacts on adjoining land, notification will not be required.

5 Penalties

Under Section 629 of the *Local Government Act 1993*, penalties may apply to the injury or unnecessary disturbance of plants in or from public place, including road reserves.

Under Sections 125 and 126 of the *Environmental Planning and Assessment Act 1979*, court action (in addition to any pecuniary penalty) may apply to the destruction of or damage to a tree or vegetation. Offenders may be required to rehabilitate the site, plant new trees and vegetation and maintain these until maturity,

Further penalties may also apply to the damage or removal of trees or vegetation covered by the *NPW Act*, *TSC Act* and the *EPBC Act*.

Appendices

Appendix B5-1: Matters Council considers for applications for a tree permit or development consent

The following matters are considered, but not limited to, when determining an application:

- i) whether the tree has significant amenity or aesthetic value or is ecologically significant, with particular emphasis placed on retaining trees listed on Council's Register of Significant Trees;
- ii) the condition, maturity and Safe Useful Life Expectancy (SULE) of the tree/s;
- iii) a report from a qualified arborist, if required;
- iv) whether the tree is affected by the provisions of any other Act, Regulation or State Environmental Planning Policy applying to the land;
- v) the potential hazards to persons and/or property in the context of:
 - a) the structural soundness of the particular tree (including condition of the canopy, amount of deadwood, any prolonged decline, significant and sustained insect attack, etc); and/or
 - b) the characteristics and risk potential of the particular species; and/or
 - c) siting issues such as ground conditions, building proximity, etc, which may give rise to a hazardous situation (particularly structural damage to public infrastructure and/or private property caused by the tree/s, its trunk or its root system); and/or
 - d) ill health, such as allergies, where specific evidence is provided by an expert in the relevant medical field and a link between the ailment and the species is reasonably established; and/or
 - e) existing (or potential for) traffic obstruction in relation to proximity to a roadway, intersection or driveway, where pruning would be an insufficient remedy;
- vi) the demonstrated need for reasonable solar access to windows, openings of a building, solar appliances, clothes drying and outdoor living areas;
- vii) whether a tree should be replaced by a more suitable species given its location or proximity to services such as overhead powerlines, sewer or drainage pipes or the like;
- viii) whether an amenity tree no longer fulfils its original purpose in the landscape;
- ix) whether the species' natural propagation method is likely to create a nuisance in the landscape (e.g. Camphor laurel, Hackberry and Sweet Pittosporum);
- x) whether the proposed work needs to be carried out by a suitably qualified and experienced person;
- xi) whether appropriate additional (or replacement) planting has been or should be undertaken;
- xii) the need for, and suitability of, soil erosion and siltation controls;
- xiii) whether permanent and/or temporary fencing or barriers are required prior to works commencing;

Note:

Relevant forms are 'Application for Permit to Prune/Remove Tree/s' and 'DA for Tree Works'. Both can be downloaded from Council's website.

- xiv) whether another alternative measure is required to ensure protection of trees on-site and on adjoining public land;
- xv) whether a tree or vegetation is or provides habitat of a threatened species or ecological communities listed in Schedule 1 or 2 of the *Threatened Species Conservation Act (TSC Act) 1995*;
- xvi) whether, prior to the felling of a tree, special measures should be in place to reduce the potential for injury or death of animals likely to inhabit the tree. Such measures may include:
 - a) inspection of hollows and other potential habitat sites on the tree;
 - b) sectional dismantling;
 - c) supervision of works by an arborist and/or a licensed wildlife carer or handler.

Note:

Refer to the OEH website <http://www.environment.nsw.gov.au/threatenedspecies/> for threatened species identification (by region).

Note: Provided that no significant hazard or other safety issues are caused by the existing tree/s, the following should not generally be considered as valid reasons to remove a tree/s or native vegetation:

- i) leaf drop to gutters, downpipes, pools, lawns, etc.;
- ii) to increase natural light, where it is the sole consideration;
- iii) to improve street lighting into private property;
- iv) to enhance views or reduce the height of trees;
- v) to reduce shade created by a tree/s – particularly species such as *Ficus* or *Araucaria*;
- vi) to reduce fruit, resin or bird droppings falling onto driveways and/or cars;
- vii) minor lifting of driveways, front fences, paths and footpaths by tree roots;
- viii) to erect a fence;
- ix) bushfire hazard control, which has not been verified by Council; or
- x) potential damage to sewer mains or stormwater pipes, unless supported by written expert advice and only where reasonable alternatives are not feasible (e.g. relocation or encasement of mains and replacement of damaged pipes in PVC plastic).

Appendix B5-2: Listing of undesirable species

Species name	Common name
<i>Ailanthus altissima</i>	Tree of Heaven
<i>Cotoneaster species</i>	Cotoneaster
<i>Erythrina species</i>	Coral tree
<i>Ficus elastica</i>	Rubber tree
<i>Ligustrum species</i>	Privet
<i>Nerium oleander</i>	Oleander
<i>Ochna serrulata</i>	Ochna
<i>Olea europa var. africana</i>	African Olive
<i>Schefflera actinophylla</i>	Umbrella tree
<i>Syagrus romanzoffianum</i>	Cocos Palm
<i>Alnus jorullensis</i>	Evergreen Alder
<i>Bambusa species</i>	Bamboo species
<i>Celtis occidentalis</i>	Hackberry
<i>Cupressocypariss x leylandii</i>	Leyland Cypress
<i>Lagunaria patersonia</i>	Norfolk Island Hibiscus
<i>Morus species</i>	Mulberry
<i>Populus species</i>	Poplars
<i>Salix species</i>	Willows
<i>Toxicodendron succedaneum</i>	Rhus tree

Appendix B5-3: Guidelines for preparing an Arborist's Report

Where necessary, Council will require an arborist to prepare a tree/vegetation report and the minimum accepted qualification for an arborist is the Australian Qualification Framework level 4 (AQF4).

Where trees are listed on Council's Register of Significant Trees, a report must be prepared by a qualified arborist. The minimum accepted qualification for a qualified arborist is the Australian Qualification Framework level 5 (Diploma) (AQF5).

The following information is required to be included in any Arborist's Report:

- i) name, address, telephone number, ABN, qualifications and experience of the arborist who inspected the tree/s and prepared the report;
- ii) address of the site, where the tree/s are located;
- iii) who the report was prepared for, date site inspected, date report prepared and the aims of the report;
- iv) methods and/or techniques used in the inspection;
- v) a plan (to scale) accurately showing:
 - a) location of tree/s on the subject site and any adjoining trees which may be affected by any development. Trees identified on the plan shall be named and numbered;
 - b) optimum and minimum tree protection zones - if recommended by the arborist;
 - c) lot boundaries, dimensions and North point;
 - d) proposed development including services, driveways and any alteration to existing and proposed soil levels and drainage, as well as distances (in mm) between tree/s and works.
- vi) a table showing, for each tree to be pruned/removed:
 - a) number of the tree - as indicated in the plan;
 - b) species name;
 - c) conservation status (whether or not is a threatened species or a component of Endangered Ecological Community);

- d) age class;
- e) height;
- f) canopy width;
- g) trunk circumference at one (1) metre above ground level;
- h) health and condition, and estimated Safe Useful Life Expectancy.
- vii) a discussion of other relevant information, including details of tree hollows for wildlife, tree structure/defects, root form and distribution, pests and diseases and/or a Tree Hazard Assessment;
- viii) supporting evidence such as photographs and laboratory results to confirm the presence of soil pathogens or to support soil assessment, where relevant;
- ix) proposed replacement plantings, landscaping and/or soil remediation;
- x) tree protection measures and a post-construction tree maintenance program which can be used as development consent conditions, should the application be approved;
- xi) sources of information referred to in the report;
- xii) measures to minimise impacts of proposed/approved development - eg, footing designs, excavation techniques, vents to atmosphere, etc;
- xiii) any other relevant matters or information such as Resistograph or Picus Sonic Tomograph reports.

Qualified arborists and their contact details may be obtained from the Institute of Australian Consulting Arboriculturists (IACA) (www.iaca.org.au) or from Arboriculture Australia (www.arboriculture.org.au).

These organisations are not specifically recommended and Council will accept arborist's reports from any registered member of a nationally recognised arboricultural organisation or association.

Appendix B5-4: Definitions

Dead tree means a tree with no living vascular tissue.

Destroy means any activity leading to the death, disfigurement or mutilation of a tree.

Height means the distance measured vertically between the horizontal plane of the lowest point of the base of the tree/s which is immediately above ground level and the horizontal plane of the uppermost point of the tree/s.

Injury or injuring means damage to a tree and includes:

- a) lopping and topping;
- b) poisoning, including applying herbicides and other plant toxic chemicals to a tree or spilling (including washing off or directing water contaminated by) oil, petroleum, paint, cement, mortar and the like onto the root zone;
- c) cutting and tearing of branches and roots that is not carried out in accordance with accepted arboricultural practices, does not qualify as 'pruning' (as defined within AS 4373 – 2007 – Pruning of Amenity Trees), or which is done for invalid reasons;
- d) ringbarking, scarring the bark when operating machinery, fixing objects (eg, signs) by nails, staples or wire, using tree climbing spikes in healthy trees marked for retention (except for access to an injured tree worker) or fastening materials that circle and

significantly restrict the normal vascular function of the trunk or branches;

- e) damaging a tree's root zone by compaction, excavation or asphyxiation (including unauthorised filling or stockpiling of materials);
- f) underscrubbing, particularly carried out by mechanical tools such as brushcutters and the like.

Lopping means the cutting of branches or stems between branch unions or at internodes on trees.

Prune or pruning means cutting branches from a tree/s in a planned and systematic manner that is carried out in accordance with the provisions of Australian Standard AS 4373 - 2007 - Pruning of Amenity Trees, and which consists of the following pruning types:

- a) Crown maintenance pruning involving:
 - General pruning
 - Thinning
 - Deadwooding
 - Selective pruning
 - Formative pruning

(Crown maintenance pruning relates to pruning according to the growth habit of the tree/s without reducing the area of the crown, while retaining the structure and size of the tree/s.)

- b) Crown modification pruning involving:
 - Reduction pruning
 - Crown lifting
 - Pollarding
 - Remedial pruning
 - Powerline clearance

(Crown modification pruning relates to pruning that changes the structural appearance and habit of the tree/s.)

Remove or removal means to cut down, fell, destroy, kill, take away, uproot or transplant a tree from its place of origin.

Topping means cutting away part or all of the tree canopy, leaving a trunk and stubbed main branches.

Tree works are works affecting the form, structure or foliage of a tree including root cutting, crown lifting, reduction pruning, selective pruning, crown thinning, remedial or restorative pruning or complete tree removal.

Trunk means the main stem of the tree, as distinguished from the branches and roots.

Undesirable species are plants listed in this control which are deemed undesirable due to characteristics which may lead to poisoning, weed infestation, brittle and dangerous wood, excessive spread of roots or bushland invasion.

Width means the distance measured horizontally (in metres) between the two (2) widest points of a tree's canopy.

Recycling and Waste Management B6

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1 Introduction

This DCP section provides guidelines and requirements for sustainable and efficient recycling and waste management practices during the demolition, construction and on-going operation of a development.

It must be read in conjunction with Council's Waste Management Guideline, which details and specifies waste management requirements for various development types.

This section of the DCP should also be read in conjunction with:

- Part A - Introduction and other sections in Part B - General Controls; and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the DA.

1.1 Objectives

- To encourage best practice in waste management that minimises waste generation, facilitates waste separation and maximises reuse and recycling.
- To ensure quality design of waste management facilities that complement the building design and minimise noise, odour and visual impacts on adjacent uses and the public domain.
- To ensure suitable and efficient waste storage, recycling and collection in all development.

2 Recycling and Waste Management Plan

Explanation

A Site Recycling and Waste Management Plan (hereafter referred to as 'Waste Management Plan') estimates volume and type of waste and recyclables to be generated and outlines waste avoidance and resource recovery activities to be carried out during demolition, construction and operation of a proposed development.

Controls

- i) Submit a Waste Management Plan with DAs involving:
 - a) demolition;
 - b) construction of a new building(s); or
 - c) change of use or alterations/additions to existing premises (only when this would result in a change of waste generation).
- ii) Prepare the Waste Management Plan in accordance with Council's Waste Management Guideline and the template plan in Appendix B6-1.

3 Demolition and Construction

Controls

- i) Identify in the Waste Management Plan, the type and estimated volume of waste to be generated during demolition and construction and respective recycling, reuse and disposal methods.
Note: See Appendix B6-2 for potential reuse/recycling opportunities for various building materials.
- ii) Illustrate on the DA plans/drawings:
 - a) the location and space allocated for the storage of demolition and construction waste or materials;
 - b) waste collection point(s) for the site; and
 - c) path of access for collection vehicles.
- iii) Provide separate bins or storage areas for materials to be reused, recycled and directed to landfill.
- iv) Storage areas must be easily accessible for collection vehicles, clearly signposted indicating purpose and content and managed appropriately to prevent stormwater pollution, damage to vegetation and odour and health risks.
- v) Demonstrate in the Waste Management Plan the use of second hand building materials and recycled building products during building design and construction.
- vi) Retain records (including receipts) on site demonstrating recycling and lawful disposal of waste.

4 On-going operation

Controls

- i) Provide suitable and sufficient waste storage facilities for all development, in accordance with Council's Guideline.
- ii) Identify in any required Waste Management Plan:
 - a) estimated volume of general waste, recyclables, garden waste and bulky waste likely to be generated on the premise;
 - b) required type, size and number of bins and space for storage of bins and bulky waste; and
 - d) details of on-going management arrangements, including responsibility for cleaning, transfer of bins between storage facilities and collection points and maintenance of the storage facilities.
- iii) Illustrate on the DA plans/drawings:
 - a) storage space and layout for bins;
 - b) storage room for bulky waste;
 - c) waste collection point(s) for the site;
 - d) path of access for users and collection vehicles; and

Note:

Waste storage facilities include waste/recycling bins and storage space for bins (e.g. bin enclosures/rooms) and bulky waste, etc.

- e) layout and dimensions required to accommodate collection vehicles when on-site collection is required.
- iv) Locate and design the waste storage facilities to visually and physically complement the design of the development. Avoid locating waste storage facilities between the front alignment of a building and the street where possible.
- v) Locate the waste storage facilities to minimise odour and acoustic impacts on the habitable rooms of the proposed development, adjoining and neighbouring properties.
- vi) Screen the waste storage facilities through fencing and/or landscaping where possible to minimise visual impacts on neighbouring properties and the public domain.
- vii) Ensure the waste storage facilities are easily accessible for all users and waste collection personnel and have step-free and unobstructed access to the collection point(s).
- viii) Provide sufficient storage space within each dwelling/unit to hold a single day's waste and to enable source separation.
- ix) Bin enclosures/rooms must be ventilated, fire protected, drained to the sewerage system and have lighting and water supply.
- x) For mixed use development, provide separate waste storage facilities for residential and commercial uses.
- xi) Consult with Council and the NSW EPA with regards to any proposed storage and collection of special wastes (e.g. medical and household hazardous chemical wastes).

Appendices

Appendix B6-1: Site recycling and waste management plan (template plan)

Part 1 Applicant and development details			
Applicant details			
Application No.			
Name			
Address			
Phone Numbers			
Email			
Development details			
Type of development (please tick)			
Residential	<input type="checkbox"/>	Commercial	<input type="checkbox"/>
Residential & Commercial	<input type="checkbox"/>	Industrial	<input type="checkbox"/>
No. of proposed residential dwellings		No. of proposed commercial/industrial tenancies	
Total industrial/commercial floor area			
Address of development			
Description of existing building/structures on site			
Description of proposed development			

Part 2 Recycling and waste management details
General information and requirements
<p>A Site Recycling and Waste Management Plan (the Waste Management Plan) must be submitted with DAs involving:</p> <ul style="list-style-type: none"> • demolition; • construction of a new building(s); or • change of use or alternations/additions to existing premises (only when this would result in a change of waste generation). <p>The Waste Management Plan must be prepared in accordance with the DCP, demonstrating waste management arrangements during demolition, construction and on-going operation of the development.</p> <p>In addition, details of the waste storage facilities must be clearly shown on the DA plans/drawings, illustrating location and layout of the bin and bulky waste storage, type and number of bins, waste collection points and associated path of access for users and collection vehicles, etc.</p>

Part 2 Recycling and waste management details				
1) Demolition phase				
Type of material (e.g excavation material, bricks/pavers, concrete, tiles, timber, etc)	Est.Vol (m3) and Wt (t)			Specify proposed on-site and off-site reuse and recycling methods, landfill site to be used and contractor details
	Reuse (on-site and off-site)	Recycling (on-site and off-site)	Off-site disposal	

2) Construction phase				
Type of material (e.g excavation material, bricks/pavers, concrete, tiles, timber, etc)	Est.Vol (m3) and Wt (t)			Specify proposed on-site and off-site reuse and recycling methods, landfill site to be used and contractor details
	Reuse (on-site and off-site)	Recycling (on-site and off-site)	Off-site disposal	

Part 2 Recycling and waste management details			
3) On-going operation			
	General waste	Recyclables	Green waste
Amount generated (L/development/week)			
Size and number of bins required			
Frequency of collections (for commercial only)			
Other management arrangements			
Location and space of storage areas			
On-site management (e.g. garbage chute, composting, and compaction equipments)			
Floor area and height required for manoeuvrability (if on-site collection is required)			
Roles/responsibilities for cleaning, transfer of bins between storage facilities and collection points and maintenance of the storage facilities			
Contractor details			

Your declaration
<p>The information provided on this Recycling and Waste Management Plan and the accompanying plans provides an accurate indication of the manner in which recyclable/waste materials are to be managed.</p> <p>All records demonstrating recycling and lawful disposal of waste will be retained and kept readily accessible for inspection by regulatory authorities such as Council, WorkCover NSW or the NSW EPA.</p> <p>Applicant(s) name:</p> <p>Applicant(s) signature:</p> <p>Date:</p>

Appendix B6-2: Reuse and recycling opportunities

Materials	Reuse/recycling potential
Concrete	Reused on-site as fill; crushed for road base
Bricks	Cleaned and/or rendered for reuse; sold or provided to a recycled materials yard
Roof tiles	Crushed for reuse in landscaping and driveways or sold or provided to a recycled materials yard
Plasterboard	Crushed for reuse in manufacture of new plasterboard
Hardwood beams	Reused as floorboards, fencing, furniture
Other timber	Reused in formwork; ground into mulch for garden
Doors, windows, fittings	Reused in new or existing buildings
Glass	Recycled; aggregate for concrete production
Metal, steel/copper pipe	Recycled metal recycling facility
Cardboard packaging	Recycled
Synthetic and recycled rubber	Reused in manufacture/construction of safety barriers, speed humps
Green waste (organics)	Mulched, composted for reuse as
Top Soil	Stockpiled on-site for reuse in landscaped areas
Soil	Stockpiled on-site for reuse as fill

There are many opportunities to reduce the volume of waste generated during demolition and construction:

- Consider adaptive reuse of building materials by reusing or recycling materials onsite.
- Facilitate reuse/recycling by 'deconstruction', where various materials are carefully dismantled and sorted.
- Consider sourcing used or recycled building materials.
- Unwanted construction materials and reusable demolished building materials should be taken to a second hand building centre which will reduce waste disposal costs.
- Large quantities of single items like bricks may be picked up by recycling yards for free.
- Some specialist demolition companies will remove waste materials from a site and recycle off-site.
- Avoid purchasing materials that are individually wrapped and prefer purchasing materials that can be delivered in returnable packaging, i.e. timber pallets.

Appendix B6-3: Types and number of bins required for residential development

Type of development	General Waste Weekly collections	Recycling Fortnightly collections	Green Waste Fortnightly collections
Single dwelling houses and semi-detached dwellings	1 x 140 L each	1 x 240 L	1 x 240 L
Dual occupancies and secondary dwellings	1 x 140 L each or 1 x 240L shared between 2 dwellings	1 x 240 L each or shared between 2 dwellings	1 x 240 L each or shared between 2 dwellings
Multi-dwelling housing (e.g. town houses) and attached dwellings (e.g. terrace houses)	If bins stored in each residence		
	1 x 140 L	1 x 240 L	1 x 240 L
	If bins stored in a communal storage area		
	1 x 240L per 2 units	1 x 240L per 2 units	240L bin/s available on request
Residential flat buildings	1 x 240L per 2 units OR 660L bulk bins based on 120L/Unit	1 x 240L per 2 units	240L bin/s available on request
Boarding houses; hostels; residential care facilities; and tourist & visitor accommodation	1 x 240 L per 6 rooms OR 1 x 240L per 2 rooms if each room has individual kitchen	1 x 240 L per 6 rooms OR 1 x 240L per 2 rooms if each room has individual kitchen	240L bin/s available on request

Note: Waste bins for residential component of mixed-use development must be provided in accordance with the above requirements for relevant development types.

Transport, Traffic, Parking and Access

B7

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1 Introduction

The RLEP aims, among other things to:

- Support efficient use of land, vibrant centres, integration of land use and transport, and an appropriate mix of uses.
- Promote sustainable transport, public transport use, walking and cycling.

This section of the DCP incorporates a range of initiatives to promote sustainable transport including: small car parking spaces (within large commercial and shopping centre development), dedicated car share spaces, bicycles facilities, motorcycle and scooter parking. It also encourages the integration of development with the public transport network and an improved public domain.

The section applies to all development in Randwick City. It sets out the objectives, controls and options for development proposals to investigate, design and manage parking demand, access, and parking spaces and provide for alternative modes of transport. It also covers the requisite studies which may be needed when submitting a development proposal.

This section of the DCP should be read in conjunction with:

- Part A - Introduction and other sections in Part B - General Controls; and
- Other sections of the DCP for specific development types, locations or sites, if relevant to the DA.

Note:

Where a reference is made to a published Australian/New Zealand Standard it is to the most recent version.

1.1 Objectives

- To promote sustainable transport options for development, particularly along transport corridors, in commercial centres and strategic/key sites.
- To manage the provision of car parking within the broader transport network.
- To support integrated transport and land use options which can demonstrate shared and effective car parking provision with car share facilities, motorbikes/scooters, bikes and links to public transport.
- To ensure car parking facilities, service and delivery areas and access are designed to enhance streetscape character and protect pedestrian amenity and safety.

2 Sustainable transport

2.1 Public transport

Randwick City relies on a bus based public transport system providing services particularly to and from the Sydney CBD. Local and regional connections provide access to other centres and activities such as Bondi Junction, Waverley, Maroubra Beach and Coogee Beach.

Increasing pressure on the bus networks, over the last decade, has seen substantial interest and investigations into the re-establishment of a light rail system from the City to Randwick.

An integrated light rail system would facilitate access to large entertainment, employment, health and learning venues such as the Randwick hospitals campus, the University of NSW, NIDA, Centennial Park and Moore Park, Royal Randwick Racecourse, Randwick TAFE, the Entertainment Quarter, Sydney Cricket Ground, and the Sydney Football Stadium.

Commitment by the State Government to light rail will deliver benefits for local residents and businesses. Development along potential routes and in and around destination venues/activities will need to integrate with the overall public transport network.

Accessibility to public transport is critical, requiring suitably located services and infrastructure (eg. bus stops) integrating with pedestrian and cycle networks.

At a State level, the NSW Bike Plan aims to double the number of people cycling in NSW over the next 5 to 10 years, and to double the mode share in Metropolitan Sydney. This DCP supports those efforts with controls to improve walking, cycling and its integration with development and the public transport network.

While recognising the need for car travel this DCP also introduces the potential for sustainable and integrated transport solutions.

Objective

- To integrate development with the public transport network and improve walking, cycling, sustainable transport options and public transport use.

Control

- i) All development in addressing transport, parking and access requirements must consider and integrate transport measures that provide for greater use of public transport, walking and cycling.

An integrated response to land use and transport planning is supported by the Metropolitan Plan for Sydney 2036, the draft East Sub Regional Strategy and planning policies and direction.

For information on car sharing in Australia, refer to Australian Greenhouse Office 2004: Car Sharing – An Overview.

2.2 Car share

Explanation

Car share schemes provide an economical alternative to car ownership for residents and businesses. A number of commercial schemes operate in Sydney providing on-line booking of vehicles linked to dedicated parking spots. These schemes are more viable in locations where private car ownership is discouraged or where available on street parking is limited.

Membership of a car share scheme provides access to a network of new cars parked locally - without the expense of owning one. Car sharing also helps to reduce the number of cars on the road and alleviate problems associated with traffic congestion. Council has partnered with a carshare provider to promote car sharing in Randwick City. Council has also resolved to establish preferential parking for car-share and hybrid vehicles.

For large development, therefore, there may be an opportunity to provide dedicated on-site parking spaces for car share vehicles. This would be particularly effective for development on sites such as the University and Hospital, key strategic sites and within or adjoining commercial centres.

Car share schemes are effective on sites or in areas with higher density and ready access to good public transport and services. To operate successfully car share vehicles need to be highly visible, easily and safely accessed at any time (whether on or off the street) by residents and business operators on the site, as well as those in the surrounding precinct.

Car share spaces can also be dedicated for the exclusive use of building occupiers, if desired. In this case, the cost of the car share can be met through strata levies and must be organised by the developer.

Where car parking rates are being considered, Council will look more favourably on proposed reductions within close walking distance to strategic bus corridors and areas of high public transport provision and where a car share scheme is provided on site.

Objective

- To encourage car share spaces in developments with high public transport access.

Controls

- i) Car share spaces are to be provided in residential and/or commercial development where public transport accessibility is high and/or where a Transport Assessment Study is required.
- ii) Locate the car share space/s in a convenient, accessible, secure area.

Any development can consider car share, however it is larger development where a car share space/s will be sought by Council.

Car share spaces can be provided where there are site constraints, or other restrictions on car parking provisions.

- iii) Ensure good visibility, 24 hour access and close proximity to the street. If in a basement it must be near exit/entry areas and not difficult to find or be out of sight.
- iv) Identify (sign and road/pavement markings) the car share space for use only by car share vehicles in accordance with RMS standards.
- v) The establishment and operation of a car share scheme must occur soon after completion or occupation of the development.
- vi) Parking spaces for car share schemes located on private property are to be retained as common property by the Owners Corporation of the site.

2.3 Fuel efficient cars

Explanation

Priority parking spaces can be allocated, within certain developments, to targeted users to promote equity of access and encourage use of environmental vehicles over conventional vehicles.

The term “environmental vehicles” most typically covers very small cars, hybrid cars and fully electric cars.

The provision and management of priority spaces for smaller cars and environmental vehicles with easy access to entry/exits and lifts should be part of commercial, office and shopping centre developments.

Spaces allocated to these vehicles should be marked and managed according to the specific vehicle type targeted. In the case of fully-electric cars, it may be appropriate to provide recharging facilities adjacent to the parking space.

Objectives

- Encourage the use of smaller and fuel efficient vehicles within the community.
- Provide convenient, accessible parking spaces in commercial, office or shopping centres development.

Controls

- i) A minimum of 10% parking spaces are to be designed and labelled for small & environmental vehicles in commercial, office or shopping centre development wherever 10 or more spaces are required.
- ii) Give priority location to these spaces with easy access to entry/exits and lifts of the office/shops/buildings.

2.4 Resident parking schemes

Explanation

Resident parking permits are used to exempt residents from some kerbside time restrictions in areas where on street demand is high arising from shoppers, commuters and visitors. These circumstances are most likely to exist in and around business or neighbourhood shopping centres, centres of activity such as the University of NSW and Hospital Specialised Centre, public swimming pools, sports fields, beaches etc.

In the Randwick LGA a major objective of the resident parking scheme is to improve the amenity for those residents who **do not** have access to an off-street parking space and where there is time limited on-street parking in place.

No parking permits will be issued to residents of new developments that have been approved by Council in accordance with this DCP. This will be a condition of consent and recorded on Section 149(5) planning certificates and must be notified to all prospective buyers and tenants of the building. This is to ensure that new developments do not increase congestion and parking demands in busy areas while encouraging developers to adopt sustainable transport options and new residents to use public transport, car share, walking and cycling.

Student housing

Student housing and other forms of residential development, such as boarding houses approved by Council in accordance with this DCP will also not be permitted to apply for parking permits.

Controls

- i) No resident parking permits will be issued for new development or for significant alterations and additions to residential flat buildings and this must be notified to all prospective owners and tenants.

Note: This applies to development determined under this DCP and the RLEP.

- ii) A notice shall be placed in the foyer/common area of all buildings advising tenants that they are in a building which does not qualify for on-street resident parking exemptions.

2.5 Traffic and parking study requirements

Explanation

To enable Council to manage transport demand generated by development a suitable assessment must be provided by the developer/applicant.

Controls

- i) Depending on the type of development one or more of the following will be required to be submitted with the development application:
 - a. Transport Assessment Study and Travel Plan
 - b. Parking and Access Study
 - c. Construction Traffic Management Plan (Preliminary) for busy arterial roads

Note: Table 1 Vehicle Parking Rates sets out where one or more of these studies are required, depending on types of development.

- ii) The Transport Assessment Study must be prepared by a qualified traffic engineer. The study/report must then be signed by the author with their qualifications and MIE membership number quoted.

Transport Assessment Study Requirements

A Transport Assessment Study is a technical investigation into the transport and safety issues that might arise from a development. It also assesses the transport related impacts on the surrounding transportation network that are generated by a development and how those impacts are to be managed. Such a study recognises the role of traffic within a broader transport system that includes public transport, walking and cycling.

Refer to Section 2 of the RMS Guide to Traffic Generating Development 2002.

The RMS Guide to Traffic Generating Development, in particular Section 2 should be used as a guide to the detail required in the Transport Assessment Study which complements the matters listed in this DCP – see Appendix B7-1 for the Transport Assessment Study.

Parking and Access Report

A parking and access report is to assist in determining the most appropriate level of car parking for a development and is to accompany DAs for smaller scaled development. The requirement to provide such a report will depend on the type, scale and potential traffic impact of the proposed development and will be determined by Council at pre DA stage.

The Parking and Access report should incorporate a survey of available on-street parking within walking distance from the site (including Thursday evening and Saturday morning).

Construction Traffic Management Plan (CTMP)

A CTMP is a practical response to ensuring that demolition and construction works do not adversely impact on the public domain or vehicular and pedestrian movements in an area.

A construction traffic management plan should detail how proposed development located on busy roads, bus or light rail stops or on difficult sites will be able to undertake loading and unloading, demolition and construction including the manoeuvring of trucks in and out of a site with minimum disruption to vehicular and pedestrian traffic or transportation networks.

2.6 Traffic Generating Development

Council is required under State Environmental Planning Policy (Infrastructure) 2007 to refer to the Roads and Maritime Services (RMS) certain DAS. The development to be referred is listed in the SEPP.

In certain circumstances Council may also refer development to the Regional or Local Traffic Committee.

3 Parking & Service Delivery Requirements

This section provides vehicle parking rates, design and location requirements.

3.1 Relationship to other documents

Development applications requiring car parking will need to consider the following documents:

- Australian Standards (AS)
 - i) AS 1428 Design for access and mobility
 - ii) AS 2890 Parking facilities series
 - AS 2890.1 Off-street car parking
 - AS 2890.2 Off-street commercial vehicle facilities
 - AS 2890.5 On-street parking
 - AS 2890.6 Off-street parking for people with a disability
- State Environmental Planning Policy (Infrastructure) 2007
- RMS Guide to Traffic Generating Development 2002
- Austroads guides

3.2 Vehicle Parking Rates

Explanation

The vehicle parking rates apply to all new development, alterations and additions to existing development and change of use.

The provision of motor cycle or scooter parking areas is included in the rates to encourage this mode as a viable, energy efficient transport option.

Service delivery rates are in Table 2 and Bicycle rates are set out in Table 3.

Objective

- To ensure that an appropriate level of off-street vehicle parking is provided.

Controls

- i) Development must comply with the vehicle parking rates as detailed in Table 1 Vehicle Parking Rates. Any excess provisions over and above the parking rates will be included in GFA calculations.
- ii) Parking for service/delivery vehicles, bicycles and people with a disability need to be considered for the relevant land use and in accordance with this DCP.
- iii) Where a parking rate has NOT been specified in the table, the RMS Guide to Traffic Generating Developments shall be used to calculate the parking requirements for the proposed development and/or a Transport Assessment Study may be used to determine the parking, subject to approval by Council.
- iv) Minimise the use of mechanical parking devices (car stackers or turntables) particularly on difficult (eg constrained access) sites and where queuing may result or safety is jeopardised.
- v) For mixed use development the allocation of car spaces among the uses is to be indicated on the DA plans.

Note:

See sub-section 2 of this section for rates for car share spaces, fuel efficient cars and study requirements

Where development comprises an extension, modification or change of use to an existing development, Council will generally only require that additional parking be provided to cater for the additional demands arising from increases in floor space or changes in use.

Note:

Parking calculations should be rounded to the nearest whole number. Where the fraction is 0.5, then the figure must be rounded up to the next whole number.

Table 1 Vehicle Parking Rates

(See also Tables 2 and 3, for service/delivery and bicycles rates)

Proposed use	Vehicle	Motor cycle/scooter
RESIDENTIAL		
Dwelling houses/dual occupancies, semi-detached dwellings, attached dwellings	1 space per dwelling house with up to 2 bedrooms 2 spaces per dwelling house with 3 or more bedrooms Note: Tandem parking for 2 vehicles is allowed	
Boarding Houses and student accommodation Note: The Affordable Rental Housing SEPP contains controls for boarding houses, including parking requirements, which overrides the DCP. Refer to the SEPP for parking provisions for boarding houses.	1 car space per 5 bedrooms 1 space per resident caretaker	1 motorcycle space per 5 bedrooms
Group Homes	2 spaces per group home. Tandem parking is not allowed.	
Home business/industry	1 space in addition to the parking for the dwelling.	
Hostels	1 space per 10 beds; 1 space per 2 staff; 1 service and delivery space depending on size (e.g. 30+ beds)	
Multi dwelling housing and residential flat buildings	1 space per 2 studio 1 space per 1 bedroom apartments (over 40 m ²) 1.2 spaces per 2 bedroom apartments 1.5 spaces per 3 or more bedroom apartments 1 visitor space per 4 dwellings (but none where development is less than 4 dwellings) Note: Car share facilities in certain locations are a viable option and should be discussed with Council staff.	5% of the car parking requirement

Proposed use	Vehicle	Motor cycle/scooter
<p>Seniors housing</p> <p>Note: These parking rates for seniors housing are contained in the SEPP (Housing for Seniors or People with a Disability) as 'standards that cannot be used to refuse development consent'. The SEPP overrides the DCP. Refer to the SEPP for parking provisions for seniors housing.</p>	<p>Hostels</p> <p>(i) 1 space per 5 beds in the hostel</p> <p>(ii) 1 visitor space per 10 beds;</p> <p>(iii) 1 parking space per 2 staff; and</p> <p>(iv) 1 parking space suitable for an ambulance.</p> <p>Residential care facility</p> <p>(i) 1 space for each 10 beds in the residential care facility (or 1 parking space for each 15 beds if the facility includes care for persons with dementia);</p> <p>(ii) 1 space for each 2 staff; and</p> <p>(iii) 1 parking space suitable for an ambulance.</p> <p>Self-contained dwellings</p> <p>(i) 0.5 car spaces for each bedroom where the development application is made by a person other than a social housing provider; or</p> <p>(ii) 1 car space for each 5 dwellings where the development application is made by, or is made by a person jointly with, a social housing provider.</p> <p>Note: Resident spaces should be designed to be suitable for people with a disability.</p>	
BUSINESS AND RETAIL		
Business premises, retail premises and office premises	1 space per 40m2 Gross Floor Area (GFA)	5% of the car parking rate
Business and office premises in residential zones	1 space per 100m2 GFA	
Entertainment facilities and function centres	A Transport Assessment Study is required.	5% of the car parking rate
Bulky goods premises and passenger transport facilities	Transport Assessment Study is required.	5% of the car parking rate

Proposed use	Vehicle	Motor cycle/scooter
Pubs, registered clubs, and nightclubs	1 space per 10 person as endorsed as the maximum number on the subject liquor license; or 1 space per 6m2 bar, lounge, entertainment venues, restaurant, dining room, games rooms, auditoriums and disco etc, where the liquor license does not specify maximum number of persons. 1 space per 3 staff; 1 space per manager and 1 taxi/bus pick up point on site.	
Restaurants or cafes	1 space per 40m2 GFA for the first 80m2 GFA then 1 space per 20m2 GFA thereafter. Note1: Parking rate applies to restaurant uses, over a public road such as a balcony. Note2: Parking rates do not apply to dining on footpaths or on community land.	
Take away food and drink premises	Transport Assessment Study including provision for queuing for drive through facilities.	
Service stations and vehicle repair stations	6 spaces per work bay; and 1 space per 25m2 GFA.	
TOURIST AND VISITOR ACCOMMODATION		
Backpackers' accommodation	1 space per 10 beds or 1 space per 5 bedrooms (which ever is the greater) plus 1 space per 2 staff	5% of the car parking rate
Bed and breakfast accommodation	1 space for guest use (plus parking for the dwelling)	
Hotel or motel accommodation	1 space per 4 units; and 1 space per 2 staff.	
Serviced apartments	1 space per 4 apartments; and 1 space per manager/caretaker	
HEALTH, EDUCATION AND COMMUNITY FACILITIES		
Child care centres	Transport Assessment Study or Parking and Access Study (depending on development size) is required, with 1 space per 8 children for drop off and pick up; and 1 space per 2 staff.	
Community facilities	Transport Assessment Study is required.	5% of the car parking rate

Proposed use	Vehicle	Motor cycle/scooter
Educational establishments <ul style="list-style-type: none"> Schools Tertiary institutions (except the UNSW) 	Schools <ul style="list-style-type: none"> 0.7 spaces per staff. Tertiary <ul style="list-style-type: none"> 0.7 spaces per staff member plus 1 space per 10 full time students in a tertiary institute. Note: For larger developments a Transport management and accessibility plan (TMAP) maybe required. See Transport NSW - Draft Interim Guidelines for the Preparation of TMAPs.	5% of the car parking rate
Health consulting rooms	2 spaces per consulting room (plus parking for the dwelling)	
Hospital	1 visitor space per 3 beds; plus 1 space per 2 staff; plus 1 space per doctor plus adequate space for ambulance parking.	5% of the car parking rate
Medical centre	1 space per 25m ² GFA	5% of the car parking rate
Places of public worship	1 space per 20m ² GFA	5% of the car parking rate
Respite day care centres	1 space per 2 staff plus 1 mobility access space plus drop/off pickup area.	
LIGHT INDUSTRY		
Truck depots and shipping container storage	Transport Assessment Study required.	
Garden centres, Plant nurseries, Hardware and building supplies, landscape materials supply	1 space per 40m ² GFA	5% of the car parking rate
Light industry; warehouse or distribution centre; wholesale supplies	Light industry 1 space per 80m ² GFA Warehouse or distribution centres and wholesale supplies 1 space per 300m ² GFA.	5% of the car parking rate
RECREATION		
Indoor recreation facility	1 space per 25m ² GFA or Transport Assessment Study	5% of the car parking rate
Outdoor recreation facility	Transport Assessment Study	5% of the car parking rate
Major recreation facility	Transport Assessment Study	5% of the car parking rate

3.3 Exceptions to the Parking Rates

Explanation

Council transport investigations note that Randwick City's car parking rates are higher than adjoining comparable councils and the recommendations of the RMS. The rates for residential and business uses have **not** been altered in this DCP, except for minor adjustments made for specific development types (e.g. business premises in residential zones and backpackers' accommodation). The DCP provisions continue to acknowledge that applicants may seek variations where suitable and sustainable transport alternatives are considered and incorporated into the development.

There may be circumstances where it may not be physically possible or aesthetically desirable to provide parking (eg the provision of off street parking in the frontage of a heritage item or in areas of significant streetscape value).

It is the responsibility of the applicant through the development assessment process to demonstrate that the proposed level of parking provision is adequate, or that the overall planning benefits of the proposed development outweigh the deficiencies.

Controls

- i) Any variation to the parking rates must address the following issues (as relevant to the particular development):
 - (a) Type and scale of the development and its potential impact on local traffic and parking conditions.
 - (b) Survey of parking provision in comparable recent development.
 - (c) Existing parking facilities already provided prior to further development.
 - (d) Site and building constraints.
 - (e) Heritage and urban design considerations including significant streetscape elements such as sandstone retaining walls, significant mature trees etc
 - (f) On street and public parking in the area, as well as proximity and access to public transport.
 - (g) Location of local services, employment, retail and recreational facilities.
 - (h) Safety of vehicles, pedestrians and cyclists.
 - (i) Provision of any integrated, sustainable transport options on site.

3.4 Parking requirements for accessible spaces

Explanation

The Federal Government's *Disability Discrimination Act (DDA 1992)* 1992 sets the framework for ensuring that people with a disability have the same rights to equality before the law as the rest of the community and are not discriminated against in areas such as housing, education, employment, access and provision of goods and services. The Building Code of Australia (BCA) and Disability (Access to Premises—Buildings) Standards establish the access requirements and rates for car parking for people with a disability.

All development must provide accessible car parking for people with a disability as set out in the BCA and the relevant (and most current) Australian Standard (AS).

The dimensions for car spaces including headroom and access requirements for people with a disability are set out in AS 2890.6.

3.5 Parking requirements for adaptable housing – aging in place

Explanation

Where adaptable housing units are provided in accordance with Part C3 of this DCP, the car parking rate will be the same as that required for residential flat buildings.

Objectives

- To ensure that the design of parking areas is safe and compatible with best practice standards for people with a disability.
- To provide a sufficient number of designated car parking spaces for vehicles used by people with a disability.

Controls

- i) Comply with the minimum requirements of AS 4299 Adaptable Housing regarding car parking (e.g. internal dimension of 3.8m by 6m for garages and carports; 1 space per adaptable unit) or otherwise comply with the access and dimensions for car spaces for people with a disability as specified in the BCA and the Australian Standard AS 2890.6.
- ii) Parking spaces for people with a disability are to be provided in close proximity to lifts or access points and be linked by a continuous path of travel.
- iii) The location of the accessible parking spaces must be indicated at the entrance to the car park.
- iv) Parking spaces must be well lit and clearly line marked.

- v) Parking areas, signage and directions must be well lit and easily read for convenience and safety.
- vi) Parking areas that use lifts should include audio cues and tactile control panels incorporated into the design of the lift.
- vii) For residential development, accessible car parking spaces are to be allocated to adaptable units or as visitor parking. Accessible car parking spaces allocated to adaptable dwelling units are to be a part lot to an adaptable unit in the strata plan.

3.6 Car park location and design, streetscape and heritage

Explanation

The Australian Standards and RMS Guidelines provide the base requirements for parking location and design.

Car park location and design needs to be carefully considered to ensure pedestrian safety, clear sight lines and to maintain streetscape character and amenity.

In older established areas, uniform streetscapes and heritage conservation areas the provision of car parking needs to maintain the character of the area and the significance of the item or conservation area.

Controls

- i) Minimise loss of existing on-street parking supply by:
 - a. Careful location of crossings and laybacks
 - b. Tapering the driveway at the property boundary
 - c. Amalgamating driveway crossings with adjoining property where possible
 - d. Considering the overall streetscape, continuity of footpaths and the need for safe pedestrian movement.
- ii) Ensure pedestrian and cycling safety is maintained or improved.

Refer to other relevant Parts and Sections of this DCP, for example, Residential or Heritage for detail on car parking design, provision and location particularly for older areas or areas with heritage value. Note: In some cases, it may not be possible to provide off-street car spaces.

3.7 Parking layout, configuration & dimensions

Explanation

The specific requirements for parking layout and dimensions (for car spaces, aisles, disabled, grades etc.) are provided in the relevant Australian Standard and the RMS Guidelines. All development must comply with these standards as a minimum level of provision to ensure car parking facilities are efficient, adequate and safe.

In new commercial development the provision of a percentage of small car spaces with ready access to facilities is encouraged.

In residential areas, smaller car spaces are sometimes sought for dwelling houses or semi-detached dwellings on narrow lots with access from the primary street frontage. These carports or hard stand spaces may only be suitable where they are able to accommodate medium sized cars as this avoids overhanging the footpath and creating a potential sight and physical hazard to pedestrians and other road users. Off street parking often also involves the loss of valuable on-street car parking spaces and disrupts the continuity and safety of footpaths.

Controls

- i) An off-street car space must be a minimum of 2.4m by 5.4m long and comply with AS 2890.1.
- ii) Small car spaces as provided for in the Australian Standard are not permitted for dwelling houses, terraces, semi-detached dwellings or attached dwellings.
- iii) Motor cycle parking spaces must be a minimum 2.5m by 1.2m and clearly marked.
- iv) Motor cycle spaces are to be designed and located so they are not vulnerable to being struck by manoeuvring vehicles.
- v) Motor cycle spaces must be located on flat and even surfaces as they rely on side-stands to park.
- vi) In all development except dwelling houses, semi-detached dwellings or attached dwellings, all vehicles must enter and exit in a forward direction.
- vii) Unless otherwise stated, development is to comply with the relevant Australian Standard and the RMS Guidelines for car parking layout, dimensions, aisle widths, grades, access requirements for different uses & users (eg those with disabilities), driveway widths, service and delivery needs.

Refer also to the relevant sections of this DCP for car parking details relating to specific land uses such as residential, commercial, industrial and specific locations such as UNSW.

3.8 Access to Dwellings Elevated Above Retaining Walls in Public Domain

Explanation

The historical subdivisions in the coastal areas of Randwick City have created a number of urban blocks that are elevated above public roads due to the sloping topography. The frontage to these allotments is supported by masonry block retaining walls aligning the carriageway boundaries, with public footpaths running above.

The provision of off-street parking to these sites often proves to be problematic as it necessitates significant demolition and modification to the retaining walls. In some occasions, the height of the retaining walls does not possess sufficient clearance for parking facilities required by the Australian Standard. The public footpaths above need to be raised along the frontage of the development site, which further compromises the visual integrity of the retaining walls, streetscape character and pedestrian accessibility. Any successive developments for vehicular access would incrementally remove wall sections and lead to cumulative visual impacts.



Due to the likely adverse implications on streetscape amenity, the partial demolition of existing retaining walls within the public domain for the sole purpose of gaining vehicular access to a private property will generally not be supported.

Controls

- i) Any provision of vehicular access to dwellings must minimise demolition, modification and damage to existing retaining walls within the public domain.
- ii) Double width driveway and entry to on-site parking involving full or part removal of retaining walls in the public domain must not be provided.
- iii) Development must not involve any significant change to the existing gradients of public footpaths above the retaining walls, except to facilitate equitable access.
- iv) The creation of an access driveway must not jeopardise the safety of pedestrians and vehicles.
- v) Works that require alteration or replacement of landscape elements and structures (such as handrails) adjacent to the public footpaths situated above retaining walls must be compatible with the streetscape character.

3.9 Service and Delivery Vehicles

Explanation

The number of service bays required for a development depends on the size and nature of the development. The following rates are based on the RMS Guideline. However, given the age of the data used, major developments should quantify their service vehicle requirements through new surveys of similar developments.

The following minimum requirements for service delivery parking apply to new development:

Table 2 Service and Delivery Rates

TYPE OF DEVELOPMENT	MINIMUM REQUIREMENTS
Commercial premises	1 space per 4,000m ² GFA up to 20,000m ² GFA plus 1 space per 8,000m ² thereafter (50% of spaces adequate for trucks)
Department Stores	1 space per 1,500m ² GFA up to 6,000m ² GFA plus 1 space per 3,000m ² thereafter (all spaces adequate for trucks)
Supermarkets, shops and restaurants	1 space per 400m ² GFA up to 2,000m ² GFA plus one space per 1,000m ² thereafter (all spaces adequate for trucks)
Warehouse, Industrial	1 space per 800m ² GFA up to 8,000m ² GFA plus 1 space per 1,000m ² thereafter (all spaces adequate for trucks)
Hotels and Motels	1 space per 50 bedrooms or bedroom suites up to 200 plus one per 100 thereafter plus one space per 1,000m ² of public area set aside for bar tavern, lounge and restaurant, (50% of space adequate for trucks)
Residential flat buildings	1 space per 50 units up to 200, plus 1 space per 100 units thereafter. PLUS 1 space per 1,000 m ² of public area set aside for bar, tavern, lounge and restaurant.
Other uses	1 space per 2,000m ² GFA (50% of spaces adequate for trucks)

(Source: RTA Guidelines 2002)

Controls

- i) Development must comply with the minimum requirements for the parking of service and delivery vehicles as set in Table 2.
- ii) Service vehicle dimensions, layout and service/loading bays must comply with Australian Standard AS 2890.2 Off street commercial vehicle facilities.

4 Bicycles

Explanation

Environmentally healthy, vibrant and sustainable cities support alternative modes of transport such as bicycles and the provision of suitable infrastructure and safe bikeways.

Major activity nodes, such as the University of New South Wales, Prince of Wales Hospital, Centennial Park and the beaches generate demand for non-car transport. Through improved facilities for cyclists, there is an opportunity to promote sustainable transport by reducing car dependency, encouraging walking and cycling and improving community health.

The following provides bicycle parking rates for certain development in the City. Where a type of use is not specified a merit assessment is required to ensure bicycle parking is not over or under provided.

Objectives

- To support active, healthy lifestyles via the provision of cycling infrastructure.
- To promote cycling as a safe, convenient and clean form of transport.
- To provide equitable access to parking facilities.

4.1 Relationship to other documents

DAs requiring the provision of bicycle facilities will need to consider the following documents:

- Australian Standard AS 2890.3 Bicycle parking facilities
- NSW Planning Guidelines for Walking and Cycling
- Austroads Part 14 Bicycles
- RMS Guide to Traffic Generating Development

4.2 Bike parking rates and controls

Controls

- i) All new development is to provide on-site bike parking additional to other parking requirements, in accordance with the minimums set out in Table 3 below.
- ii) The design and construction of bicycle facilities must comply with AS2890.3.
- iii) Parking requirements for cyclists will vary. Developments therefore must consider the following categories:
 - a. All day parking for employees and students.
 - b. Permanent parking or storage of bicycles for residents.

Note:

While there are no requirements stated for a dwelling house or semi detached dwelling the inclusion of suitable internal/covered bike space is encouraged

- c. Short term parking for visitors to shopping centres, offices, industrial buildings and other public and private buildings.
 - d. All day parking at transport nodes.
- iv) Bicycle parking for residents/staff should be located close to building entry/exits and lifts and be given priority over other parking uses to ensure they are well located, designed and ultimately used. Avoid locating bicycle parking in hidden niches, at the end of aisles and under staircases etc.
- v) Where parking is located in basement levels, bicycle parking must be located on the upper most basement level close to pedestrian exits.
- vi) Bicycle parking spaces must be clearly marked and easily accessible, have good surveillance and provide a means of securely locking bicycle frames and wheels.
- vii) One-wheel racks are not acceptable nor are facilities that require a wheel to be removed.
- viii) A safe path of travel from bike parking areas to entry/exit points is to be marked and have a minimum width of 1.5m. Adequate sight lines are to be provided to ensure safety.
- ix) Bike parking for visitors must be provided in an accessible on-grade location near a major public entrance to the development and is to be sign posted.
- x) Minimum locker provisions for work places should be in accordance with Table 3 of the NSW Planning guidelines for walking and cycling and development.

Table 3 Bicycle provision rates

Proposed use	Residents/Employees	Customers/Visitors	Shower & change facilities for workplaces
Residential housing & accommodation			
Shop top housing, multi dwelling housing, residential flat buildings	1 bike space per 2 units	1 per 10 units	Showers 1 per 0-12 2 per 13-49 4 per 50-149 staff. 2 change rooms (one male/one female) where 13 or more staff
Boarding Houses and student accommodation	1 bike space per 2 rooms	1 per 10 rooms	Nil
Back packers' accommodation	1 bike space per 2 staff	1 per 10 beds	Nil
Serviced apartments, hotels and motels	1 bike space per 4 staff	1 per 20 rooms	Showers 1 per 0-12 2 per 13-49 4 per 50-149 staff 2 change rooms (one male/one female) where 13 or more staff
All other development			
Commercial, retail, industrial, community, educational, recreational etc.	1 bike space per 10 car parking spaces. Accessible showers 1 in 10 spaces. Changing facilities (next to the showers) with one secure locker per bike space.		Showers 1 per 0-12 2 per 13-49 4 per 50-149 6 per 150-299 8 per 300-500 staff 2 change rooms (one male/one female) where 13 or more staff

Sources: Marrickville Council, Sydney City and NSW Planning Guidelines for Walking and Cycling

Note:

The minimum number of bike parking spaces is to be rounded up to the nearest whole number

APPENDIX B7-1: Transport Assessment Study

A Transport Assessment Study is to consider:

- a) The accessibility of the site by a range of transport modes including car, public transport, walking and cycling;
- b) The ability of the public transport network to service the site in the peak and off peak and weekend periods;
- c) Mode share targets;
- d) Means of minimising travel demand by car and maximising the share of travel by other modes including public transport, cycling and walking;
- e) Compliance with the requirements of the LEP and DCP;
- f) A justification of car parking provision and site servicing arrangements in accordance with the objectives of the LEP and DCP;
- g) The proposed allocation of parking to apartment types in residential developments;
- h) Access for the mobility impaired;
- i) Estimates of trip generation by the development and the impacts of trips generated by the development on the road network and other movement systems;
- j) Means of accommodating and integrating trips generated by the development including necessary improvements to public transport services and infrastructure (eg. bus shelters), pedestrian systems, bicycle routes, and the road network;
- k) Means of mitigating any adverse impacts of the development on movement systems;
- l) Means of improving access to the site having regard to vehicular, pedestrian, cycle and public transport access;
- m) Impacts on and means of improving pedestrian accessibility to public transport (including proximity to services), shops, schools, open spaces; community centres and the like.
- n) Impacts on and means of improving pedestrian safety including demonstrating that access driveways are not in undesirable locations;
- o) Availability of on street parking and potential on street parking controls to discourage all day residential parking demand generated by the development.

Vehicle Trip Generation

In relation to trip generation by vehicles, reference should be made to the 'RTA Guide to Traffic Generating Developments' which provides a summary of basic vehicular trip generating rates for both daily and peak hour vehicle trips. Surveys of existing developments similar to the proposal, can also be taken and comparisons drawn.

Two periods of traffic generation need to be considered:

- a) The peak activity time of the development itself
- b) The peak activity time on the adjacent road network.

This assessment should identify whether any on road improvements, traffic management or pedestrian measures are required to accommodate the increased movement on the system.

The Transport Assessment Study is to include a comparison between the vehicle trip generation rates in the 'RTA Guide to Traffic Generating Developments', availability of parking, access to public transport and access to neighbourhood shopping centre, community facilities and open spaces where relevant. Adjustments factors for each land use may include:

- a) Mode split by time period;
- b) Persons per vehicle;
- c) Trip purpose; and
- d) Availability of on-site parking.

A number of traffic facilities can be incorporated to ameliorate the impact of traffic and parking generated by the development including traffic signals, signs, pedestrian crossings, channelization, roundabouts, angled parking, and traffic calming devices, storage areas and median islands.

Bicycles

End-of trip facilities such as storage, parking spaces, lockers and showers need to be provided in developments in accordance with the rates specified in the DCP.

Refer also to the Planning NSW, 'Planning Guidelines for Walking and Cycling' (December 2004) and the NSW Bike Plan (May 2010) and Council's Bike Plan.

Travel Plans

A travel plan is a work place plan developed to make it easier for employees to get to and from work and reduce reliance on private vehicles and parking spaces. Such a plan typically includes support for walking, cycling, car pooling and public transport use. It is an important part of managing the transport demand generated by a development.

The travel plan should be based on the findings of the Transport Assessment Study and be prepared with reference to the Premiers Council for Active Living and section titled Workplace Travel Plan Resource.

Source: Draft Sydney City Council DCP 2010.

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1 Introduction

This section of the DCP contains objectives and controls for development in relation to water conservation, stormwater management, groundwater and flooding, with an overall focus on Water Sensitive Urban Design.

Water Sensitive Urban Design (WSUD) is the sustainable management of water in urban areas through intelligent and integrated design. It seeks to ensure that development is designed, constructed and maintained to minimise impacts on the natural water cycle.

It includes a wide range of technologies to reduce potable water consumption and reduce the pollution from stormwater ending up in local waterways. These can include rainwater tanks, gross pollutant traps, on site stormwater retention and reuse, landscaped swales, and infiltration systems.

For further information and examples of WSUD refer to www.urbanwater.info or www.wsud.org.au

2 Water Conservation

State Environmental Planning Policy (SEPP) - Building Sustainability Index (BASIX) includes targets for water conservation for most residential development.

The following controls, while not specifically mandated for residential development under BASIX, are encouraged to be applied, and are required to be addressed in all other development.

Objectives

- To promote the sustainable use of water across the City of Randwick.
- To minimise the development's reliance on mains supplied water and encourage water conservation and reuse.

Controls

- i) Provide rainwater tanks to meet all non-potable water demands including outdoor use, car washing, toilets and laundry.
 - a. Include a site-specific analysis to determine tank capacity based on potential collection area, and internal and external demands.
 - b. Encourage installation of dual reticulation systems to link collected rainwater to non-potable water uses such as irrigation or toilet flushing.

- c. Where site constraints restrict rainwater tank capacity or installation, an alternative off-set provision (in addition to standard requirements) promoting sustainability and innovation may be considered.
- ii) Encourage grey water recycling and reuse. Note that grey water treatment systems will require separate Council approval.

Contact Council's Environmental Health Section for further information on grey water reuse, or refer to the NSW Office of Water:

<http://www.water.nsw.gov.au/Urban-water/Recycling-water/Greywater/Greywater/default.aspx>

3 Stormwater Management

Randwick LEP includes provisions for stormwater management which aim to minimise the impact of urban stormwater on land in Randwick City, including adjoining downstream properties, native bushland and receiving waters.

This section supports these LEP provisions, and contains specific requirements for developments in relation to managing the quality and quantity of stormwater impacting on Randwick City and surrounding catchments, waterways and coastlines.

Other sections in this DCP also contain related requirements for water permeable surfaces in landscaped open space. Refer to the sections on specific development types for further details.

3.1 Water Quality

Explanation

Water bodies and coastlines in urban areas often suffer from decreased water quality resulting from stormwater run-off from roads and other impermeable surfaces. This run-off collects sediments, oils, chemicals and other pollutants, and adversely impacts on the biodiversity and recreational amenity of waterways and coastlines.

Management of stormwater quality is particularly important to larger developments with open areas of hardstand or car parking that have higher potential to collect and direct sediments and pollutants into the stormwater system.

Objectives

- To prevent the transportation of pollutants and sediments from a site by stormwater runoff.
- To ensure that stormwater runoff is of suitable quality to protect the recreational amenity of water bodies and coastlines; aquatic ecosystems and downstream receiving waters.
- To prevent pollution spills or contaminants from leaving a site via the stormwater network.

Controls

- i) All development proposing open car parking or hard stand areas exceeding 200 square metres, or incorporating new



Green sea turtle at Clovelly Beach

roads shall capture sediments and pollutants from the site via:

- a) A minimum of one pollutant trap located between the last downstream stormwater pit and prior to discharge from the site, or
 - b) A system of water sensitive urban design treatments such as vegetated swales, bio-retention systems and buffer strips to achieve the same performance as the pollutant trap(s), and;
 - c) Submit a design report with the DA from a suitably qualified environmental consultant demonstrating how sediments and pollutants will be captured.
- ii) All other development must consider the use of water sensitive urban design technologies to improve the quality of stormwater run-off from a site prior to entering the drainage system, nearby catchments or waterways.

3.2 On-site Detention and infiltration

Explanation

On-site Stormwater Detention (OSD) temporarily stores excess stormwater on a site. It acts to restrict the rate that the stormwater leaves the site with the aim of better managing the rate and quantity of stormwater entering the drainage system, and reducing the risk of downstream flooding effects.

On-site detention will be required for certain development types, and certain locations within Randwick City. These are specified in Council's Private Stormwater Code

Objectives

- To control the release of private stormwater into Council's drainage system to maintain its capacity.
- To require the use of on-site detention systems and, where practical, to encourage the use of stormwater infiltration in lieu of on site detention.

Controls

- i) On-site detention and infiltration systems shall be designed and constructed to comply with the requirements of Council's Private Stormwater Code.
- ii) On-site detention storage volume may be reduced through the use of stormwater infiltration systems.

Note:

For further details on requirements for on-site detention and the design and application of infiltration systems, refer to Council's Private Stormwater Code

3.3 Construction water management

Explanation

Discharging site stormwater, groundwater or seepage water from a building site can introduce excess sediments and harmful

pollutants into Council's stormwater drainage system and downstream receiving waters. Construction sites are required to manage erosion of sediment and stormwater run-off during construction. Council will include conditions of consent describing requirements during construction.

Objective

- To protect the drainage system, downstream receiving waters and the surrounding environment from harmful contaminants from construction sites.

Controls

- i) All DAs involving excavation or other site disturbance shall submit a soil and erosion management plan demonstrating how sediment and contaminants from construction shall be contained and managed.
- ii) Separate approval will be required from Council for any proposals to discharge stormwater, seepage water or groundwater from a construction site into Council's stormwater drainage system. Council may require water quality testing of the discharged water by a suitably qualified environmental consultant.

3.4 Stormwater infrastructure

Explanation

This sub-section applies to all development in proximity to public stormwater infrastructure or inter-allotment drainage, and all development proposing new connections to Council's drainage system.

Objectives

- To ensure stormwater infrastructure is designed and constructed to an acceptable standard.
- To prevent adverse impacts of development on the performance, serviceability and integrity of publicly owned stormwater systems and inter allotment drainage lines.
- To ensure that private stormwater systems discharge to the public stormwater system in an acceptable manner.

Controls

- i) Design and install stormwater infrastructure in accordance with Randwick City Council's Private Stormwater Code.
- ii) New structures may not be constructed above public stormwater infrastructure or inter-allotment drainage.
- iii) Redevelopment of existing structures above public stormwater infrastructure or inter allotment drainage shall occur only where:

Note:

The public stormwater infrastructure is the system of drainage pipes and pits owned by Council or another public authority.

Inter-allotment drainage lines carry stormwater from more than one lot across private property before connecting to the public stormwater system.

- a. relocation of the stormwater conduit or structure is not feasible,
 - b. the conduit is reconstructed to meet relevant standards, and
 - c. the conduit is upgraded to ensure structural soundness and serviceability for the life of the structure and the life of the conduit;
- iv) A drainage easement may be required for development impacting existing Council stormwater infrastructure or an inter-allotment drainage line
- v) Separate approval from Council will be required for development proposing to connect private stormwater to the public drainage system.

4 Groundwater

Several areas within Randwick City are underlain by the Botany Sands aquifer. The level of the aquifer can vary with seasonal conditions, and in some areas is quite close to the surface. As a consequence some developments in locations above the aquifer may be affected by the groundwater system.

This sub-section applies to all development proposing basement construction or other forms of excavation that may interact with the groundwater table.

4.1 Site investigations

Explanation

It is important to establish the potential for a development to be impacted by groundwater early in the design process, to ensure appropriate investigations are undertaken that inform the design and construction of the development.

Objective

- To ensure appropriate site investigations are undertaken to identify the potential for a development to be affected by groundwater.

Controls

- i) All development proposals incorporating a basement level are required to undertake a preliminary geotechnical investigation to establish whether the development may be affected by groundwater
- ii) This investigation must be undertaken by a suitably qualified geotechnical or hydrogeological engineer, and shall be submitted with the DA.

4.2 Basement design and construction

Explanation

Basements that may intersect the water table must be designed and constructed to preclude the need for dewatering after construction, while also avoiding unreasonable adverse effects on groundwater flows and quality, and on neighbouring properties.

This sub-section sets out requirements for documentation to be included with DAs. Council will also include conditions of development consent requiring design details and certification of the suitability of the basement design prior to approval to commence works on site, and certification upon completion that the works have been implemented in accordance with the approved documentation.

Objective

- To require sufficient information to demonstrate that the proposed works may be feasibly constructed without unreasonable impacts to neighbouring properties, groundwater conditions, or the structural integrity of the development.

Controls

- i) Provide a letter or report prepared by a suitably qualified engineer experienced in the design of structures below a water table, confirming that the proposed basement will be designed and constructed in a manner that is suitable for the site conditions.
- ii) The report shall be submitted with the DA and include confirmation that the basement:
 - will be designed and certified by a suitably qualified and experienced engineer
 - will preclude the need for dewatering after construction
 - will be suitably water-proofed and tanked in all areas where groundwater may impact on the development
 - will include groundwater management systems if needed to maintain natural flowpaths of groundwater around the development.

4.3 Groundwater during construction

Explanation

Where a development intersects the groundwater table, temporary pumping (dewatering) may be required to allow construction to proceed. Dewatering is the process of removing groundwater from an aquifer to lower the water table below the lowest level of the excavation. This allows construction to proceed safely by limiting the potential for excavation instability and water-logged ground conditions.

Development proposals involving dewatering are referred for assessment, review and approval from the NSW Government's Office of Water. If approval is granted, they will issue general terms of approval which will be incorporated into any development consent issued by Council. It is also necessary to obtain a Water license from the Office of Water after development consent is issued, to permit the extraction of water from an aquifer.

Note that the Office of Water will not endorse continuous extraction of groundwater. Temporary de-watering may be approved by the Office of Water provided the design of basement areas precludes the need for dewatering after construction.

Council will also include conditions of development consent relating to excavation, shoring, piling, dewatering and other construction activities relating to basements affected by groundwater, including requirements for information/certification to be provided prior to approval to commence construction works.

Objectives

- To ensure that construction activities do not adversely impact on groundwater conditions or neighbouring properties.
- To identify requirements for development proposals that may require temporary de-watering during construction.

Controls

- i) All DAs involving excavations that may require temporary de-watering, shall include a letter or report prepared by a suitably qualified engineer experienced in the construction of structures below a water table. The letter/report shall:
 - a. outline the proposed method of construction and dewatering; and
 - b. confirm that the basement can be feasibly constructed without causing unreasonable impacts on the groundwater system or neighbouring properties.

5 Flooding

Explanation

Flooding in NSW is managed in accordance with the NSW Government's Flood Prone Lands Policy, which aims to reduce the impact of flooding and flood liability on individual owners and occupiers of flood prone property, and to reduce private and public losses resulting from floods, utilising ecologically positive methods wherever possible.

Randwick City Council is in the process of undertaking flood studies, Floodplain Risk Management Studies and Plans for its catchments to quantify flooding risks and potential measures in accordance with the NSW Government's Floodplain Development Manual.

RLEP includes flood planning provisions (CI 6.3) applying to land at or below the defined flood planning level, and which require the consent authority to consider the impacts of development on flooding. This sub-section of the DCP supports RLEP, and provides controls for development consistent with the NSW

Government's Flood Prone Land Policy and the Floodplain Development Manual.

This sub-section applies to:

- Residential development on land below the 1% Annual Exceedance Probability (AEP) flood plus the required freeboard, and
- All other development on land below the Probable Maximum Flood (PMF) plus the required freeboard

Applicants are encouraged to liaise with Council early in the design process to identify any applicable flooding implications.

Objectives

- To control development at risk of flooding in accordance with the NSW Government's Floodplain Development Manual.
- To ensure that the economic and social costs which may arise from damage to property due to flooding is minimised and can be reasonably managed by the property owner and general community.
- To reduce the risk to human life and damage to property caused by flooding by controlling development on land impacted by potential floods.
- To ensure that development is appropriately sited and designed according to the site's sensitivity to flood risk.

Definitions

Probable Maximum Flood (PMF):

The largest flood that could reasonably occur.

1% Annual Exceedance Probability (AEP) flood:

A flood with a 1% (1:100) probability of occurring in any given year, also known as the 100 year ARI.

5% Annual Exceedance Probability (AEP) flood:

A flood with a 5% (1:20) probability of occurring in any given year, also known as the 20 year ARI.

Freeboard:

A factor of safety typically used in relation to floor levels, to ensure that the required standard of protection is achieved.

Overland Flow Path:

The path of rain-induced surface run-off that is not part of a defined watercourse, including run-off in excess of the capacity of the underground drainage system

5.1 Flood Studies and Plans

Objectives

- To ensure that development addresses any relevant flood studies, and is consistent with the requirements of any floodplain risk management studies or plans.

Controls

- i) DAs are to identify any flood related information including flood levels, locations of floodways or overland flow paths impacting the site.
- ii) Submit a site specific flood study or other calculations to demonstrate there is no adverse impact on flooding if a flood study for the catchment has not been prepared.
- iii) Comply with any catchment-specific controls in an adopted Floodplain Risk Management Plan in addition to the controls in this section.

Notes:

Refer to Council's website for status of flood studies, and availability of information for different catchments.

Information including locations of floodways and flood levels is available from Council where a flood study for a particular catchment has been prepared.

Property specific information, where available, can be obtained from Council by completing a Flood Report Application Form.

5.2 Flood effects

Objectives

- To ensure that development, either individually or cumulatively, minimises adverse impacts on flooding, conveyance of floodwaters and floodplain storage volume.
- To ensure that floodways and overland flow paths are not obstructed by development.

A flood study may be prepared either by Council, or by the applicant in instances where Council requires the applicant to submit a flood study.

Controls

- i) The development shall not increase flood effects elsewhere, having regard to loss of flood storage, changes in flood levels and velocities and the cumulative impact of multiple potential developments, for floods up to and including the 1% AEP flood.
- ii) Floodways and overland flow paths must not be obstructed or diverted onto adjoining properties.
- iii) Areas identified as flood storage areas must not be filled unless compensatory excavation is provided to ensure that there will be no net loss of floodplain storage volume below the 1% AEP flood.

5.3 Floor levels

Floor levels refer to the minimum required building floor levels. For development such as basements, the floor level refers to the lowest level at each access point.

Objective

- To ensure that floor levels are set at an appropriate height to reduce the frequency of inundation of structures and floors to an acceptable probability.

Controls

- Building floor levels shall comply with the *Table A – Floor Levels for Buildings*, with exceptions noted below:

A single (once only) addition at the existing lowest habitable floor level may be permitted after a flood study has been prepared. Such an addition will be limited to:

- A maximum 10 square metres for existing single and dual occupancy dwellings,
 - up to 10 percent of the existing gross floor area for all other development (note for large buildings, this increase may be limited to a lower amount)
- A certificate by a registered surveyor shall certify that the floor levels are not less than the required level.
 - Where the lowest habitable floor area is elevated more than 1.5m above ground level, a restriction is to be placed on the title of the land confirming that the sub-floor area is not to be enclosed.

Table A - Floor Levels for Buildings

Scenario	Floor level
Habitable Floors - all development (excluding critical facilities)	
Inundated by flooding	1% AEP + 0.5m freeboard
Inundated by overland flow path	Two times the depth of flow in the 1% AEP flood with a minimum of 0.3m above the surrounding surface
Habitable floors - Critical facilities	
Inundated by flooding	PMF + 0.5m freeboard
Inundated by overland flow path	Two times the depth of flow in the PMF with a minimum of 0.3m above the surrounding surface
Non-habitable floors – residential outbuildings (excluding garages) *	
Gross floor area less than or equal to 10 square metres.	1% AEP but not less than 0.15m above surrounding ground level
Gross floor area greater than 10 square metres.	The applicable habitable floor level
Non-habitable floors – Industrial and commercial	
Located on flooding or overland flow path	1% AEP but not less than 0.15m above surrounding ground level
Material storage locations – all development	
Materials sensitive to flood damage, or which may cause pollution or be potentially hazardous during flooding	1% AEP + 0.5m freeboard

* Note: floor levels for car parking are covered in 5.5

Notes:

Non habitable floors include areas such as laundries or sheds, but exclude garages. All other floor spaces are habitable areas.

Industrial and commercial facilities include areas such as office space, show rooms, child care facilities, residential floor levels for hotels and tourist establishments.

Critical facilities include: hospitals, police, fire, ambulance, SES stations, major transport facilities, major sewage or water supply or electricity or telecommunication plants, schools, nursing homes and retirement villages

Overland flow paths occur when:

- a. The maximum cross sectional depth flowing through and upstream of the site is less than 0.25m for the 1% AEP flood for other than critical facilities, or 0.25 for the PMF for critical facilities; and
- b. Existing surface levels within the site are above the floor level requirements, at the nearest downstream trapped low points, and
- c. The flood study demonstrates that blockage to any upstream trapped low point does not increase the depth of flow to greater 0.25m.

Note:

For more information on overland flow paths, contact Council's Development Engineering section.

5.4 Building components**Objective**

- To ensure the structure and construction of development is compatible with flooding up to the applicable floor level.

Controls

- i) All development shall have flood compatible building components below the floor levels identified in Table A.
- ii) All structures shall be constructed to withstand the forces of floodwater, debris and buoyancy up to and including the floor levels identified in Table A.

5.5 Driveway access and car parking**Objectives**

- To ensure car parking and site access is constructed to an acceptable flood standard.
- To require appropriate protection measures for warning and safe evacuation from basement car parking.
- To minimise the likelihood of cars or other objects becoming floating debris during a flood.

Controls

- i) Car parking floor levels shall comply with *Table B – Floor Levels for Car Parking*.
- ii) Locate vehicular access where the road level is greater than or equal to the required floor level for the car park. Where road access above the required floor level is not available, locate vehicular access at the highest feasible location.

Note:

For additional guidance on structural soundness and flood compatibility of buildings refer to: **Reducing Vulnerability of Buildings to Flood Damage – Guidance on Building in Flood Prone areas (Hawkesbury-Nepean Flood Plain Management Steering Committee, 2006)**

- iii) The level of the driveway between the road and car park shall be no lower than 0.3m below the 1% AEP flood or such that the depth of inundation during the 1% AEP flood is not greater than the depth of flooding at either the car park or the road where the site is accessed.
- iv) Underground car parking accommodating more than three vehicles shall have warning systems signage and exits to ensure adequate warning and safe evacuation.
- v) Barriers shall be provided to prevent floating vehicles leaving the site during the 1% AEP flood if the depth of flooding at the car space exceeds 0.3m.
- vi) Vehicle access to critical facilities that have an emergency function must be achieved for floods up to the PMF.

Table B - Floor Levels for Car Parking

Scenario	Floor Level
Above ground level open car parking, car ports and garages	
Open car parking spaces and car ports	5% AEP flood
Residential garages with up to two spaces	1% AEP but not less than 0.15m above surrounding ground level
Residential garages with more than two spaces	Applicable residential habitable floor level requirement (Table A)
Enclosed industrial/ Commercial parking spaces	Applicable industrial/commercial floor level requirement (Table A)
Underground car park (where floor level is more than 0.8m below surrounding ground level)	
All driveways	1% AEP plus 0.3m freeboard at its highest point
All emergency exits	All underground garages and car parks to have emergency exits protected from inundation up to the 1% AEP flood plus 0.5m freeboard with a minimum of 0.2m freeboard from vehicle entry point.
All other openings inundated by flooding or local overland flow path	All openings to be sealed up to 1% AEP + 0.5m freeboard with a minimum of 0.3m above the surrounding ground level

5.6 Safety and evacuation

Objective

- To ensure development provides for the safety of persons and emergency access during a flood.

Controls

- i) Include a description of the safety and evacuation methodology with all DAs, including:
 - a) the provision of reliable and safe egress for inhabitants from the lowest habitable floor level to a publicly accessible location above the PMF level.
 - b) the method of access for emergency personnel.

Note:

For some developments a condition of consent may be imposed to require the placement of a safety and evacuation plan for all building occupants in a visible location

5.7 Management and design

Objectives

- To ensure stored materials do not become hazardous during a flood.
- To ensure land subdivisions have suitable potential to be developed in accordance with the flooding requirements of this DCP.
- To ensure development does not increase erosion, siltation or destruction of natural or modified watercourses, wetlands or coastal areas.
- To ensure fencing does not obstruct the flow of flood waters, become unsafe during times of flood or become moving debris.

Controls

- i) Land shall not be subdivided unless it is demonstrated that the newly created parcels of land can be developed in accordance with the flooding requirements of this DCP. Parcels created for the specific purpose of being transferred to Council ownership are exempt from this requirement.
- ii) The development shall not cause or increase erosion, siltation or destruction of natural or modified watercourses, wetlands or coastal areas.
- iii) Fencing within a floodway or overland flow path shall be of permeable open type design, and be constructed to withstand the forces of floodwaters or to collapse in a controlled manner.
- iv) Any proposed storage area shall be constructed and located to prevent stored materials or goods becoming hazardous during a flood.

Note:

Permeable open type fences are fences with sufficient openings to allow the unobstructed flow of water

Explanation

A Management Plan is a document which outlines how the operation of a premises will be managed to minimise any potential impacts on the amenity of surrounding properties and/or the locality.

A Management Plan may be required as a condition of development consent for proposals for late night trading premises, sex services premises, backpackers accommodation, boarding houses and amusement centres. It may also be required for any other land uses that in the opinion of Council may potentially have unacceptable amenity impacts if poorly managed.

The content and level of detail in a Management Plan will vary on a case by case basis depending on the nature and intensity of the proposed land use or its intended location. Applicants are advised to also refer to the relevant DCP section for additional Management Plan requirements for specific land uses.

A Management Plan should be in the form of a separate attachment with a DA.

Controls

The Management Plan must address the following requirements:

1 Objectives

- i) Objectives articulating the need for preparation of the Management Plan and outcomes it sets out to achieve.

2 Site and Context Details

- (i) Street address and lot number of the land to which the Management Plan applies.
- (ii) Date of preparation.
- (iii) Registered business name and trading name of the premises.
- (iv) A description of the primary use of the premises as well as any secondary/ancillary uses. This may be in the form of a floor or site plan indicating the use of all areas within the building or site.
- (v) Types of activities within the premises including any variations at different times of the day, week or in different seasons.

- (vi) Any 'active areas' adjacent to the boundaries of the site associated with the premises (e.g. outdoor dining, queuing areas etc) where relevant.
- (vii) A brief description of surrounding land uses including:
 - Proximity to residential and other sensitive land uses (e.g. schools, places of worship etc).
 - Premises of a similar nature and scale.
- (viii) Maximum capacity of the premises.
- (ix) A schedule of proposed hours of operation for each day of the week for all areas of the premises.

3 Operational Details

- i) Name and contact details of operator/manager and type of management arrangement (e.g. on site or managed through off site agent etc).
- ii) Organisational structure including number of staff, key roles and responsibilities. Information on any variation to staffing levels at different times of the day, week, or during different seasons should be provided.
- iii) The procedure for receiving, recording and handling complaints regarding the operation of the premises. A Complaints Register should be maintained on site which includes the following information:
 - Complaint date and time.
 - Name, address and contact details of person making the complaint.
 - Nature of complaint.
 - Name of staff on duty.
 - Action undertaken by premises to resolve the complaint.
 - Follow up and outcome.
- (iv) Details of training and induction procedures to ensure staff are aware of the provisions of the Management Plan and emergency procedures.
- (v) Any requirements in respect of the on-going management of the premises arising from any conditions placed on the Development Determination, if approved.

4 Amenity

- i) Details on all measures to be undertaken to ensure that the operation of the premises will not adversely affect the amenity of the locality by way of noise, vibration, fumes, waste disposal and the like.

5 Safety and Security

- i) Details on systems and procedures to ensure the safety and well being of staff, patrons/residents and/or other users of the premises including:

- Risk management procedures appropriate to the service provisions (e.g. accident and injury etc).
- Method of surveillance of common areas.
- Location and monitoring of security alarms.
- Security personnel and their duties.

6 Waste Management

- i) Procedures for minimising and managing waste and litter that is generated on site.
- ii) Details on how and when waste will be collected.
- iii) Details of when (frequency) and how the premises will be cleaned and serviced.
- iv) Location of waste storage areas.

7 Fire Safety

- i) Details on proposed fire safety regime including:
 - Annual certification (if required).
 - Maintenance of emergency systems.
 - Actions to reduce fire risks.
 - Provision of an emergency evacuation plan.

8 Deliveries and Loading/Unloading

- i) Details on deliveries including frequency, hours and type of vehicles associated with delivery and loading/unloading.
- ii) Guidelines for service providers and staff on how to mitigate any adverse impacts.

9 Declaration

- i) A signed declaration from the licensee/manager that they have read, understood and will ensure compliance with the approved Management Plan.

Foreshore Scenic Protection Area B10

Explanation

Randwick City covers almost 30km of coastline. The RLEP has identified visually prominent residential areas and commercial centres as the Foreshore Scenic Protection Area, to recognise, protect and enhance the scenic qualities of the coastline.

Development on any land located within the Foreshore Scenic Protection Area must be located and designed to minimise visual impact on public areas, including views to and from the coastline, foreshore reserves and open space.

This section includes controls to ensure future development is of high architectural quality and is sensitive to the aesthetic values of the foreshore areas.

Objectives

- To protect the natural landscape qualities and aesthetic appeal of the foreshore areas.
- To encourage high quality designs for dwellings that are sensitive and sympathetic to the natural landform, colours and landscape character of the foreshore areas.
- To retain and provide an ambient landscape that is suitable to the coastal conditions and enhances the scenic qualities of the foreshore.

Controls

- i) The design of buildings must consider their visual presentation to the surrounding public domain, including streets, lanes, parks, reserves, foreshore walkways and coastal areas. All elevations visible from the public domain must be articulated.
- ii) Outbuildings and ancillary structures must be integrated with the design of the main dwelling in a coherent architectural expression. They must not present as temporary or make-shift structures, nor constructed with non-durable, low quality materials.
- iii) The exterior colour scheme must complement the natural elements in the coastal areas. The colour palette must predominantly consist of light toned neutral hues.
- iv) High reflective glass in windows and doors visible from the public domain must not be used.

- v) Finishing materials to buildings must be capable of properly withstanding deterioration and weathering accelerated by the coastal conditions.
- vi) Plant species selected for landscaping must be capable of withstanding the exposed and windy coastal environment. Professional landscape advice must be obtained in the selection of species.
- vii) Adequate soil depth must be reserved around buildings for gardens and soft landscaping purposes.
- viii) Any exposed coping structures of swimming and spa pools must be minimised and screened from view from the public domain.
- ix) Any rock outcrops, shelves and large boulders must be retained on the site and integrated into the landscape design.
- x) Any retaining walls within the foreshore area (that is, encroaching upon the Foreshore Building Line) must be constructed or clad with sandstone.

Development in Laneways Nominated for Road Widening

B11

Explanation

A number of narrow laneways in Randwick City have been identified for road widening. In many of these nominated laneways, Council has already commenced widening works which are gradually transforming the lane character.

These nominated laneways are listed below:

- a) Ferguson Street, Maroubra, between Maroubra Road and Beauchamp Road
- b) Glanfield Street, Maroubra, between Bunnerong Road and Bruce Bennetts Place
- c) Green Street, Maroubra, between Anzac Parade and Cooper Street
- d) Galvin Street, Maroubra, between Cooper Street and Mulgray Avenue
- e) Mason Street, Maroubra, between Bunnerong Road and Anzac Parade
- f) Alma Road, Maroubra, between Anzac Parade and Cooper Street
- g) Metcalfe Street, Maroubra, between Garden Street and Flower Street
- h) Nevorie Crescent, Maroubra, between Royal Street and Hannan Street
- i) Marjorie Crescent, Maroubra, between Storey Street and Royal Street
- j) Eastmore Place, Maroubra, between Bunnerong Road and Marjorie Crescent
- k) Bundock Lane, Randwick, between Avoca Street and Canberra Street

The development of residential dwellings fronting these laneways is encouraged. Subject to dedication of land for the purpose of laneway widening, payment of relevant fees and compliance with the objectives of this DCP, subdivision for a dwelling to the rear lane may be permitted, notwithstanding the minimum allotment sizes required for subdivision under the RLEP.

The special land dedication requirements for corner blocks and specific allotments are detailed in Council's Subdivision Code.

Objectives

- To facilitate widening and streetscape improvement of specially nominated laneways in Randwick City.
- To achieve the dedication of land for laneway widening purposes through permitting subdivision and dwelling house development on nominated sites fronting the lanes.

Controls

Notwithstanding the minimum allotment size provisions of the RLEP and the minimum frontage width requirements of this DCP, the subdivision of land for a dwelling house fronting a nominated laneway may be permitted having regard to the following criteria:

- i) The merits of the proposal and compliance with the objectives of this DCP; and
- ii) The dedication to Council of a strip of land 4.57m in depth along the frontage of the lane for road widening purposes.