



Part



CUMBERLAND
CITY COUNCIL

Miscellaneous Development Controls

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PART G1

ADVERTISING AND SIGNAGE

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1. Introduction

1.1 Land to which this Part applies

This Part applies to all land within Cumberland City where Council is the consent authority.

1.2 Purpose of this Part

The purpose of this Part is to establish Council's specific objectives and development controls for the provisions of signage in Cumberland City.

1.3 Relationship to other Documents

This Part of the DCP should be read in conjunction with *State Environmental Planning Policy No. 64 Advertising and Signage* (SEPP 64). For the purposes of this Part, signage has the same meaning as defined in SEPP 64 (or equivalent):

- Advertisement;
- Business identification sign; and
- Building identification sign.

Any application to which this Part applies must also consider Council's large display advertising policy.

Refer to the Sex Service Premises and Regency Green Industrial Estate Parts of this DCP for additional advertising and signage controls.

Refer to the *Local Government Act* (1993) and *Regulation* (2005) for controls relating to election signs and material.

2. Objectives and controls

2.1 General

Objective

O1. Protect visual amenity and reduce visual clutter.

Controls

C1. Signs must not:

- be attached to a vehicle, where the vehicle remains stationary primarily for the purpose of advertising. "Vehicle" means a registered or unregistered vehicle and includes a trailer;
- be a temporary poster and sticker affixed to the exterior of the building, power poles, fences, tree, construction hoardings or the like;
- be of a portable nature, such as a sandwich board (A-frame signs), placed in, on or over a public place, except in special circumstances specified in the Plan;
- include flashing lights, regardless of whether these are for illumination of a fixed sign, to attract attention to an otherwise illuminated sign or as part of an illuminated sign;
- be painted on or applied on the roof; or
- include inflatable signs or structures, other than temporary signs.

- C2. Advertising signs which do not relate to a use, business or activity carried out on the site or building on which the sign is to be placed are discouraged.

2.2 Language of signs

Objective

- O1. Ensure that advertising and signage provides effective communication for the whole community.

Controls

- C3. Advertising and signage shall be displayed in English but may include a translation in another language.
- C4. Content of signage shall not be offensive in nature.

2.3 Number of signs

Objective

- O1. Ensure that the visual and physical amenity of a locality is not impaired by a proliferation of signs.

Controls

Residential zones

- C1. Signage is restricted to one business identification per street frontage.

Business zones

- C2. Total signage per street frontage must not exceed one (1) top-hamper sign, one (1) under-awning sign and one (1) wall sign.

2.4 Signs on heritage buildings and conservation areas

Objectives

- O1. Encourage signs (including its supporting structure) that are appropriate to a heritage item having regard to the significance and context of each item.
- O2. Ensure that the installation of a sign does not result in damage to significant fabric of a heritage item and conservation areas.
- O3. Ensure high quality and consistency of signage on heritage items and areas.
- O4. Ensure that the heritage significance of existing signs is conserved and not impacted upon by the provision of new signage.

Controls

- C1. All signs on a heritage item or conservation area are to be:
- of a high standard of materials, construction and design;
 - sympathetic to the architectural design of the heritage item or conservation area and should be of a scale which is appropriate for the articulation and modulation of the building on which it is located; and

- located to respect the value of the heritage item or conservation area and its setting.
- C2. Any sign proposed for a heritage item is to be consistent with the recommendations of any heritage management document applying to the heritage item or conservation area.
- C3. Illumination of signs on a heritage items and within conservation areas shall not interfere with the aesthetic of the item or conservation area.
- C4. Externally illuminated signs may be considered where:
- the design of the sign achieves a very high degree of compatibility with the heritage item or conservation area; and
 - the cabling and conduit supplying power to the sign is completely concealed and does not involve alterations to or damage to the heritage fabric.
- C5. Existing signs on a heritage item or within a conservation area that is of heritage value shall be retained. Any new signs are to be designed and installed sympathetically with regard to existing signs. This may restrict the locations for new signs.
- C6. New signs should be located in areas or elements of buildings that have traditionally been used for signage.
- C7. The installation of any sign on a heritage item is to be carried out in a reversible manner without damage to the heritage fabric. In the case of a sign affixed to any stone or brick wall of a heritage item, the sign is to be fixed in such a way that stone is not damaged, and any fixings are installed only onto mortar joints.
- C8. Where the name of a heritage item carries significance, the building name and associated signage must be retained and maintained.

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PART G2 HERITAGE

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1. Introduction

Heritage includes places and landscapes of historic, cultural, social, spiritual, natural, archaeological, architectural or aesthetic significance.

1.1 Land to which this Part applies

This Part applies includes land identified under *Cumberland LEP 2021* as a heritage item, heritage conservation area and archaeological site. This Part also applies to land within the vicinity of heritage items, conservation areas and archaeological sites. In the event of any inconsistency between the general objectives and controls and the objectives and controls listed in specific heritage conservation areas, the specific controls will take precedence.

1.2 Other listings

State Listed heritage items are also subject to the requirements of the *Heritage Act 1977* (or any subsequent legislation) as well as any associated documentation, such as a conservation management plan, for the item.

Development in the vicinity of Old Government House and Domain in Parramatta (also known as Parramatta Park), that is a World Heritage Site and a National Heritage Site, are to address the associate heritage values and requirements of those listings and potential impacts including to the view and setting.

1.3 Heritage Conservation Areas

Heritage Conservation Areas are integral to the historical significance of those places. The heritage value of a conservation area lies not just with the heritage significance of individual buildings, but with other factors, including the landform, subdivision pattern and the history of development. The following Heritage Conservation Areas are specifically covered by this DCP:

- Blaxcell Estate Conservation Area
- Fullagar Road Conservation Area
- Granville Civic Precinct Conservation Area
- Granville Residential Precinct Conservation Area
- Tooheys Estate Conservation Area

This DCP identifies existing buildings that collectively demonstrate the history of a conservation area and contribute to its significance. These are known as contributory items.

Contributory items may not be individually listed as heritage items but, by virtue of their age, scale, materials, details, design style or intactness, make a significant contribution to the character of the heritage conservation area.

Non-contributory items may be described as neutral or intrusive. In the event of any inconsistency between the general objectives and controls and the objectives and controls listed in specific heritage conservation areas, the specific controls will take precedence.

2. Objectives and controls

2.1 Development requirements for environmental heritage

Objectives

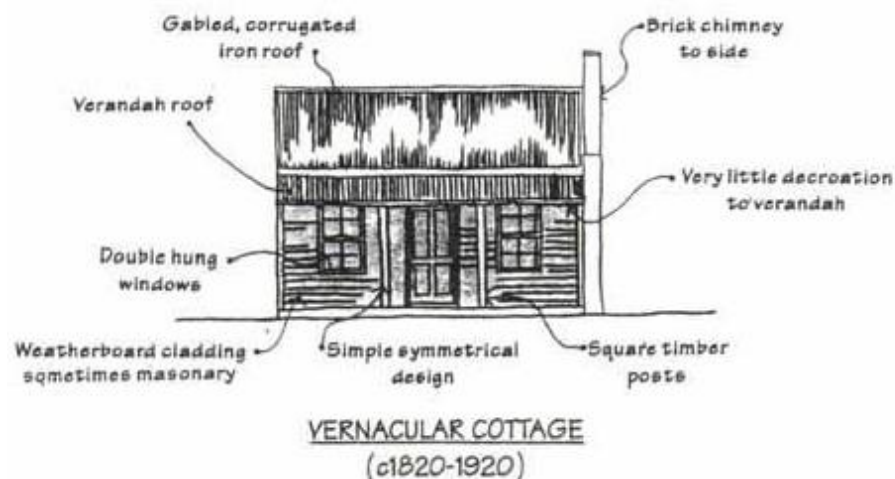
- O1. Identify development that is considered minor by Council as it relates to environmental heritage, including heritage items and heritage conservation areas.
- O2. Assist in the preservation of the integrity of any item of environmental heritage identified in the *Cumberland Local Environmental Plan 2021* or a Conservation Instrument under the *Environmental Planning and Assessment Act 1979* and/or *Heritage Act 1977*.
- O3. Promote sympathetic redevelopment of, or surrounding, a heritage item that complements the style and character of any item of environmental heritage.

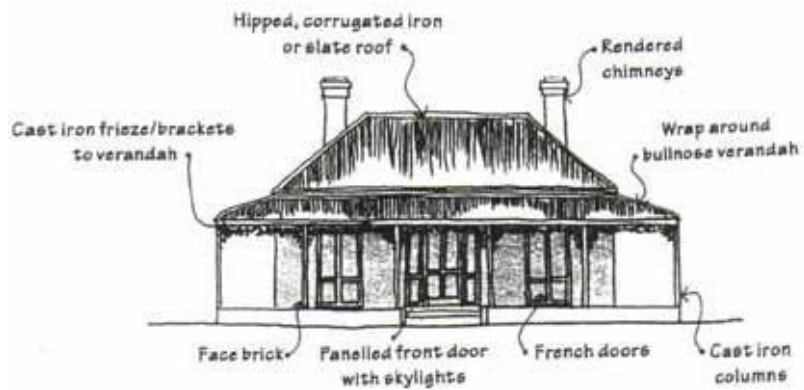
Control

- C1. Contributory items are required to be retained.
- C2. Non-contributory items not identified are not required to be retained.

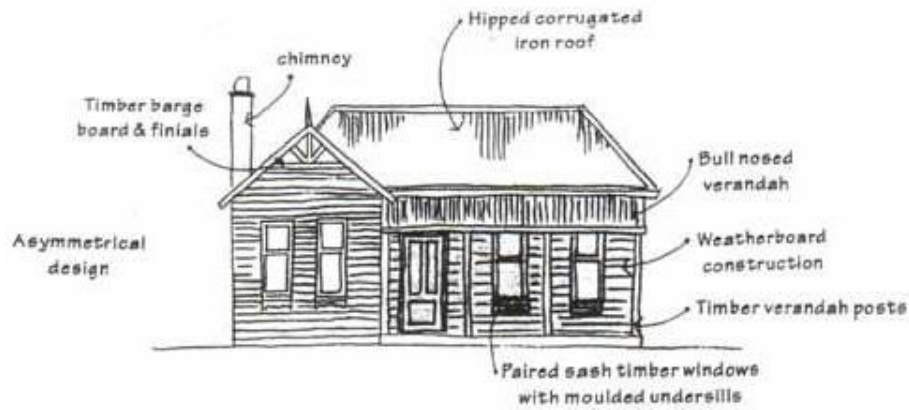
Documentation

- C1. Council may waive the need for applicants to submit a Heritage Impact Statement as may be required under the LEP, if it deems the development and its potential impacts are minor in nature.
- C2. A Conservation Policy or Conservation Management Plan may be required, depending on the significance of the item, the proposed works and the need for strategies for the retention of the significance of the heritage item.
- C3. Development applications and their assisting documentation shall be prepared in accordance with the Burra Charter.

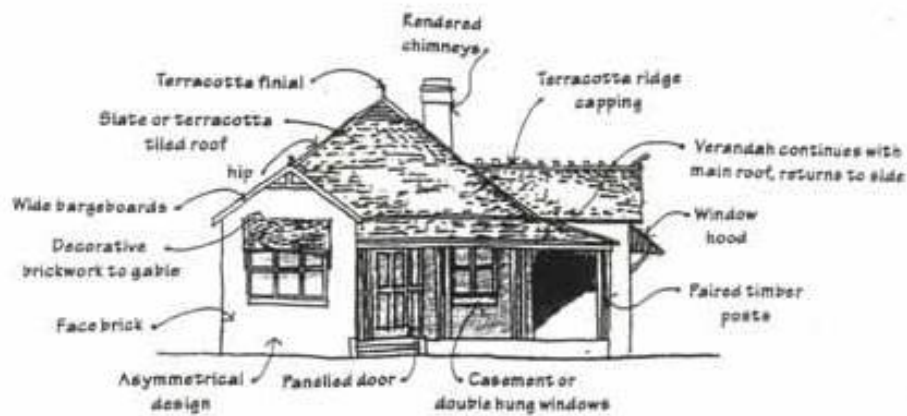




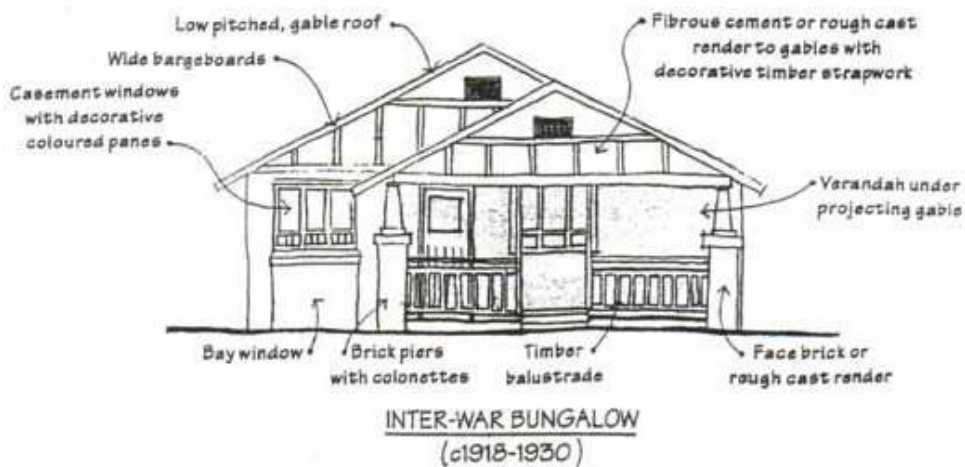
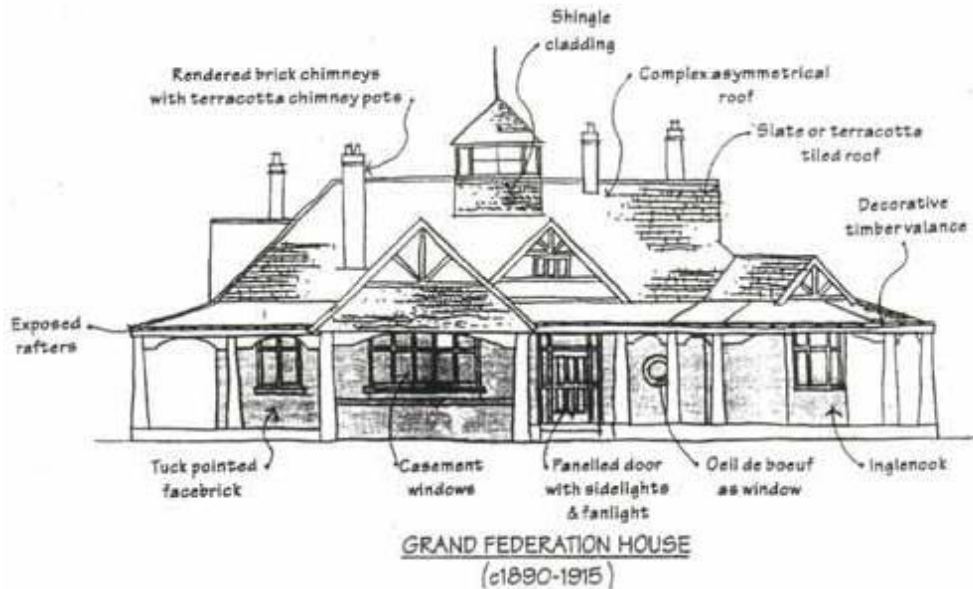
VICTORIAN/FEDERATION GEORGIAN
(TRADITIONAL SYMMETRICAL TYPE)
(c1870-1910)



STANDARD FEDERATION TYPE
(WEATHERBOARD)
(c1890-1915)



STANDARD FEDERATION TYPE (BRICK)
(c1890-1915)



2.2 Conservation and development works on heritage items

Objectives

- O1. Ensure that development does not damage the heritage item or heritage conservation area.
- O2. Ensure development reinforces the established character of the item/conservation area through appropriate built form and design.
- O3. Allow heritage items to be adaptively reused with minimal and acceptable changes to building fabric, with a proposal that shall incorporate the use of unobtrusive and well-designed signage, lighting and external treatments.

Controls

- C1. New development should be consistent with the guidelines and policies of any relevant conservation plan adopted by Council, and where appropriate, with State government requirements.
- C2. New dwellings on sites occupied by an item of environmental heritage shall be designed and constructed in a manner that does not detract from the historic significance of that item or the area.
- C3. Ensure that conservation or maintenance works on a heritage item use materials, detailing, features, and design elements that are appropriate to the style and age of the heritage item.
- C4. Additions and/or extensions to heritage items:
- are to be located and designed to complement the existing scale, character and amenity of the streetscape;
 - are not to dominate the appearance of the heritage item from the street; and
 - are to consistent with the style of the heritage item.
- C5. All new development within the curtilage of a heritage item is to be suitably located and retains the visual dominance of the heritage item, with minimal impact upon the fabric and significant landscaping associated with the item.
- C6. Garages and carports are designed and located to ensure that they do not impact upon the appearance or fabric of the heritage item and its setting, and comfortably fit with the character of the area.
- C7. Alterations or additions to existing commercial or civic heritage items are to be designed to respect the scale and form of the existing building and are located to have minimal visual impact from the street and on the significant fabric of the building.

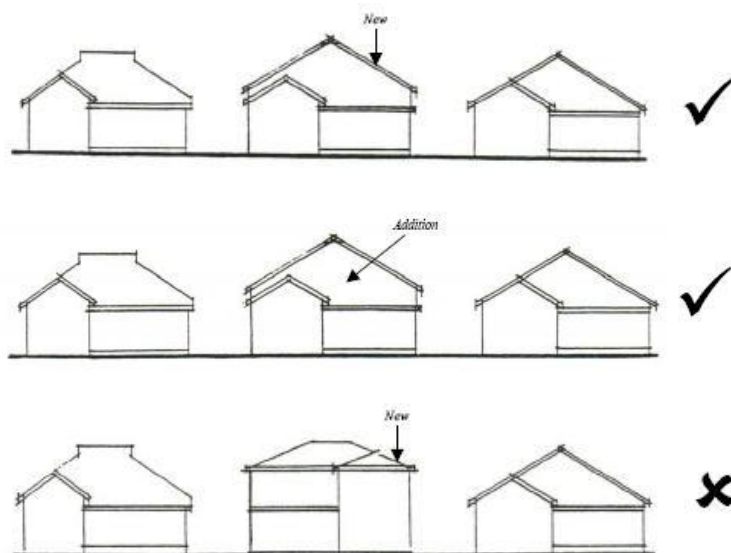


Figure 1: Example of alterations or additions to existing or commercial heritage items

General conservation and maintenance works

- C8. When undertaking any form of development, conservation, maintenance or construction works on a heritage item, the materials, colours, maintenance and construction techniques used shall be appropriate to the heritage item.
- C9. Original face brick should generally not be rendered as it removes and covers over the original colours and textures of the building.
- C10. New roofing materials should match or be sympathetic in style and colour to the appearance of original materials.
- C11. When undertaking works on a heritage item, the design of building detailing such as windows or doors, should be in keeping with the age and style of the heritage item.

Where original design features of heritage items, such as bullnosed verandahs, have been removed, these should be replaced where possible as they are important to the design and appearance of the building and generally serve a useful function.

- C12. Where original gates and fences still remain as part of a heritage property, these should be retained. Where this is not possible, the use of replacement fences and gates should be in a style appropriate to the design and style of the building.
- C13. Where original gates and fences still remain as part of a heritage property, these should be retained. Where this is not possible, the use of replacement fences and gates should be in a style appropriate to the design and style of the building.

Residential alterations and extensions

- C14. When undertaking extensions or alterations to a heritage item, the design of the proposed extensions or alterations should be compatible with the style of the heritage item and its height, scale and proportion.
- C15. In general, where an extension is proposed to a single storey dwelling, the extension should also be single storey and should be located to the side or rear of the property, so as not to affect the streetscape appearance of the item.
- C16. Rear second storey additions should use recessive colours and should not visually dominate the existing building to the front.
- C17. Any proposed roof extensions should be carefully designed to ensure that it is compatible with the original building. Roofs of additions should be consistent with the existing roof in terms of its form, pitch, eaves and ridge height, and should be in proportion to the existing building.

Design details

- C18. The treatment of design details, such as verandah posts, doors or windows, on new extensions to heritage items should be sympathetic with those of the original building where possible. It may be appropriate to use a simpler version of the design details used in the original building, so that the new additions are in keeping with, yet still able to be differentiated, from the original structure.

Garages and carports

- C19. When adding a new garage to a heritage item, open-sided carports are generally more acceptable and less intrusive than solid structures as they do not affect the fabric and streetscape appearance of the heritage item.
- C20. If a solid garage is proposed for a heritage item, the garage should be located away from (i.e. detached from) the main house structure
- C21. Where possible, solid garages should be set back from the front, side and rear of the property boundary.
- C22. Garage or carport designs should use design detailing, materials and colours that refer to, and are compatible with, the original building.

Landscaping and gardens

- C23. The siting of buildings should retain any significant trees and gardens identified on the site.

Curtilage development

- C24. Where proposing development within the curtilage of a heritage item, the new development should be designed so that the heritage item retains its visual prominence.
- C25. The colours and materials used within the new development shall be recessive and complement the colours and materials of the heritage item.
- C26. Where new development is proposed within the curtilage of a heritage item, a reasonable “buffer” space should be provided between the original building and the new development.
- C27. Significant gardens should be retained as part of any works within a curtilage, where possible.
- C28. New development within the curtilage should not adversely impact upon the significant fabric of a heritage item.
- C29. The height of new buildings shall not exceed that of the original heritage building.
- C30. The new development shall be massed so that lower-scale buildings act as a transition between the new and the old.
- C31. New development within the curtilage of a heritage item should not block the sight lines from public areas to the original building.
- C32. Civic, commercial development and adaptive reuse
- C33. Retention of the original streetscape facades is required, with extensions or redevelopment to be located to the rear of the property.
- C34. Development should be compatible with the existing height, scale, massing and detailing and setbacks and orientation of existing development within the streetscape. New extensions should be recessive to the original building.

- C35. Colours and materials should be carefully selected so that they do not visually dominate, or overly contrast with, that of the existing heritage item. New development shall utilise compatible colour schemes and materials with the original building.
- C36. For development involving churches or schools, the removal of more recent structures is considered acceptable where it is demonstrated that they are not critical to the heritage significance of the property.
- C37. New development should be located to the side or rear of the heritage item and the original building should visually dominate.
- C38. Development should not impact upon the sight lines from public areas to the original building.
- C39. Development should minimise any changes to the significant fabric of the building and, in particular, to the streetscape appearance of the heritage item.
- C40. Signage, lighting, materials and colours used should be unobtrusive and compatible with the overall style and design of the building.

2.3 Specific development controls for Heritage Conservation Areas

Objectives

- O1. Ensure that contributory items are retained and improved.
- O2. Ensure that new development is sympathetic to the identified heritage values.
- O3. Ensure that development respects the original built form, architectural style and character of the area.

Controls

General

- C1. New dwellings on sites occupied by, adjoining or in the vicinity of an item of environmental heritage, and/or within a Heritage Conservation Area, shall be designed and constructed in a manner that does not detract from the historic significance of that item or the area.
- C2. When undertaking conservation or maintenance works on a building within a conservation area, the materials, colours and maintenance techniques used should be appropriate to the style and age and the context of the building.
- C3. Works relating to a heritage conservation area should avoid high retaining walls and changes of land produced by cut and fill which in turn produces buildings of disparate height.
- C4. The design of the building detailing, such as windows or doors, should be in keeping with the age and style of the building and to the overall character of the conservation area.

Fences

- C5. Properties within conservation areas should, where possible, retain original gates and fences that contribute to heritage significance of the area.

- C6. Any new fences or gates are to use a style and materials that are appropriate to the age of the building and to the character of the conservation area.

Garages

- C7. Open-sided carports or hardstand areas are preferred where new on-site parking is proposed. Where solid structures (ie enclosed garages) are proposed, these should be located away from the main house structure,
- C8. Where solid structures (i.e. enclosed garages) are proposed, where possible, these should be setback from the front, side and rear of the property boundary.

Alterations, additions and extensions

- C9. Where any alterations, additions or extensions are proposed to a building within a conservation area, these should:
- be carefully designed to continue the specific scale and form of the building and the overall character of the conservation area;
 - consider the accurate reinstatement of building features and other works shown in historical photographs;
 - avoid painting, rendering or re-skinning of original brick walls; and
 - make use of pavilions or skillion extensions.
- C10. Additions or extensions to buildings within a conservation area should be located away from the street frontage and side boundaries and are to be designed to complement the materiality, scale, form, style of the building and character of the conservation area.

Subdivision

- C11. Works within a heritage conservation area should maintain the historical pattern of subdivision.
- C12. Subdivision must not adversely impact on the established form, shape and size of the development or the existing pattern and scale of development.

Siting, setbacks and garden area

- C13. Works within a heritage conservation area should maintain amenity and privacy of gardens.
- C14. Works should investigate archaeological potential of areas where new buildings are sited.
- C15. Garages/carports should be placed in backyards and separate from existing buildings, where possible.
- C16. Works should respect any significant trees and gardens identified on the site.

Streetscape character

- C17. New development should make reference to, and be sympathetic to the predominant:
- height;
 - scale;
 - roof form, line and pitch;
 - proportion;
 - setbacks;

- design details (including parapets, verandahs, awnings and string courses); and
 - features of adjoining development and of any adjacent conservation areas.
- C18. New development should be compatible with heritage items in terms of its scale and massing, overall bulk and composition. New buildings should not dominate their surroundings.

Conservation areas

- C19. Buildings located within the Fullagar Road Heritage Conservation Area, Toohey's Palm Estate Group Heritage Conservation Area, Granville Civic and Granville Residential Conservation Areas, and Blaxcell Conservation Area shall retain their original materials, features and detailing where appropriate and practical and support by a heritage impact statement.
- C20. Works located within the former Lidcombe Hospital Conservation Area are to address the State legislative requirements and listing information, and the conservation management plan.

2.4 Specific controls for development in the vicinity of a heritage item

Objectives

- O1. Ensure that new development is sympathetic to the identified heritage values.
- O2. For new development to be designed to maintain the existing streetscape character and is compatible with its particular heritage themes.
- O3. Ensure that new development is carefully sited to avoid causing physical damage to any heritage item or building within a conservation area, as well as ensuring it does not overshadow or affect the curtilage, landscaping, setting, solar access or views associated with any heritage item.

Controls

- C1. New dwellings on sites adjoining or in the vicinity of an item of environmental heritage shall be designed and constructed in a manner that does not detract from the historic significance of that item.

Context

- C2. The development shall be designed having regard to its environmental and built context, to the existing streetscape character and to any heritage items or conservation areas that may be located nearby.

Streetscape character

- C3. New development should make reference to, and be sympathetic to the predominant:
- height;
 - scale;
 - roof form, line and pitch;
 - proportion;
 - setbacks;
 - design details (including parapets, verandahs, awnings and string courses); and,
 - features of adjoining development and of any adjacent heritage items.

- C4. New development should be compatible with heritage items in terms of its scale and massing, overall bulk and composition. New buildings should not dominate their surroundings.
- C5. Where a residential flat building is proposed adjoining or adjacent to a heritage item, any height and scale differences between a heritage item and new development should be minimised by stepping the height or locating the bulk of the new development away from the heritage item.
- C6. Window and door openings, building lines and building massing of new development should also be designed in the context of its adjoining development.
- C7. Where a particular heritage character predominates within a street, the design of new development should be compatible with this heritage character.

Setbacks and orientation

- C8. New development shall be carefully sited so that it is consistent with the predominant street and boundary setbacks. This may be varied where an increased or decreased front or side setback will assist in ensuring that a new development does not visually dominate any adjoining heritage items.
- C9. New buildings within an existing streetscape should not be oriented across sites contrary to the established pattern.
- C10. Where a new development is proposed adjoining a significant heritage feature, new development should continue the primary orientation and should provide an appropriate entry design and setback treatment along that frontage.

Siting and location

- C11. The siting of new development should not affect the structure of, or otherwise cause physical damage to, any heritage item.
- C12. New development should be located so that it does not adversely impact upon the identified curtilage, setting or landscaping, solar access or any significant views to or from a heritage item.

Visual impact

- C13. The design of the street elevation should be relatively uncomplicated and consist of simple forms that do not visually compete with the heritage item.
- C14. New development adjoining/adjacent to a heritage item should avoid incorporating large unbroken wall areas.
- C15. Where new development is necessarily larger than its surrounding development, the bulk can be reduced by breaking long walls into bays or by arranging the openings in the wall so that their size and shape reflect the structure and the openings of its neighbours.
- C16. Landscaping should be used to minimise the visual appearance of large wall areas in new development adjoining a heritage item.
- C17. Where new development is proposed adjoining a heritage item or conservation area, the development should incorporate the use of colours and materials that are recessive

so that they do not visually dominate the heritage item. Darker colours and simple facade treatments can assist in minimising the visual impact of new development on adjoining heritage items.

- C18. Buildings in the vicinity of heritage items or conservation areas should use a style and material of fencing (and gates) that are appropriate to the age and style of the heritage item and/or to the character of the conservation area.

2.5 Specific conservation area controls

2.5.1 Blaxcell Estate

History

The land on which this conservation area is situated had been privately acquired and subdivided as early as 1922, but very few of the lots had sold. The Commission bought the estate, kept the proposed street pattern, re-subdivided the lots, leaving a few private lots (all at the end of streets). This was the first of the Commission's group developments in New South Wales and the buildings in Montgomery Street were completed in December 1944. They were constructed in full double brick with Marseilles tiled roofs, decorative use of bricks around front porches and identical front fences.



Figure 2: Blaxcell Estate, South Granville

Distinctive Characteristics

- flat to gently undulating clay land which drains slowly to the east and Duck Creek
- regular sized allotments, mostly
- 20m x 34m
- single storey freestanding houses separated from the street and neighbours by large garden space, with lawn and shrubs
- spaciousness of the area created by:

- width of each allotment
- wide side boundaries
- background view to large remaining eucalypts
- backyard placement of garages and carports
- houses standing parallel to the street
- intact street character and a remarkable number of the houses, most of which have very few alterations or additions
- consistent age of the houses - almost all date from 1944 - 1950 with a few from the 1960s
- uniform building shape (form), scale and setbacks
- one chimney per house
- uniform building materials - bricks and tiles to Montgomery Street; fibro and tiles to the other street, with the occasional timber clad house and brick corner houses in Oakleigh Ave
- uniform brick fences to Montgomery Street and few fences throughout the rest of the area

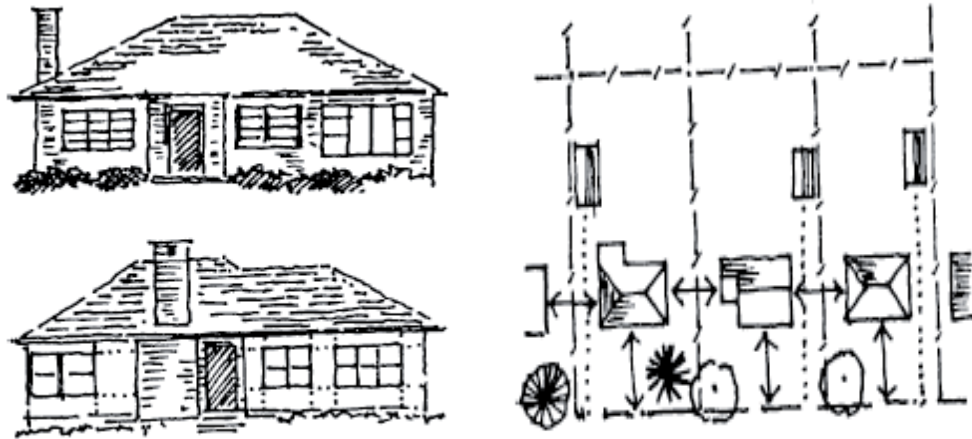


Figure 3: Distinctive Characteristics

Statement of significance

This area comprises the first group development in NSW constructed in 1944 by the newly formed Housing Commission, having taken over a privately developed subdivision. The area is remarkable for its totally intact core area of Montgomery Street which has kept all its fencing and all original houses without second storey additions. The brick houses demonstrate the ideals with which the Commission commenced its charter, while the fibro houses are the result of the cost effective measures undertaken soon after to produce the quantity of houses needed at that time. The consistent scale, siting, materials and fences of the development provides a cohesive 1940s suburban character, and the fibro housing is a particularly good example of the very extensive Housing Commission development throughout Parramatta.

Objectives

- O1. Protect the area's single storey residential character, especially its 1944 face brick houses and fences.
- O2. Maintain front and side garden spaces.

Controls

Landform / natural characteristics

- C1. Keep remaining eucalypts and encourage their replanting on rear boundaries of private gardens.

Subdivision pattern

- C2. Maintain the 1944 pattern of subdivision.
- C3. Avoid re-subdivision by amalgamation of back garden space.

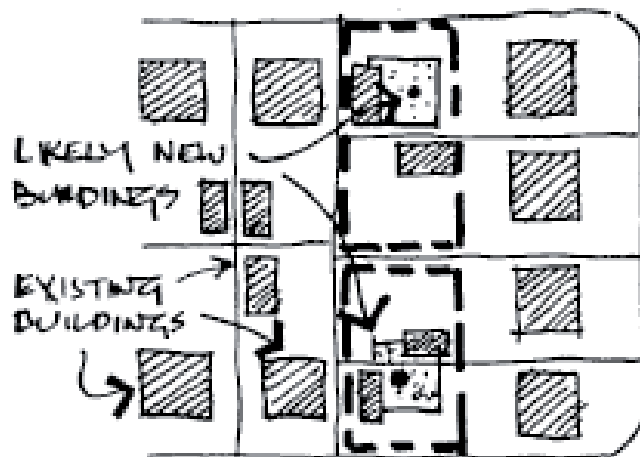


Figure 4: Subdivision pattern

Siting, setbacks and garden area

- C4. Maintain the existing pattern of development, of individual single storey houses on wide parcels of land surrounded and separated by garden space.
- C5. Keep views and space between buildings and maintain amenity and privacy of back gardens.
- C6. Keep at least 50% of the site for garden area.
- C7. Ensure similar side boundary setbacks to those existing.
- C8. Avoid additions to the front or side of an existing house.
- C9. Avoid establishing any new building or structure standing closer to the front street alignment than existing houses.
- C10. Second storey additions will not be supported.

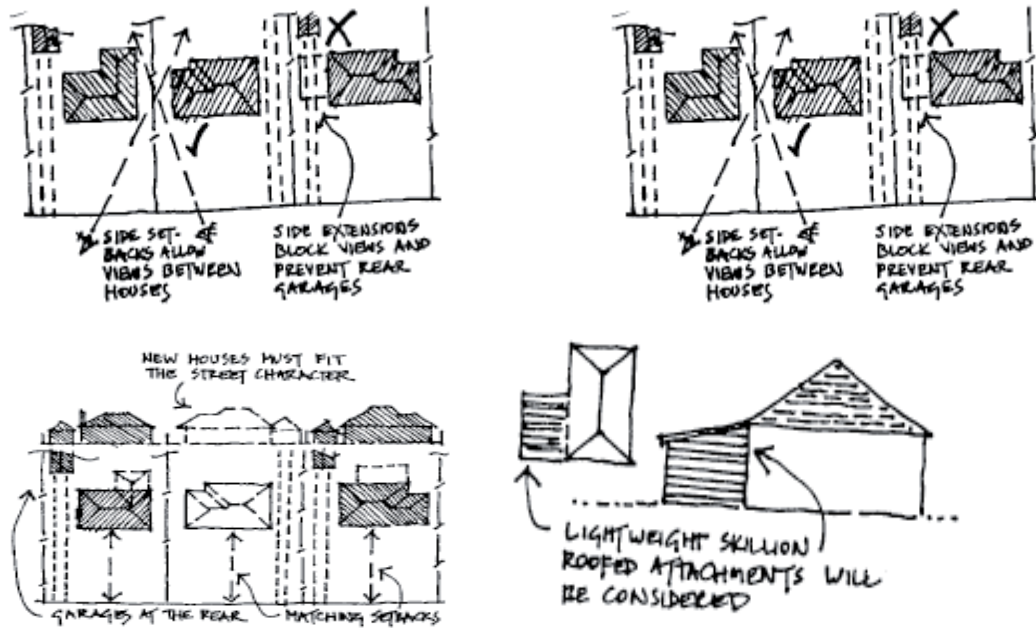


Figure 5: Side setbacks and garden areas

Alterations and additions

- C11. Extra rooms above the existing main body of the house which require alteration of existing roof shape are not permissible. Rooms in roof may be considered but only where they are ventilated by flat, in-plane skylights on the back slope of the roof.
- C12. Avoid new dormer windows, mansard roofs or large bulky additions visible from the street.
- C13. Linked pavilions under a separate roof form, or skillion extensions both to the back of the house are supported.
- C14. Keep all existing chimneys.
- C15. Painting, plastering or re-skinning of brick houses or fences in Montgomery Street or Oakleigh Street is not desirable.
- C16. Avoid recladding of existing fibro buildings (including garages and other ancillary buildings) in brick as this would confuse the history of the area. Recladding in other lightweight materials, such as fibro-cement, timber or imitation timber is acceptable.
- C17. Avoid re-roofing of main body of the existing house except to match original materials, maintaining the existing balance of red and blue tiles.

New development

- C18. Repeat single storey scale for houses with maximum wall height the same as existing houses.
- C19. Hipped pitched house roofs should not exceed the pitch of existing house roofs.

- C20. Setbacks should be the same as original houses in the street.
- C21. Access to garages and carports should be by a side driveway beside house to the backyard.
- C22. Materials for any new house facing Montgomery Street to be of face or common bricks with Marseilles tile roof.
- C23. Materials for main part of any new house in other streets to be of timber, fibro or imitation timber cladding, with terra cotta tile roofs.
- C24. Materials for utility buildings and garages in lightweight materials such as fibro, imitation timber cladding or 'corrugated iron'.
- C25. In Montgomery Street, avoid use of hearted, speckled, multicoloured or textured bricks in light colours.
- C26. Roofing materials other than terracotta tiles are not desirable.

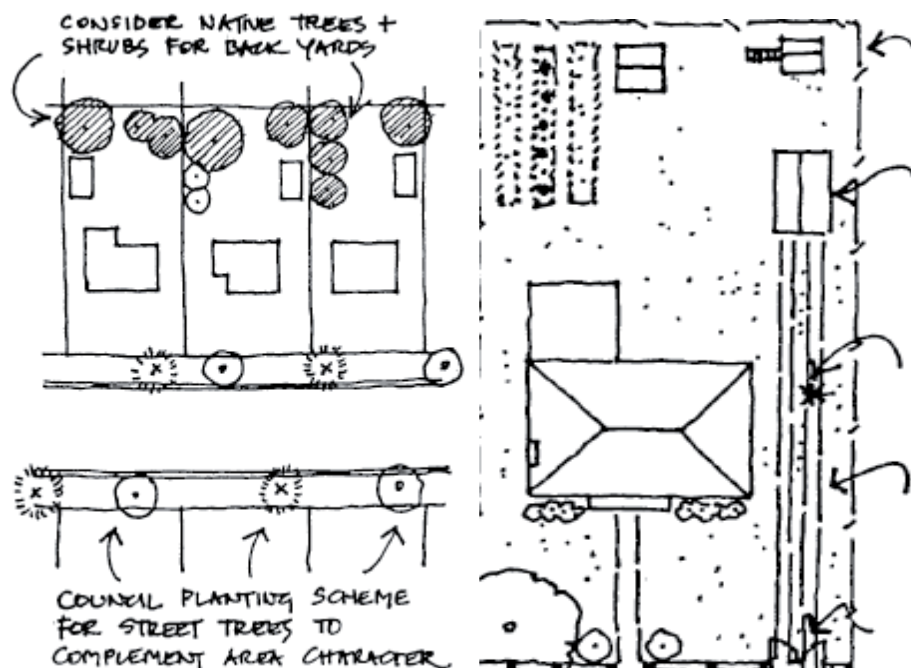


Figure 6: New development

Fences

- C27. The following fences must be kept:
 - Clyde Street: Nos 286 and 288; and
 - Montgomery Street: Nos 2 - 24 and Nos 9 - 25 and 29.
- C28. Keep the existing street character, with fenceless street alignments for all properties other than those listed in the above control.

Public lands

- C29. Maintain and reinstate those elements of the public domain which contribute to an understanding of the history of the area.
- C30. Improve the residential amenity and enjoyment of the public street area.
- C31. Prepare a uniform planting scheme for the streets of this area to complement the formal 1940s character of the houses. Plantings such as crepe myrtle (which is bare in winter) or clipped pine are the most suitable.
- C32. Street plantings of native shrubs or trees are not suitable to the formal line of the streets and the house setbacks.
- C33. Plant on or near side boundary alignment to minimise effect of tree shade on front wall of house.

Existing significant buildings

- C34. Keep all buildings and other structures that explain the history of the area and contribute to its significance.
- C35. Keep all the following buildings, which together demonstrate the history of the area and contribute to its significance, with their present form and roof shape:
 - Blaxcell Street: Nos 347 - 361
 - Chiswick Street: Nos 27- 47
 - Clyde Street: Nos 270 - 280 and 286, 288.
 - Cordon Street: Nos 69, 71 and 82
 - Montgomery Street: Nos 2 - 24 and Nos 7 - 29
 - Pegler Street: Nos 76, 78, 79, 80, 81
 - Oakleigh Street: Nos. 4 - 16 and 20 - 26 and 1 - 7 and 11 – 17

2.5.2 Granville Civic and Residential Precincts

History

The character of the Civic and Residential Precinct conservation areas is largely determined by the development that occurred during the 1880s. This was stimulated by the relocation of a number of large manufacturing industries close to the railway. The 1880s saw the construction of new houses, including both workers' cottages and more substantial residences for the managers and factory owners, and a complete community quickly established itself. For 25 years from 1905, when Clyde Engineering was awarded large contracts to build locomotives, Granville saw another great period of development, with the appearance of: new small industries, new housing, new shops and businesses.



Civic Precinct



Residential Precinct

Figure 7: Civic and Residential Precincts

Distinctive Characteristics

- Varied subdivision patterns and allotment sizes with consequential varied building forms.
- Predominantly residential in character, with some larger scaled civic, religious, commercial and educational buildings.
- In the Residential Precinct, low scale development and a sense of space.
- Variety of residential buildings - single and two storey freestanding suburban houses, pairs of attached dwellings and terraces, separated from the street by garden space.
- Early buildings stand close to front fence.
- Buildings stand parallel to the street, with the space between the building line and front fence generally free of structures such as garages or carports.
- Predominance of brick as a building material with tile, slate or iron roofs but with interest and variety provided by occasional use of other materials - stone, rendered and ashlar brick, timber.
- Front garden space visible from the street mostly over low front fences built of varied materials, many of which respond to the materials and importance of the building behind brick, timber and wire on timber frame.
- In the Civic Precinct Conservation Area, the total garden area is generally about 40% of the site.
- Remnants of street tree planting of brush box and silky oak which frame and unify the street space and cool pavements in summer.
- Remnants of sandstone kerbs and gutters in important civic and residential streets - in the Residential Precinct Conservation Area these have sometimes been removed to form garden edges around recent central street tree planting.
- Predominance of buildings from 1880s - 1930s which collectively show how the area has grown and provide the historic significance and character of the area.



Figure 8: Streetscape character

Statement of significance

The Civic Precinct Conservation Area is at the civic, religious and residential heart of Granville together with the Residential Precinct Conservation Area and collectively represent its great periods of growth and prosperity. The area is predominantly residential in character with some larger scaled civic, religious, commercial and educational buildings. Through their street planting and edging, their civic, commercial, educational and religious buildings, and their range of housing types, age and size, these areas reflect the substantial role played by Granville in the development of western Sydney, the way in which it developed and the nature of its social structure.

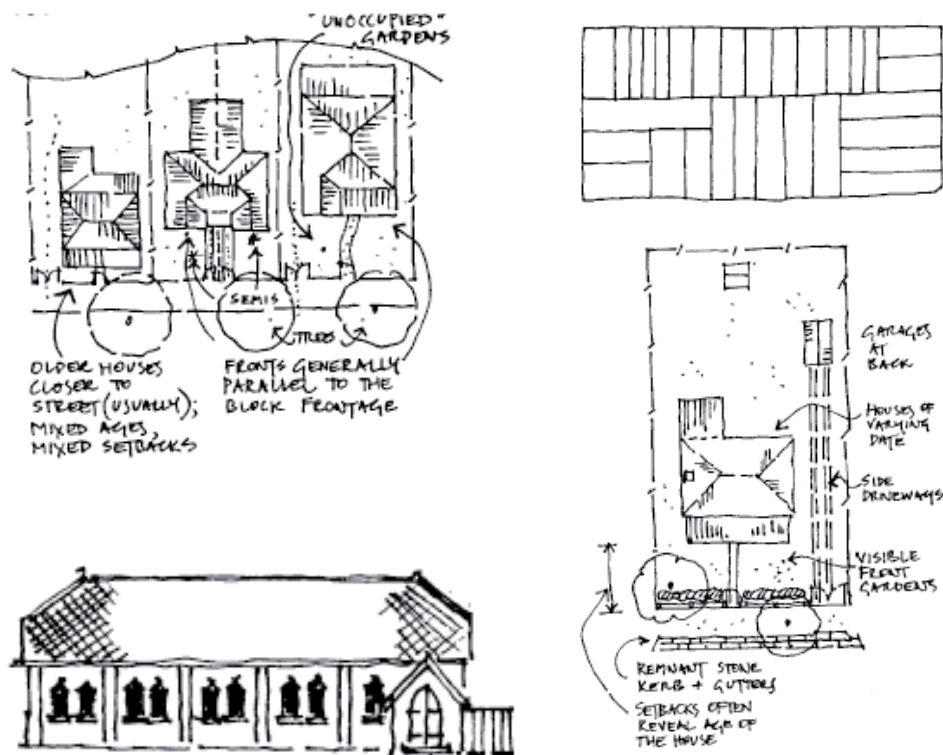


Figure 9: Significant characteristics

Objectives

- O1. Retain all the attributes that contribute to the heritage value and character of the Granville Civic and Residential Precincts.

Controls

Landform / natural characteristics

- C1. High retaining walls and buildings of disparate height are not permitted.
- C2. Maintain the natural shape of landform.



Figure 10: Landform / natural characteristics

Subdivision

- C3. Re-subdivision along the length of the allotment may be considered and, in line with past practice, re-subdivision across the line of corner allotments may be considered, but only where the resultant development would not have the potential to detrimentally affect the setting of a building listed below as an Existing Significant Building or disturb the existing streetscape.

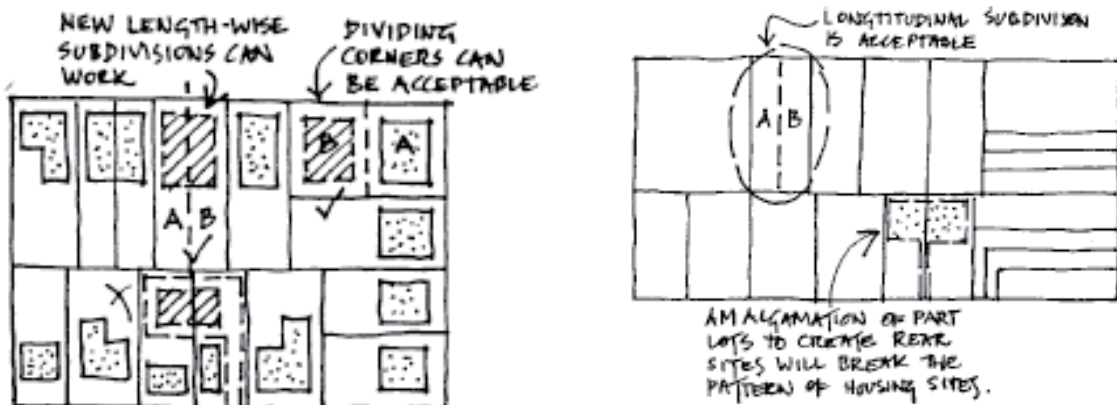


Figure 11: Subdivision

Siting and garden area

- C4. Maintain the historical pattern of development where individual dwellings are established on separate parcels of land.
- C5. Maintain amenity and privacy of back garden space to residential buildings.
- C6. Keep existing side driveway access for cars to rear garden garage/carports.

- C7. Continue parallel alignment of new buildings to the street.
- C8. Dual occupancy development is not permitted, except where it can be accommodated in a modest attached addition to the rear of an existing house.
- C9. For commercial areas, 40% of the site be retained for garden area and 50% for residential areas.

Alterations and additions

- C10. Development should complement heritage without imitation so that the new work does not compete with historic buildings in the area or detract from the area's visual consistency and amenity.
- C11. Additions are permitted at the rear of the building or within the existing roof form only and are to be modest. Rooms in the roof will be considered but only where they are ventilated by flat in-plane skylights. Additions which change the shape of the original roof or the character of the building are not permitted.
- C12. Additions to the side of an existing building are not permissible where they would prevent side driveway access to rear garages/carports.
- C13. Avoid dormer windows and mansard roofs.
- C14. In the Civic Precinct Conservation Area, corrugated iron may be used as a cladding for extensions to an existing house.
- C15. Brick walls are not to be repainted or reskinned.
- C16. Avoid additions higher than the ridgeline of the house.

New buildings

- C17. New buildings should not compete in height or scale with existing significant buildings listed under 'Existing Significant Buildings' at the end of this Section.
- C18. Avoid establishing new buildings closer to the front street alignment than nearby pre-1930 buildings.
- C19. The maximum wall height of new buildings in the Civic Precinct Conservation Area is 7.2 metres, provided that there is no competition in presentation with existing significant buildings.
- C20. Hipped or gabled pitched roofs must not exceed 32 degrees. Rooms in the roof may be considered but only where they are ventilated by flat, in-plane skylights on the rear face of the roof.
- C21. Materials for new buildings should be face or common bricks, timber or rendered masonry, with slate, terracotta tile or corrugated iron roof cladding.
- C22. Boundary-to-boundary development is not appropriate as it does not allow garages and other ancillary structures to be located at the rear of the development. In exceptional cases, where the lot is less than 10m wide, a front garage may be integrated with a new house, providing that it is set back from the front wall of the house by a minimum of 1m and its design and construction avoid negative impact on the streetscape.

C23. Do not use imitation slate or obtrusively coloured roofing materials.

C24. Imitation architectural details from earlier styles are not appropriate.

Garages, carports and other ancillary buildings

C25. Maintain the uncluttered space between the building line and the front fence as an important part of the street character - this space should be free of garages, carports and other structures.

C26. In residential locations of the conservation areas, garages and carports should not be integrated into the house except where the allotment is less than 10m wide.

C27. Keep garages and carports as secondary utilitarian buildings.

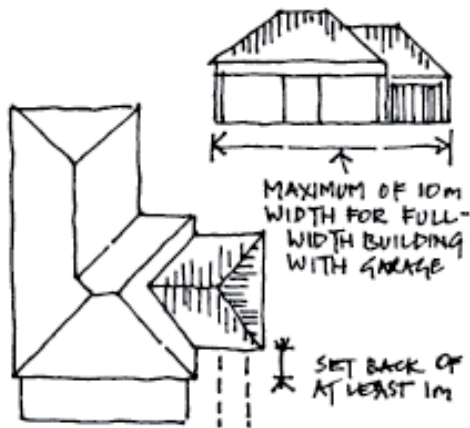


Figure 12: Garages

Front fences

C28. Every effort should be made to keep and maintain the front fences at the following addresses, which are a most important part of the history and character of the area:

Table 1: Conservation Areas and Residential Precincts Areas

Civic Precinct Conservation Area	Residential Precinct Conservation Area
Carlton Street: No 12 Jamieson Street: Nos 17* (timber), 30*, 39* (stone) Railway Parade: Nos 62*, 64*, 72 *Heritage Item	Daniel Street: No 17 Hewlett Street: No 18* The Avenue: Nos 58*, 66*

C29. Avoid fences higher than 1.2 metres.

C30. Keep fences made of materials such as timber or wire frame on timber mesh with hedge, if desired. In some cases a new brick fence may be acceptable.

- C31. Avoid high front privacy walls of brick, timber or brush.
- C32. Avoid timber picket front fences unless to replace a known original picket fence.
- C33. Avoid new brick front fences, except where there is evidence of an earlier brick fence, lost or changed since its construction.
- C34. For side and back boundaries, continue the use of timber paling fences.

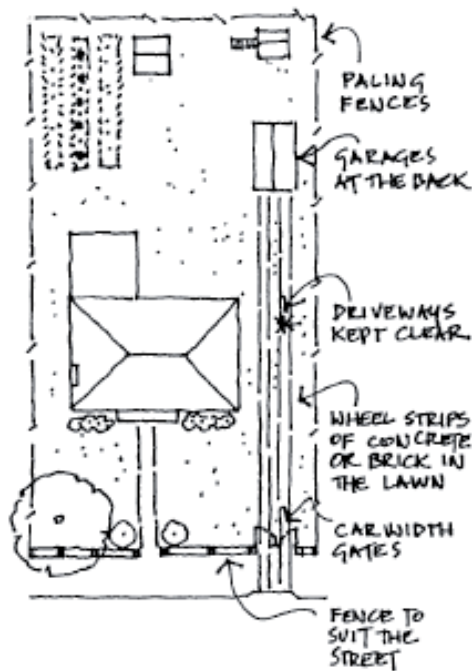


Figure 13: Fencing and Garages

Existing significant buildings

- C35. The following significant buildings, which together demonstrate the history of the area and contribute to its significance, must be retained:

Civic Precinct Conservation Area

Buildings from the 1880s - 1890s:

- Carlton Street: No 10* (town hall)
- Hutchinson Street: Nos 6, 10 - 12* (police station), 14* (church)
- Jamieson Street: Nos 6 - 14* (terrace), 29*, 39* (church, hall and rectory)
- Mary Street: No 8*

Buildings from c1905 - c1930:

- Carlton Street: No 10* (town hall)
- Hutchinson Street: Nos 6, 10 - 12* (police station), 14* (church)
- Jamieson Street: Nos 6 - 14* (terrace), 29*, 39* (church, hall and rectory)
- Mary Street: No 8*

Residential Precinct Conservation Area

Buildings from the 1870s:

- The Avenue: Nos 36*, 52*, 54*

Buildings from the 1880s - 1890s:

- Hewlett Street: No 4*
- Spring Garden Street: Nos 2, 4, 12, 14*, 20, 22, 24*, 26*, 28*, 30*
- The Avenue: Nos 42*, 58*, 60*
- William Street, Nos 123*, 133* (public school)
- Walter Street: Nos 4*, 30*, 32*

Buildings from c1905 - c1930:

- Daniel Street: Nos 3, 4, 5, 6, 7, 9, 11*, 17
- Hewlett Street: Nos 6*, 7, 8*, 9, 10, 11, 13, 18*, 20, 21, 23
- The Avenue: Nos 28*, 30, 32, 34, 44, 46, 48, 50, 56, 61, 66*, 70, 72, 74*
- Spring Garden Street: Nos 10, 16, 18
- Walter Street: Nos 8, 10, 11, 20, 22, 24, 26, 28

* Heritage item

2.5.3 Fullagar Road Conservation Road

The Fullagar Road War Service Homes group has both local and state-wide historic, social and aesthetic significance. Within Holroyd, the group is the largest and most intact representative example of Inter-War service homes, and provides evidence of contemporary social and architectural attitudes to housing ex-service personnel in the years immediately following World War I. The buildings are significant individually and as a group, as fine and largely intact examples of the Inter-War Georgian style constructed in quality materials with good layouts and style. Within the state context the group is one of the earliest War Service homes estates so far to the west of Sydney, and one of the few groups which were constructed in this distinctive style.

Objective

- O1. Buildings located within the Fullagar Road Heritage Conservation Area shall retain their original materials, features and detailing.

Controls

- C1. Any proposed works on a building which has been identified as a heritage item within this conservation area should be designed to retain the original classical detailing as well as the fenestrations (arrangement of windows in a wall) which are characteristic of buildings within this conservation area).
- C2. Where works are proposed to a building that is currently face brick, the building should remain unpainted or unrendered.
- C3. Where additions and extensions are proposed, these should be single storey only, and are to be located to the rear or side of the building so that they do not impact upon the presentation of the building from the street.
- C4. Alterations and extensions should not alter the form or fabric of the roof. In general, roofs of single storey additions in this conservation area should be consistent with the existing roof in terms of form, pitch, eaves and ridge height.

2.5.4 Toohey's Palm Estate Group Conservation Area

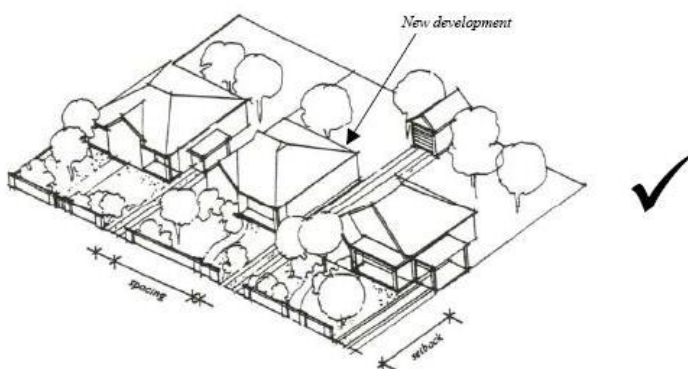
The Moree Avenue bungalow group has local historic significance arising from the evidence it provides of the pattern of suburban development in Holroyd in the interwar period. Built as part of the Toohey's Palm Estate, a planned subdivision which used a distinctive pattern of palm tree street planting to give a unified identity and character to the newly created group of allotments, these early residences retain much of their original character and fabric and thus provide evidence of the social, economic and architectural forces which accompanied the burgeoning of new residential development in this period.

Objective

- O1. Buildings located within the Toohey's Palm Estate Group Heritage Conservation Area shall retain their original materials, features and detailing.

Controls

- C1. Any proposed works on a building within this conservation area should be designed to retain and conserve all original detailing, design features and materials.
- C2. Any proposed works on a building which has been identified as a heritage item within this conservation area should be designed to retain the original front and side curtilage of the building, which is characteristic of buildings within this Conservation Area.
- C3. Where works are proposed to a building that is currently face brick, the building should remain unpainted or unrendered.
- C4. Where additions and extensions are proposed, these should be single storey only, and are to be located to the rear or side of the building so that they do not impact upon the presentation of the building from the street.
- C5. Where alterations and extensions are proposed, these should not alter the overall form or fabric of the roof. In general, roofs of single storey additions in this conservation area should be consistent with the existing roof in terms of form, pitch, eaves and ridge height.



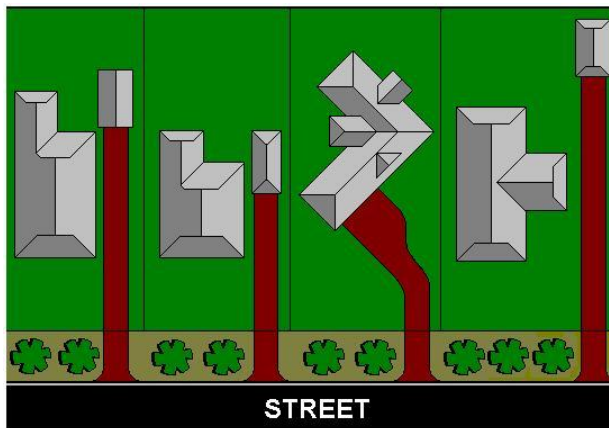


Figure 14: Examples of good and poor streetscape orientation and setback

2.6 Conservation Incentives

Objectives

- O1. To provide incentives for the restoration and maintenance of heritage listed items in Cumberland.
- O2. To ensure that conservation incentives are provided where restoration and maintenance will be compliant with the objectives of this part of the DCP
- O3. To ensure that any variations to the development controls within this development control plan for a proposed development involving a heritage item does not affect the heritage significance of the heritage item or conservation area.
- O4. To ensure that the amenity of a streetscape and surrounding neighbourhood is not detrimentally affected by any variations to controls within this development control plan.

Controls

- C1. Conservation incentives may apply for heritage items that are listed within Cumberland Local Environmental Plan 2021.
- C2. When considering a development application for works involving a heritage item, Council may consider variations to development controls contained within Council's adopted Development Control Plan, provided the Council is satisfied that:
 - The proposed development complies with all of the heritage design controls contained within this Part of Cumberland Development Control Plan 2021,
 - The proposed development will not adversely affect the heritage significance of the heritage item or its setting,
 - The proposed development will involve a complete and full restoration of the heritage item, if this is deemed necessary by the Council, and
 - The proposed development will not adversely affect the amenity of the surrounding area
- C3. When considering an application for consent to erect a building on land on which there is situated a heritage item, Council may for the purpose of determining the number of car parking spaces to be provided on the site, exclude from its calculation of the gross floor area of the buildings erected on the land part or all of the gross floor area of the

heritage item, but only if the Council is satisfied this will facilitate the conservation of the heritage item.

Note:

Council can provide general information on design outcomes, colour schemes, building materials and fences for owners of properties listed as heritage items in the Local Environmental Plan 2021.

If your property is listed on a state or national heritage register, owners may also be eligible for special State funding to help with the maintenance of your property

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CUMBERLAND
CITY COUNCIL

PART G3

TRAFFIC, PARKING, TRANSPORT AND ACCESS (VEHICLE)

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1. Introduction

1.1 Land to which this Part applies

This Part applies to development applications on all land within Cumberland City.

1.2 Purpose of this Part

This Part of the DCP provides objectives and controls for all aspects of a development concerning the movement and access of vehicles.

Council's parking, traffic and access provisions aim to satisfy the parking demand likely to be generated by the development and encouraging other modes of transport.

1.3 Relationship to other Parts

Where relevant, this Part of the DCP should be read in conjunction with the following Parts of the DCP:

- Part A - Introduction;
- Part B - Development in Residential Zones;
- Part C - Development in Business Zones;
- Part D - Development in Industrial Zones;
- Part E - Other Land Use Development Controls; and
- Part F - Precinct and Site Specific Development Controls.

2. General objectives

The objective of this Part of the DCP is to ensure that:

- O1. On-site car parking is sufficient, accessible and safe to all user groups while encouraging alternative modes of transport, such as walking and cycling.
- O2. Developments integrate design of vehicle access and parking facilities to minimise visual and environmental impacts.
- O3. Design of on-site car parking structures, loading facilities and driveways is consistent with, and has minimal impact on, the appearance of the local streetscape.

3. Parking rates

Development is to provide on-site parking in accordance with the following minimum rates. Refer to Table 1 below.

Where a parking rate has not been specified in the table, the Guide to Traffic Generating Developments shall be used to calculate the parking requirements for the proposed development. Alternatively, a parking study may be used to determine the parking, subject to prior approval by Council.

Additional parking objectives and controls are provided in Section 4 of this DCP.

Table 1: Parking rates. Parking calculations that are not whole numbers are to be rounded up

Development Type	Car Parking Rate	Bicycle Parking Rate
Residential – Dwelling House		
General rate	• Minimum 1 covered space / dwelling house • Maximum of 2 covered spaces / dwelling house. • Stacked parking may be provided only for use by the same dwelling. For Basement parking refer to 4.1.4 of this Part of the DCP.	N/A
Residential - Flat Buildings and Shop Top Housing		
Studios, 1-2 bedrooms	1 space / dwelling	1 space / 3 units
3 or more bedrooms	1.5 space / dwelling	1 space / 3 units
Visitor parking	0.25 space / dwelling	1 space / 3 units
Other Residential		
Boarding House	0.5 space / room	As per State Environmental Planning Policy (Affordable Rental Housing) 2009
Commercial - Business and Office		
General rate	1 space / 40m ² GFA	Staff: 1 space / 10 employees Visitor: • Sites under 1000 m²: Nil • Sites over 1000 m²: 1 space / 750 m² over 1000 m²
Commercial - Retail		
General rate	1 space / 50m ² in B4 zone 1 space / per 40m ² GFA in all other zones	Staff: 1 space / 10 employees Visitor: 1 space / 750 m ² over 1000 m ²
	<i>For applications involving existing buildings which do not involve additional floorspace, Council will give consideration to site characteristics when determining parking rates.</i>	
Food and Drink premises [#]	Within Town Centre*: 1 space / 40m² GFA Outside Town Centre: 1 space / 7 m² GFA	Staff: 1 space / 100 m ² GFA
Health consulting room	3 space / consulting room	N/A

Development Type	Car Parking Rate	Bicycle Parking Rate
Recreation facility (indoor)	Within town centre*: 3 space / 100m ² GFA Outside town centre: 4.5 – 7.5 space / 100m ² GFA	Staff: 1 space / 4 employees Visitor: 1 space / 200 m ² GFA
Industrial		
Factories	1.3 space / 100m ² GFA	N/A
Vehicle repair stations	3 space / work bay 1 space / 40m ² GFA of office	N/A
Warehouses	1 space / 300m ² GFA	N/A
Other Land Use		
Centre Based Child Care Centres	Rely on Child Care Planning Guideline	Merit based assessment as per Child Care Planning Guide
Educational Establishments**	<u>Primary Schools:</u> 1 space per 1 staff + 1 visitor parking space per 100 students. <u>Secondary Schools:</u> 1 space per 20 year 12 students + 1 space per 1 staff + 1 visitor parking space per 100 students. <u>Tertiary Institutions:</u> 1 space per 6 students + 1 space per 1 staff + visitor parking space based on scale of institution.	1 space / 5 students over Year 4
Places of public worship***	Whichever is greater of: 1 space / 8m ² GFA (total) or 1 space / 3 people	N/A
Sex services	1 space / service room	N/A

#Consideration will be given to change of use of existing buildings for food and drink premises where there is no increase in gross floor area, subject to appropriate parking and traffic justification.

**Town centre is land within a core area zoned primarily for business and commercial uses in B2 and B4 zones.*

***Applies to applications for new educational establishments and expansions of existing educational establishments.*

****Parking rates for places of public worship may differ in industrial zones, as outlined in section 4.7 of this Part.*

4. Objectives and controls

4.1 Development in residential zones

The following provisions apply to all residential development.

Parking and site access

Objective

- O1. Minimise visual and environmental impacts of car parking and access.

Controls

- C1. Parking rates shall comply with the minimum parking rates in Section 3 of this Part of the DCP.
- C2. One additional car parking space is permitted within the front setback area for single dwelling house development on the following roads, where all other provisions of the DCP are achieved (including landscaping area):
- Centenary Road, Wentworthville;
 - Cumberland Highway;
 - Merrylands Road (between Cumberland Highway and Clarence Street); and
 - Great Western Highway.

For these specified roads, vehicles must be able to enter and exit the site in a forward direction.

Driveways

Objective

- O1. To provide safe and practical access to properties.

Controls

- C1. Only one driveway crossover shall be permitted per residential property where the property frontage is less than 15m.
- C2. A maximum of 2 driveway crossovers shall be permitted for residential properties with a residential frontage of 15m or more.
- C3. Single vehicle driveways shall be a maximum width of 3.5 metres along the front property boundary.
- C4. Driveways which service a double garage shall be a maximum width of 6m.
- C5. All new driveways shall be located a minimum of 1 metre from the side property boundaries.
- C6. Where rear access is available, driveway access shall be located at the rear of the site.
- C7. Driveways servicing car parking including manoeuvring areas to the parking bays shall comply with AS 2890 – Parking Facilities unless otherwise specified by Council.

- C8. The maximum gradient for a driveway shall be 20% or 1:5 (with appropriate transitions). However, in extreme circumstances, gradients up to 25% or 1:4 (with appropriate transitions) may be considered by Council, subject to individual merit.
- C9. Minimum clearance of 1.2 metres shall be provided to structures, such as power poles, service pits and drainage pits.
- C10. Vehicular access points and parking areas are to be:
- easily accessible and recognisable to motorists;
 - located to minimise traffic hazards; and
 - located to minimise the loss of on-street car parking.
- C11. The area between the driveway and the property boundary shall be suitably landscaped to minimise the visual impacts of vehicular access points and to maximise the visual quality of the streetscape.
- C12. Driveways shall be designed and constructed in materials to avoid glare and large expanses of plain concrete, whilst ensuring the driveway colour does not detract from the development and character of the street.

4.2 Garages and carports (dwellings and dual occupancies only)

Objectives

- O1. Ensure garages do not visually dominate the appearance of buildings or the streetscape.
- O2. Integrate design of access and parking facilities to minimise visual and environmental impacts.
- O3. Ensure that the design of car parking structures is consistent with the dwelling house and has minimal impact on the streetscape.

Controls

Visual quality and streetscape character

- C1. Garages shall not be a dominant feature of the dwelling house façade. The garage must be subservient in scale to the dwelling house, and integrated and compatible with the overall design of the dwelling house in terms of height, form, materials, detailing and colour.
- C2. Garages and carports at grade are to be set back a minimum of 1 metre behind the front wall of the dwelling house.
- C3. Where garaging is provided as part of the dwelling frontage, it must be integrated into the design of the dwelling house to minimise visual impact.
- C4. Where the garage is proposed to be provided on the secondary street frontage, setbacks for garages should respect any existing adjacent development facing the secondary street and should not be located forward of the associated main dwelling house.
- C5. Detached garages and car parking structures shall be constructed using materials, colours and roof pitch that are similar and complementary to the main dwelling house.

- C6. The roofs of garages and car parking structures should be constructed of low reflective materials.
- C7. No more than two single garages or one double garage shall be placed on the front facade.
- C8. Where rear access is available and/or where this is the prevailing pattern of development in the street, the garage shall be located at the rear of the site.

Dimensions

- C9. Parking spaces within an enclosed garage shall have minimum dimensions of 3 metres width x 5.4 metres length clear of walls and columns per vehicle.
- C10. Single garage doors shall be a maximum of 3.5m and double garage doors shall be a maximum of 5.5 metres wide.
- C11. Garage doors shall not exceed 50% of the width of the street elevation.
- C12. The size of any garage shall be no more than a maximum of 50m². If the proposed garage is to be greater than 50m², any area in excess of this will be considered to be gross floor area.
- C13. Triple garages are not permitted.

Carport (detached)

- C14. Carport structures are not to be provided forward of the front building line, except where block dimensions are not sufficient to accommodate a carport elsewhere. In these circumstances, the design is to appropriately respond to the building and existing surrounds.
- C15. Carports shall have an open design and result in minimal impact on the streetscape.
- C16. A carport shall be open on two or more sides and not less than one-third of its perimeter open.
- C17. Carports may be permitted forward of the building line within the permitted articulation zone.
- C18. If it is comprised of metal components, it should be constructed of low reflective materials.
- C19. If located within 900mm from the boundary, it shall be constructed of materials that require minimal maintenance.

Hardstand parking

- C20. Where there is no rear lane and no capacity to access the rear yard by car from a street, an uncovered hardstand car space may be provided within the front setback where a minimum 6m setback is available.

4.3 Basement parking

Objective

- O1. Provide safe, well designed, and functional basement parking within buildings.

Controls

- C1. Basement garages and driveways shall be permitted in accordance with the relevant Australian Standards. Where slope conditions require a basement, the area of the basement shall not significantly exceed the area required to meet the car parking and access requirements for the development.
- C2. Basement parking shall be located within the building footprint.
- C3. Basement parking shall not unreasonably increase the bulk and scale of development.
- C4. Basement parking shall provide, where required, a pumpout drainage system according to Council's engineering requirements.
- C5. Basement parking shall not affect the privacy of adjacent residential development.
- C6. Basement parking manoeuvring shall ensure that vehicles can enter and exit in a forward direction.
- C7. Basement access/ramp design shall comply with ramp requirements specified in AS2890.

4.4 Development in business zones

The following provisions apply to all commercial development.

Vehicle access

Objectives

- O1. Minimise the impact of vehicle access on streetscape amenity, pedestrian safety and circulation within the centre.
- O4. Integrate vehicular access and service areas into building design and streetscape character.

Controls

- C1. Driveways shall be provided from laneways (existing or proposed), private accessways and secondary streets, where possible.
- C2. If a building has access to a rear lane or sidestreet, the loading and unloading facilities and service access shall be provided from that lane.
- C3. The location of vehicular access shall consider existing services (eg. power, drainage) and street trees.
- C4. Car park entries and driveways shall be kept to a minimum and shall not be located on primary or core retail streets.
- C5. Driveways shall be located at the required distance from the intersection of two roads.
- C6. Vehicular access shall be integrated with the overall design of the building and shall consider site layout, streetscape character and façade design.
- C7. All vehicles must be able to enter and leave the site in a forward direction.

- C8. The width of driveways is limited to a maximum of 8 metres at the boundary, including development with commercial loading docks and servicing (including waste servicing).
- C9. Pedestrian safety is to be maintained through design, including ensuring clear sight lines at pedestrian and vehicular crossings and clearly differentiating vehicular and pedestrian access.

Parking

Objectives

- O5. Ensure that adequate and convenient off-street parking facilities are provided for all vehicles generated by the various types of development.
- O6. Ensure car parking is well designed and located to maintain positive streetscape character and active frontages, enable efficient use of the site and reduce its visual impact.

Controls

- C10. Parking rates shall comply with the minimum parking rates in Section 3 of this Part of the DCP.
- C11. On-site parking is to be accommodated within a basement wherever possible.
- C12. Consolidate basement parking areas under building footprints to maximise the area available for landscaping.
- C13. On-site parking is to be suitably screened from view of an active or main street frontage.
- C14. Parking areas shall be designed to ensure pedestrian amenity and safety.
- C15. Natural ventilation is to be facilitated to basement and sub-basement car parking areas, wherever possible, and with regard to any flooding issues.
- C16. Ventilation grilles and structures shall be integrated into the façade and landscape design, should not be provided at active frontage and should not be near windows of habitable rooms and open space areas.
- C17. Safe and secure access is to be provided from on-site parking for building users, including direct access from parking to lobbies.
- C18. Marked pedestrian pathways with clear lines of sight and safe lighting shall be provided.
- C19. Private car parking within mixed use developments must be clearly identified and separated from commercial car parking.
- C20. Visitor parking shall be clearly identified and shall not be provided in the form of stacked/ tandem parking

4.5 Development in industrial zones

The following provisions apply to all industrial development.

Car parking and design

Objectives

- O1. Sufficient car parking is provided on-site to satisfy the likely peak parking demands of the development.
- O7. Parking is integrated with site planning and landscaping and is of adequate dimensions to facilitate convenient and safe usage.
- O8. To ensure that at grade car parking on sites does not dominate the streetscape and the public domain.

Controls

- C1. Parking rates shall comply with the minimum parking rates for cars and bicycles in Section 3 of this Part of the DCP.
- C2. On-site parking is to be designed so that large expanses of bland concrete paving in the car parking and driveway areas are avoided.
- C3. Car parking areas, particularly large areas shall be landscaped so as to break up large expanses of paving. Landscaping shall be required around the perimeter and within large carparks.
- C4. In open parking areas, 1 shade tree per 10 spaces shall be planted within the parking area.

Traffic and transport management plan

Objectives

- O1. Ensure adequate arrangements for loading, parking and access are provided on site.
- O2. Minimise unacceptable impacts on the surrounding transport / road network.

Control

- C5. A traffic and transport management plan is to be prepared for the development. The plan is to include, at a minimum, details on the following items:
 - type of transport used for the development, including operations, staff and visitors;
 - frequency and duration of movements, including operations, staff and visitors;
 - size of the largest vehicle accessing the site;
 - internal management arrangements for vehicle movements, parking and access;
 - potential scope for public transport, walking and cycling access and facilities for staff and visitors on the site;
 - management arrangements should traffic and transport impacts flow outside the site where the development is located; and
 - review mechanisms to confirm the effectiveness of the plan and to refine the plan as required.

4.6 Loading requirements for commercial and industrial development

Objective

- O1. Ensure adequate onsite facilities are provided within an industrial and commercial development for the loading and unloading of goods.

Controls

- C1. Loading bays for trucks and commercial vehicles shall be provided in accordance with Table 2 below:

Table 2: Loading requirements for commercial and industrial development

Land use	Loading requirements
Business and office premises	1 space / 4,000m ² GFA up to 20,000m ² GFA, plus 1 space / 8,000m ² thereafter
Retail premises - department stores	1 space / 1,500m ² GFA up to 6,000m ² GFA, plus 1 space / 3,000m ² thereafter
Retail premises – shops and food and drink premises	1 space / 400m ² GFA up to 2,000m ² GFA, plus 1 space / 1,000m ² GFA thereafter
Hotel and motel accommodation	1 space / 50 bedrooms or bedroom suites up to 200, plus 1 space / 100 thereafter, plus 1 space / 1,000m ² of public area set aside for bar, tavern, lounge and restaurant
Other	1 space / 2,000m ²
Industrial/warehouse, bulky goods retail and wholesale supplies	1 space / 800m ² GFA up to 8,000m ² GFA, plus 1 space / 1,000m ² thereafter

The loading requirements for existing commercial and industrial developments where there is no addition to the gross floor area will be assessed on merit and existing site constraints.

- C2. Loading/unloading areas shall be provided in accordance with applicable provisions of Australian Standard (AS 2890).
- C3. Provide separation between parking and service areas (i.e. loading/unloading areas).
- C4. Locate and design service areas to facilitate convenient and safe usage.
- C5. Loading docks shall be located so as to not:
- interfere with visitor and employee parking spaces;
 - interfere with pedestrians or vehicle circulation and access; and
 - result in delivery vehicles queuing on any public road, footway, laneway or service road.
- C6. A minimum of one loading space shall be provided internally within each industrial unit.
- C7. Loading areas shall be designed for the largest size vehicle accessing the site.

4.7 Other land use

Centre based child care facilities

Objectives

- O1. Provide safe and convenient car parking arrangements for childcare centres, including a safe location for drop-off and pick-up of children.
- O9. Ensure sufficient off-street parking is provided for users of the childcare centre.

Controls

- C1. Parking rates shall comply with the minimum parking rates in Section 3 of this Part of the DCP.
- C2. All vehicles shall be able to enter and leave the site in a forward direction.
- C3. A reduction in car parking rates may be considered where:
 - the proposal is an adaptive re-use of a heritage item;
 - the site is in a high-density business or residential zone;
 - the site is in proximity to high frequency and well-connected public transport;
 - the site is co-located or in proximity to other uses where parking is appropriately provided (for example business centres, schools, public open space, car parks); and
 - a pick up or drop off zone is provided.

Community facilities

Objectives

- O1. Provide adequate car parking for community facilities, taking into account location, context and circumstances.
- O2. Ensure that the impact of parking and vehicular movement for a community facility does not adversely impact the amenity and to manage congestion and public safety within the surround locality.

Controls

- C1. Car parking shall be provided in accordance with the recommended rates following the completion of the traffic and transport impact statement. If Council is not satisfied with the car parking rate proposed in a development application, the car parking rate for places of public worship shall apply.
- C2. All vehicles shall be able to enter and leave the site in a forward direction.
- C3. Car parking shall be provided in addition to the minimum landscape area required.
- C4. A traffic and transport impact statement will be required for developments with any capacity. The statement shall:
 - assess the impact upon the surrounding streets and the measures proposed to mitigate such impacts;
 - identify the number of parking spaces required on the basis of the general use of the site. Reference should be made to similar existing and operating premises in similar neighbourhoods as far as possible;

- identify the activities (e.g. carnivals, celebrations, festivals) and other gatherings which are likely to attract larger than normal attendances at the premises, the attendance numbers associated with such events and measures to mitigate and manage their impacts associated with traffic movements. This is to be addressed in ongoing traffic and car parking plan of management;
 - adequately consider future parking needs that may result from anticipated growth; and
 - consider alternative modes of transport in addition to car parking to support access to the site, such as public transport, walking and cycling.
- C5. Car parking design shall comply with AS 2890.
- C6. Basement or at-grade parking must be provided for all new developments.
- C7. At grade parking shall be considered where it does not adversely impact streetscape character. At grade parking shall be considered where it does not adversely impact streetscape character. Where at grade parking is provided, it shall be landscaped to a high quality and incorporate shade trees.

Educational establishments

Objectives

- O1. Ensure that the surrounding street network and intersections continue to operate effectively and within design parameters.
- O2. Ensure that the impact of parking and vehicular movement for an educational establishment does not adversely impact the amenity of the surrounding locality.
- O3. Ensure adequate car and bicycle parking for employees and student drivers together with adequate pick-up and drop-off areas.

Controls

- C1. Parking rates shall comply with the minimum parking rates in Section 3 of this Part of the DCP.
- C2. A traffic and transport impact statement is to be included with the development application. The statement shall:
- assess the impact upon the surrounding streets and the measures proposed to mitigate such impacts;
 - identify the number of parking spaces required on the basis of the Section 3 of this part of the DCP. On-site parking must be provided for employees, student drivers (for senior level educational establishments only), pick-up and drop-off areas, and motorcycle and bicycle parking;
 - adequately consider future parking needs that may result from anticipated growth in the educational establishment; and
 - identify opportunities for access by public transport, school transport, walking and cycling.
- C3. New developments must provide dedicated on-site pick up and drop off areas for students by both car, public transport services and school transport services. Details on the ongoing management of these areas must be included in the operational plan of management.

Places of public worship**Objectives**

- O1. Provide adequate car parking spaces for places of public worship, taking into account location context and circumstances.
- O2. Ensure that the impact of parking and vehicular movement for a place of public worship does not adversely impact the amenity and to manage congestion and public safety within the surrounding locality.

Controls

- C1. Car parking for places of public worship shall comply with rates provided in Table 1 except for where the circumstances set out in C2 of this section apply.
- C2. For places of public worship in industrial zones where:
 - the majority services are conducted outside normal business hours; and
 - the location of the development does not have any residential accommodation permitted:
 - in a zone adjacent to the proposed development; or
 - abutting against the proposed development; or
 - on the opposite side of the roadway; or
 - within 400 metres (as the crow flies) of the proposed development.

the required car parking rates are to be calculated as provided in Table 3 below.

Table 3: Places of public worship car parking rates in industrial zones that meet the criteria outlines in C2:

Development Type	Car Parking Rate
Places of Public Worship	Whichever is the greater of: 1 space / 12m ² GFA (total) or 1 space / 4 people

- C3. Council may consider a reduction in on-site car parking provision on merit considering, for example, the ability to provide other parking arrangements and alternative modes of transport, including provision of cycle spaces and public transport availability
- C4. All vehicles shall be able to enter and leave the site in a forward direction.
- C5. Car parking shall be provided in addition to the minimum landscape area required.
- C6. A traffic and parking impact statement is to be included with the development application. The statement shall:
 - assess the traffic and transport impact upon the surrounding streets and the measures proposed to mitigate such impacts;
 - identify the number of parking spaces required in this DCP;
 - identify the activities (e.g. carnivals, celebrations, festivals) and other gatherings which are likely to attract larger than normal attendances at the premises, the attendance numbers associated with such events and measures to mitigate and

manage their impacts associated with traffic movements and parking. This is to be addressed in the ongoing traffic and transport plan of management;

- adequately consider future parking needs that may result from anticipated growth in the congregation of places of public worship; and
- identify opportunities for access by public transport, school transport, walking and cycling.

C7. Car parking design shall comply with AS 2890.

C8. Basement or at-grade parking must be provided for all new developments. At grade parking shall be considered where it does not adversely impact streetscape character. Where at grade parking is provided, it shall be landscaped to a high quality and incorporate shade trees.

C9. Worship services shall not commence until thirty minutes have elapsed following the completion of any preceding service to manage traffic flow.

Sex service premises

Objectives

O10. Ensure that adequate on-site parking is provided for staff and visitors.

O11. Ensure that the location of parking does not adversely affect the surrounding locality, particularly residential properties and sensitive land uses.

O12. Ensure safety and security in car parking areas.

Controls

C1. Parking rates shall comply with the minimum parking rates in Section 3 of this Part of the DCP.

C2. Parking areas, access corridors and entrances are to be well lit and signposted at all times, but not interfere with the amenity of the area.

4.8 Development within site specific and special/other precincts

Controls

C1. This Part must be read in conjunction with Part F – Precinct and Site Specific Development Controls for development within designated site specific and special/other precinct locations contained in the *Cumberland DCP 2021*.

C2. Where there is an inconsistency between this Part and any site specific controls as indicated in Part F, the controls contained in Part F will take precedent.

4.9 Electric vehicle charging points

Objectives

O1. To encourage and support increased usage of electric vehicles.

O2. To encourage the installation of appropriate electrical infrastructure in all new development to facilitate future electric vehicle charging points.

Controls

- C1. Electric circuitry to accommodate 'Level 2' electric vehicle charging points is encouraged, where possible, in off-street car parking of new residential and non-residential development to ensure that 100% of car spaces can install electric vehicle charging points in the future. This should include:
- ensuring adequate electrical capacity and infrastructure (cable size, distribution board size etc.) for the electric vehicle charging point system; and
 - providing either buried cables underground or cable trays sufficient to accommodate electric circuitry to each car space.
- C2. The installation of a 'Level 2' electric vehicle charging point is encouraged for all new residential and non-residential development (other than for dwelling houses, semi-detached dwellings or dual occupancies).

Note: 'Level 2' charging consisting of a single or three-phase power point with a power range of 7kW-22kW, as defined by the NSW Electric and Hybrid Vehicle Plan, Future Transport 2056 (21 January 2019). 'Level 2' electric vehicle charging provides a superior, faster and more stable charging option.

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CUMBERLAND
CITY COUNCIL

PART G4 STORMWATER AND DRAINAGE

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1. Introduction

1.1 Land to which this Part applies

This Part applies to development applications on all land within Cumberland City.

1.2 Purpose of this Part

Council's stormwater provisions aim to ensure appropriate management of stormwater flow, drainage and water quality.

1.3 Relationship to other Parts

Where relevant, this Part of the DCP should be read in conjunction with the following Parts of the DCP:

- Part A - Introduction;
- Part B - Development in Residential Zones;
- Part C - Development in Business Zones;
- Part D - Development in Industrial Zones;
- Part E - Other Land Use Development Controls; and
- Part F - Precinct and Site Specific Development Controls.

2. Objectives and controls

2.1 General objectives

- O1. Direct surface runoff from pervious and impervious areas (roofs, driveways, landscaping and paving) using a system of roof gutters, downpipes and surface inlet pits and is to be piped to Council's stormwater system.
- O2. Minimise impacts of surface runoff on adjoining and downstream properties.
- O3. To ensure effective property drainage.

2.2 Method of stormwater disposal from the site

Objective:

- O1. To identify the available methods of stormwater disposal from applicable site.

Controls:

- C1. All stormwater collecting as a result of the carrying out of development under this DCP must be directed by a gravity fed or charged system to:
 - (a) a public drainage system, or
 - (b) an inter-allotment drainage system, or
 - (c) an on-site disposal system.

2.3 Application requirements for stormwater and drainage

Objectives

- O1. To establish general application lodgement requires for proposed development.

Controls

- C1. All minor residential development will require concept stormwater plans for lodgement.
- C2. All major development will require detailed stormwater plans designed by a qualified stormwater engineer or equivalent for lodgement.
- C3. Lodgement requirements for stormwater and drainage shall be in accordance with Council's Development Application checklists and Development Application Guide for Lodgement.

2.4 Types of stormwater systems

General

Objectives

- O1. Ensure that stormwater drainage from properties is directed to one of the following:
 - Council's stormwater drainage system;
 - Sydney Water Corporation drainage system; or
 - Waterways.
- O2. Avoid environmental impact on private property and the public domain.

Controls

- C1. Discharge into the kerb and gutter shall be permitted if the discharge from the site does not exceed 30L/s. Only one discharge line shall be permitted within the footpaths per development. Unless specifically approved otherwise by Council, multiple pipelines within the footpaths shall not be permitted.
- C2. Where the outlet pipe from the property exceeds 100mm in diameter, a converter pit is to be constructed inside the front boundary of the property. Flows between the converter pit and the kerb and gutter shall be discharged using a galvanised steel rectangular hollow section.
- C3. Roof and surface stormwater shall be collected within the property to be discharged into Council's stormwater system or water course without impacting the nature of receiving body.
- C4. Stormwater runoff from major and minor storm events is to be controlled within the property prior to it being discharged into Council's stormwater system.
- C5. Overland flow through the property shall be maintained without impacting adjacent and downstream properties.
- C6. Stormwater runoff shall be controlled and water quality improved where required.

Connection to Council, Sydney Water underground drainage systems or water course

Objective

- O1. Ensure connections to the stormwater network are provided in accordance with Council, Sydney Water or relevant Authority standards and specifications.

Control

- C1. Where an adequate Council drainage line is available, connection into the system shall be permissible by means of an existing pit or constructing a new pit to Council's specifications.

Discharge to a natural watercourse**Objective**

- O1. To ensure appropriate assessment of any proposed discharge to a natural watercourse

Controls

- C1. Discharge to a suitable natural watercourse or creek may be permissible subject to the approval of the responsible authority.
- C2. The outlet at the point of discharge is to be designed to ensure the velocities are reduced sufficiently to prevent erosion of the receiving watercourse.

Properties sloping away from street**Objective**

- O1. Ensure that stormwater does not adversely affect downstream properties.

Controls

- C1. Council shall generally not approve stormwater systems, which drain against the natural grade of the land. Where the property falls away from the road frontage, it should have or obtain the benefit of an inter-allotment drainage easement through properties downstream, unless the development satisfies the conditions outlined below permitting on-site disposal or the development is for minor residential development outlined in table 1.

Table 1: Acceptable systems for different development types

Proposed use or development	Stormwater System type		
	Gravity system	Alternate system as contained within this DCP	OSD Required
Dwelling houses (including single and 2 storey dwellings, additions, secondary dwellings)	✓	✓	N/A
Dual occupancies and manor houses	✓	✓	✓ *
Multi dwelling housing Residential flat buildings Seniors housing Boarding house	✓	N/A	✓
Educational establishments Places of public worship Places of public entertainment	✓	N/A	✓

Proposed use or development	Stormwater System type		
	Gravity system	Alternate system as contained within this DCP	OSD Required
Childcare centres Hospitals			
Commercial and industrial uses alterations and additions	✓	N/A	✓ *
New mixed use development and shop top housing	✓	N/A	✓
New Industrial and commercial building/development	✓	N/A	✓

*Required as per Part 2.4.7 of this DCP

On-site disposal

Objective

- O1. To ensure any on-site disposal of stormwater is appropriately designed.

Controls

- C1. On-site disposal is generally not permitted. However, for dwelling houses and secondary dwellings where the property falls away from its road frontage and does not have a drainage easement, Council shall give consideration to permitting driveways and landscaped areas to discharge to an on-site absorption trench.
- C2. All roof areas shall be discharged to the road via a charged drainage system using sewer grade PVC pipes up to 100 year ARI storm event.
- C3. The total impervious area draining to the trench shall not be greater than 60m².
- C4. The absorption trench shall be constructed within a designated grassed area in accordance with Council's standard design. The minimum dimensions shall be 1m wide x 0.6m deep x 6m long to provide at a rate of 1.8m³ net volume per 60sqm, with two 600 x 600 inlet pits either side of the trench.
- C5. Trenches shall be constructed parallel to the contour of the land, with the front and rear of the trench at least 3 metres away from any building or boundary unless special circumstances exist.
- C6. Downstream buildings and improvements shall be required to have sufficient height above finished ground levels to prevent inundation or damage attributable to runoff from the subject site.
- C7. Overflows from the on-site absorption trenches shall not be permitted to flow directly into bushland areas that are considered to be significant by Council.

Pumped discharge

Objective

- O1. To ensure that any pumped discharge system is appropriately designed and regulated.

Controls

- C1. The use of pumps shall only be permitted to drain underground parking area of a proposed development and the only inflow is seepage and runoff from an access driveway. See Table 2 for pump requirements.

Table 2: Pump Requirements

Driveway catchment area	60m ² or 5% of basement area
Pump discharge rate	100 year ARI 5 minute storm duration
Required storage volume in tank	100 year ARI 90 minute storm duration
Required additional storage volume in car park area (aboveground volume)	Up to 100 year ARI 12 hour storm duration

- C2. Dual pumps shall be used in case of pump failure with each pump designed for the maximum discharge. Combined aboveground and underground storages shall be provided:
- Underground – 100 year ARI 90 minute storm; and
 - Aboveground – up to 100 year ARI 12 hour storm
- C3. A positive covenant shall be executed and registered against the title of the lot requiring ongoing maintenance and repair of the pump. The covenant shall:
- commit the owner to checking the condition of the pump by pumping water for at least five minutes every six months and a log book maintained of these periodic checks; and
 - provide Council with the authority to enter the land and view the logbook and the condition of the pump twice a year following the giving of two days' notice.

On-site detention

Objective

- O1. Ensure that through the on-site detention (OSD) of stormwater, discharge is controlled thereby ensuring the development does not increase the risk of downstream flooding of roads and properties, or erosion of unstable waterways.
- O2. On-site detention of stormwater is generally incorporated into all development as a means of controlling and managing the flow of stormwater to Council's drainage system.

Controls

- C1. On-site detention shall be required for all proposed development, re-development or new land subdivisions, except where:
- The proposal is a one-off extension up to 150m² impervious area for industrial or commercial development. Subsequent extensions require on-site detention facility.

- Dual occupancy development is located within the Haslams Creek Catchment or Duck River East Catchment and compliant with the site coverage requirements of the DCP.
- Dwelling and secondary dwelling developments and any ancillary residential developments.

Design

Objective

- O1. Ensure that sufficient storage is provided to ensure peak flow rates at any point within the downstream drainage system do not increase as a result of the development during all storm events up to the 100 year ARI.

Controls

- C1. The permissible site detention (PSD) and site storage requirements (SSR) shall comply with the Upper Parramatta River Catchment Trust requirements.
- C2. Alternative values for the required storage volume can be considered for larger sites greater than 3000sqm if the applicant demonstrates to Council's satisfaction using appropriate computer modelling that the relevant PSD shall be satisfied.
- C3. Stormwater runoff from all new roof areas shall be routed through the OSD facility. Runoff entering the site from upstream and adjoining properties shall be directed bypassing the on-site detention system.

2.5 Technical details of stormwater and drainage systems

Pipes

Objective

- O1. To ensure appropriate pipe design for effective stormwater management.

Controls

- C1. The minimum pipe size shall be 100mm diameter and shall increase to 150mm diameter where the catchment draining to the pit is likely to contain significant leaf litter or other debris.
- C2. Minimum pipe grade permitted shall be 1%, unless otherwise approved by Council's engineers. Pipes shall be designed to be self-cleansing without causing scour. The minimum pipe velocity shall be 0.6m/s during the design storm and a maximum velocity of 6m/s.
- C3. Property drainage system shall be designed to 20 year average recurrence interval (ARI) and designated overland flow paths up to 100 year ARI.
- C4. Property drainage system shall be designed to 20 year average recurrence interval (ARI) and designated pipe network or overland flow paths up to 100 year ARI where an On-Site Detention Facility is required.
- C5. Overland flow through the property shall be provided without a pipe network.

Pits

Objective

- O1. To ensure appropriate pit design for effective stormwater management.

Controls

- C1. All pits shall comply with the following requirements. See Table 3 for pit dimensions as specified in Australian Standards.

Table 3: Pit dimensions

Depth to invert at outlet (mm)	Minimum internal dimensions of pit (mm)	
	Width	Length
≤ 600	450	450
>600 ≤ 900	600	600
>900 ≤ 1200	600	900
>1200	900	900

- C2. Surface inlet pits shall be sufficiently large to accept the predicted inflow.
- C3. Pits deeper than 1.8m to be reinforced.
- C4. PVC pits are only permitted in landscaped areas and courtyards and not in driveways.
- C5. All masonry pits shall be cement rendered.
- C6. Step irons spaced 300mm apart shall be provided for pits deeper than 1.2m.
- C7. Pits and grated trench drains shall be positioned within the site to ensure:
- all runoff from roofed and paved areas is collected;
 - runoff does not enter garages or buildings; and
 - long term ponding of stormwater does not occur.
- C8. Pedestrian access to buildings is not restricted by significant flow depths.
- C9. Runoff from paved driveways and paths, or concentrated runoff from grassed and landscaped areas, shall not flow over the public footpath.
- C10. Pits or cleansing eyes shall be provided at a maximum spacing of 30 metres along a length of pipe to facilitate cleaning.
- C11. A cleaning eye or pit shall be provided at every bend.
- C12. Trash screens shall be provided at the boundary pit prior to discharging to Council's system.
- C13. Runoff from the site shall be routed through a sediment trap pit before it is discharged into Council's drainage system. Such sediment traps pits shall have a 200 mm sump below the invert level of the outlet pipe.

Overland flow paths

Objective

- O1. To ensure appropriate designation and treatment of overland flow paths
- O2. To minimise damage to property and infrastructure

Controls

- C1. Designated overland flow paths are to be provided within the development in case of pipe blockage or major storm events to direct runoff to receiving body without impacting the development or other properties.
- C2. Provision shall be made to ensure runoff up to the 100 year ARI (minor system including overflows from roof gutters), is safely conveyed within formal or informal overland flow paths to the receiving body.
- C3. Where it is not practicable to provide paths for overland flows, the piped drainage system shall be sized to accept runoff up to the 100 year ARI with the blockage factor.
- C4. Development shall not cause flooding of adjoining properties.
- C5. Runoff currently entering the site from upstream properties shall not be obstructed from flowing onto the site and shall not be redirected so as to increase the quantity or concentration of surface runoff entering adjoining properties.
- C6. Where a site includes either an existing or a proposed overland flow path, register a restriction on use of land and a positive covenant on the title of the subject property. The covenant should require that the overland flow path on the site:
 - not be altered; and
 - be maintained in good working order.

Note: In this instance, "overland flow path" includes all structures, pipes, drains, walls, kerbs, pits, grates, fencing and all surfaces graded to convey and/or allow stormwater flows to pass through the site.
- C7. Where the overland flow rates are high, the requirements outlined in Council's *Flood Risk Management Policy* on flood risk management will need to be satisfied.

Providing storage

Objective

- O1. To ensure appropriate retention of stormwater to reduce impact of storm events on drainage networks

Controls

- C1. Storage may be provided underground in tanks, aboveground as a shallow pond on a driveway, or as a combination of underground and aboveground storage. See Table 4 for parameters.
- C2. A portion of the site (excluding roof area) shall discharge directly to Council's system if it cannot be drained through the storage facility, provided that the PSD is reduced to compensate for the smaller catchment. No more than 15% of the total site area shall be permitted to bypass the basin. The modified PSD shall be selected from the figure in the OSD calculation sheet. The calculation of storage requirement shall be based on the area which bypasses the basin.
- C3. Maximum storage depth within the front setback shall not exceed 500mm and the front storage area shall have minimum 2m wide along the frontage.

Table 4: Storage parameters

Area	Storage parameters
Parking/paved areas	150mm desirable 200mm maximum over grate.
Storage within front building line	500mm maximum
Landscaping	300mm desirable 600mm maximum over grate.
Fenced storage	1000mm maximum elsewhere onsite
Roof area	as required by structural integrity
Underground storage	500mm minimum for residential and 700mm for other uses subject to additional opening. 1200mm desirable

Water quality**Objective**

O1. Ensure implementation of appropriate water quality treatment for stormwater run off

Control

C1. All development shall seek to achieve the stormwater quality targets set out in Table 5.

Table 5: Stormwater quality targets

Stormwater quality targets		
Pollutant	Description	Reduction in Load
Litter e.g cans, bottles, wrapping materials, food scraps	All anthropogenic materials with a minimum dimension >5mm	90%
Coarse sediment	Coarse sand and soil particles (<0.5mm diameter)	85%
Nutrients	Total phosphorous nitrogen	60%
Fine particles	Coarse sand and soil particles (<0.05mm diameter)	85%
Cooking oil and grease	Free floating oils that do not emulsify aqueous solutions	90%
Hydrocarbons inc. motor fuels, oils and greases	Anthropogenic hydrocarbons that can be emulsified	90%

Inter-allotment drainage easements**Objective**

- O1. Ensure that properties drain to the natural catchment through a stormwater pipe traversing through a downstream property into Council's stormwater system.

Controls

- C1. Where the creation of an inter-allotment drainage is required, the securing of such an easement is the applicant's responsibility. Any consent issued for such development shall be on a deferred commencement basis and shall not become operational until the easement has been prepared by a surveyor and has been registered with the relevant authority.
- C2. Such easements shall be 1.2m wide – for up to 300mm lines unless otherwise approved by Council's engineer. The easement shall be in favour of the lot(s) benefited or Council, with Council being the body to release or modify the easement. Where adjoining downstream property owners are unwilling to grant an easement to drain water, under Section 88K of the Conveyancing Act 1919, the applicant/owner of the subject property may lodge an application to the Supreme Court under this section to obtain the required easement.

Easements to drain water

Objective

- O1. To ensure the appropriate design and creation of drainage easements.

Controls

- C1. Council shall require the creation of an easement in its favour, at the cost of the applicant, over all pipelines in which council has an interest, such as pipes which transfer runoff from a public land. With both new easements and existing easements, the conditions below shall apply.
- C2. The required width of the easement shall be a minimum of 1.2m for pipes less than 300mm. The required width for pipes greater than 300mm diameter is to be a minimum of the width of the conduit plus 2m. The width of the easement shall be rounded up to the nearest 100mm.
- C3. Only pavement and landscaped areas shall be permitted over Council easements without impeding any overland flow.
- C4. The construction of a demountable carport spanning the easement can be considered. If approved it shall be necessary for the owner to enter a deed of agreement with Council to remove the structure at the owner's expense if access to the easement is required. Any such approvals shall not extinguish or limit Council's rights under the easement.
- C5. Eaves, suspended patios or pedestrian bridges shall not be permitted.
- C6. Where no easement exists over a stormwater line in which Council has an interest, or the existing easement is undersized, Council shall generally require the creation of such an easement as a condition of development consent. All setbacks shall account for the future presence of an easement.

Restrictions as to use for overland flow

Objective

- O1. Ensure that overland flow associated with Council's drainage system remains unimpeded and unobstructed.

Controls

- C1. Where the property is affected by overland flow associated with Council's drainage system Council may require the creation of a Restriction as to Use on land under Section 88B of the Conveyancing Act 1919, to facilitate the passage of overland flow through the property. The restriction shall prohibit the placement of any structure of a permanent nature, or the varying of any finished ground level within the designated flow path without the prior consent of Council.

Construction of pipe drainage in public areas

Objective

- O1. To ensure the design and construction of pipe drainage is safe and effective.

Controls

- C1. The pipe within Council's asset shall be minimum 375mm class 2 reinforced concrete pipes with rubber ring joints.
- C2. The minimum finished cover shall be 500mm unless otherwise approved by Council.
- C3. Gully pits shall be cast in situ and designed in accordance with Council's Standard Drawings.
- C4. Excavation shall be minimised. Gully pit depths shall be minimised for easy access and maintenance.

2.6 Flood risk management

General

Objectives

- O1. To ensure the proponents of development and the community in general are aware of the potential flood hazard and consequent risk and liability associated with the use and development of flood liable land.
- O2. To manage flood liable land in an economically, environmentally and socially sustainable manner.
- O3. To allow development in the floodplain which reflects the sensitivity of the proposed development to the flood hazard, and subject to appropriate design and siting controls, to ensure that the particular consequences that could still arise from flooding remain acceptable having regard to the State Government's Flood Policy and the likely expectations of the community.
- O4. To deal equitably and consistently with applications for development on land affected by potential floods, in accordance with the principles contained in the *Floodplain Development Manual* (NSW Government), and Council's *Flood Risk Management Policy*.

- O5. To apply a merit-based approach to all development decisions which takes account of social, economic and ecological as well as flooding considerations.

Controls

- C1. The proposed development does not result in any increased risk to human life and does not increase the potential flood affectation on other development or properties.
- C2. The additional economic and social costs which may arise from damage to property from flooding is no greater than that which can reasonably be managed by the property owner and general community.
- C3. The proposal should only be permitted where effective warning time and reliable access is available for the evacuation of an area potentially affected by floods. Evacuation should be consistent with any relevant disaster plans (DISPLAN) or flood plan where in existence.
- C4. A 15m setback from the mean high water mark applies to properties fronting Duck River to the east and 10m to Haslams Creek.
- C5. The proposal does not adversely impact upon the recreational, ecological, aesthetic or utilitarian use of the waterway corridors, and where possible, should provide for their enhancement, in accordance with ecologically sustainable development principles.
- C6. The proposal shall not have a significant detrimental impact on:
- water quality;
 - native bushland vegetation;
 - riparian vegetation;
 - estuaries, wetlands, lakes or other water bodies;
 - aquatic and terrestrial ecosystems;
 - indigenous flora and fauna; or
 - fluvial geomorphology.
- C7. The filling of flood prone land, where acceptable and permitted by this Part, must involve the extraction of the practical maximum quantity of fill material from that part of the site adjoining the waterway.
- C8. The proposed development shall comply with Council's *Flood Risk Management Policy*.
- C9. Site specific flood studies shall comply with Council's standard requirements.

Fencing

Objective

- O1. To ensure fencing within floodplain areas is appropriately designed.

Controls

- C1. Fencing within the floodplain shall be constructed in a manner that does not affect the flow of floods.
- C2. Fencing within a high flood risk precinct (FRP) shall not be permissible except for security/permeable/safety fences of a type approved by Council.

- C3. Council shall require a development application for all new solid (non-porous) and continuous fences in the high and medium risk FRPs, unless otherwise stated by exempt and complying development provisions.

2.7 Water Sensitive Urban Design, water quality and water re-use

Objectives

- O1. To ensure development contributes to the protection and rehabilitation of waterways in order to improve waterway health and to develop and maintain ecologically sustainable waterways.
- O2. To retain and reuse rainwater for non-potable uses including toilet flushing, laundry, garden watering and external cleaning, car washing.
- O3. To recharged groundwater where possible while still protecting and/or enhancing groundwater quality.
- O4. To reduce sediment and pollution to downstream areas and receiving waters.

Controls

Water Sensitive Urban Design (WSUD)

- C1. All development applications for sites of 2,500m², or more in area must be supported by a Water Sensitive Urban Design Strategy, prepared by a qualified civil engineer with suitable experience.
- C2. Development for the subdivision of sites of 2,500m² or more in area must achieve the stormwater flow targets in the Water Sensitive Urban Design Strategy, unless public water quality and flow structures downstream of the site allow these targets to be met. Details of compliance must be included in the Water Sensitive Urban Design Strategy supporting the development application.
- C3. All other developments shall provide appropriate water sensitive treatments.

Water quality

- C4. Water quality devices are required to prevent pollutants from commercial, industrial developments and car parking areas entering the waterways in order to improve waterway health and to develop and maintain ecologically sustainable waterways.

Water reuse

- C5. For all developments (excluding single dwellings and dual occupancies), rainwater tanks or a water reuse device shall be incorporated into the stormwater drainage system with a minimum storage size of 5,000 litres (for site area less than 1500m²) and 10,000 litres (for site area greater than 1500m²).
- C6. For dwelling houses (includes alterations and additions) exceeding 65% impervious area, a minimum capacity of 4,000 litres shall be provided, or that amount required by BASIX.

Erosion and sediment control

Controls

- C7. All runoff from surrounding land is diverted away from the area disturbed and polluted runoff is retained on-site.
- C8. All disturbed areas are stabilised with vegetation immediately after site works are completed.
- C9. Water discharging from site shall comply with standard guidelines
- C10. The ESCP shall be in accordance with the standards outlined in *Managing Urban Stormwater: Soils and Construction* by the NSW Department of Housing.
- C11. Soil and water management plans are prepared for larger development sites including residential flat buildings.

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CUMBERLAND
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PART G5

SUSTAINABILITY, BIODIVERSITY AND ENVIRONMENTAL MANAGEMENT

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1. Introduction

1.1 Land to which this Part applies

This Part applies to development applications on all land within Cumberland City.

1.2 Purpose of this Part

This Part provides objectives and controls for all aspects of a development concerning sustainability, biodiversity and environmental management.

Council's sustainability, biodiversity and environmental management provisions aim to:

- provide direction for protecting and enhancing Cumberland City's natural areas and environment; and
- to encourage sustainable design and measures to be incorporated in all forms of development.

1.3 Relationship to other Parts

Where relevant, this Part of the DCP should be read in conjunction with the following Parts of the DCP:

- Part A - Introduction;
- Part B - Development in Residential Zones;
- Part C - Development in Business Zones;
- Part D - Development in Industrial Zones;
- Part E - Other Land Use Development Controls; and
- Part F - Precinct and Site Specific Development Controls.

2. Objectives and controls

2.1 Groundwater

Objective

- O1. Protect groundwater quality, flows and drainage patterns during demolition, construction and ongoing operation phases of a development.

Controls

- C1. Operating practices and technology, including dewatering, shall not contaminate groundwater or adversely impact on adjoining properties and infrastructure. Any dewatering activities may require concurrence from the NSW Government. Any application to discharge ground and surface water to Council's stormwater system must be accompanied by a Dewatering Management Plan.
- C2. Groundwater is to be recharged, where possible, while still protecting and/or enhancing groundwater quality, using water sensitive urban design.
- C3. Protection measures for groundwater are to be proportional to the risk the development poses. Where the potential risk to groundwater is high, a separate Groundwater Impact and Management Report will be required.

- C4. The applicant must demonstrate that there will be no adverse impacts on surrounding or adjacent properties, infrastructure or groundwater dependant ecosystems as a result of:
- changes in the behaviour of groundwater created by the method of construction chosen; and/or
 - changes to the behaviour of groundwater of the surrounding area, created by the nature of the constructed form and groundwater management system used.

2.2 Surface water

Controls

- C1. All developments that have the potential to impact on stormwater quality must be consistent with the principles of water-sensitive urban design (WSUD).
- C2. With respect to applications involving soil disturbance, the consent authority may request a management plan to be submitted detailing how surface water impacts will be managed in accordance with the NSW DEC's *Managing Urban Stormwater* series (2006). The specific type of plan will depend on the volume of soil disturbance that is proposed:
- developments involving 250 – 2500m²: an erosion and sediment control plan (ESCP) must be provided, in accordance with NSW DEC's *Managing urban stormwater – Soils and Construction* Volume 1 (2006);
 - developments involving >2500m²: a soil and water management plan (SWMP) must be provided, in accordance with *NSW DEC's Managing Urban Stormwater – Soils and Construction* Volume 1 (2006).
- C3. For sites with <250m² disturbance, applications will be assessed on a merit basis to determine if a management plan is required.

2.3 Land contamination

Objectives

- O1. Ascertain the extent of contamination of existing undeveloped areas on site.
- O2. Ensure that changes of land use will not increase the risk to public health or the environment.
- O3. Ensure that any redevelopment of land for sensitive uses considers the potential contamination of the land.
- O4. Avoid inappropriate restrictions on land that could otherwise be remediated.
- O5. Consider the likelihood of land contamination as early as possible in the planning process.
- O6. Link decisions about the development of land with the information available about contamination.

Controls

Development applications

- C1. Prior to the submission of a development application, an assessment is to be made by the applicant under Clause 7 of SEPP No. 55 as to whether the subject land is

contaminated prepared in accordance with the relevant Department of Planning, Industry and Environment Guidelines and the *Guideline to Asbestos Management in Cumberland Council 2018*.

- C2. In accordance with Clause 7 (1) of SEPP No. 55 Council will not consent to development unless it has considered whether land is contaminated, and if the land is contaminated is suitable for the proposed purpose or is satisfied that the land will be appropriately remediated. Where land is proposed to be subject to remediation, adequate documentation is to be submitted to Council supporting the categorisation.

Development consent for remediation work

- C3. Development consent is required for remediation work in sensitive areas (Category 1 remediation works) under Clause 8 (2) of SEPP No. 55.
- C4. Development consent is not required for other remediation work (Category 2 remediation work) under Clause 8 (2) of SEPP No. 55. However, under Section 16 of the SEPP, notice is required to be given of the proposed work to Council before commencement of works.

Activities that may cause contamination

- C5. Some activities that are likely to cause land contamination are shown in Table 1, as well as various types of Designated Development as outlined in Environmental Planning and Assessment Regulation 2000. For further information, refer to the Managing Land Contamination Planning Guidelines, Department of Urban Affairs and Planning and EPA, 1998.

Table 1: Activities that may cause contamination

Some activities that may cause contamination	
1. acid/alkali plant and formulation	14. iron and steel works
2. agricultural/horticultural activities	15. metal treatment
3. airports	16. mining and extractive industries
4. asbestos production and disposal	17. oil production and storage
5. chemicals manufacture and formulation	18. paint formulation and manufacture
6. defence works	19. pesticide manufacture and formulation
7. drum re-conditioning works	20. power stations
8. dry cleaning establishments	21. railway yards
9. electrical manufacturing (transformers)	22. scrap yards
10. electroplating and heat treatment premises	23. service stations
11. engine works	24. sheep and cattle dips
12. explosives industry	25. smelting and refining
13. gas works	26. tanning and associated trades
	27. waste storage and treatment
	28. wood preservation

2.4 Air quality

Objectives

- O1. Protect air quality and enhance environmental amenity.
- O2. Minimise air pollution emissions and impacts on the environment associated with machinery or processes.

Controls

- C1. Any machinery or processes used should not result in air pollution emissions that have a detrimental impact on the environment.
- C2. Details of any equipment, processes and air pollution control or monitoring equipment shall be submitted to Council with a development application.
- C3. Development that is likely to result in the emission of atmospheric pollutants, including odours, is to include operating practices and technology to ensure that the development does not contribute to increased air pollution.
- C4. Effective site controls during and after demolition and construction are to ensure that development does not contribute to increased air pollution.
- C5. Wood heaters/fireplaces in private homes shall comply with Australian Standard 4013 to minimise production of pollution.
- C6. Discharge from premises of any matter, whether solid, liquid or gaseous is required to conform to the *Protection of the Environment Operations Act 1997* and its Regulations, or a pollution control approval issued by the NSW Office of Environment and Heritage for Scheduled Premises.

2.5 Biodiversity

Objectives

- O1. Apply the biodiversity mitigation hierarchy to:
 - avoid activities that lead to loss of biodiversity;
 - minimise actions that harm biodiversity;
 - rehabilitate areas that have been degraded; and
 - offset loss of biodiversity.
- O2. Respond to Biodiversity Management Principles in Section 2.2 of Council's *Cumberland Biodiversity Strategy 2019*.
- O3. Protect and enhance network of green infrastructure (e.g. Green Grid opportunities, tree corridors, parks, reserves, water sensitive urban design).
- O4. Minimise the impact of development on biodiversity in Cumberland City by:
 - minimising the removal of indigenous vegetation and naturally occurring soils;
 - conserving existing significant indigenous and native trees;
 - encouraging planting of indigenous and native plants and trees on private property; and
 - promoting measures to mitigate any adverse effects of the proposed development on the species, populations or ecological communities.

- O5. Retain and protect areas of existing biodiversity value, particularly biodiversity within the Duck River and Prospect Creek corridors to retain vegetation and fauna links to the Western Sydney Parklands and Parramatta River.
- O6. Minimise impacts of development on any habitat or wildlife corridor.

Controls

- C1. Development is to be sited and designed to minimise the impact on indigenous flora and fauna, including canopy trees and understorey vegetation, and on remnant native ground cover species.
- C2. Development that impacts threatened species listed under the *Threatened Species Conservation Act 1995* must undergo an assessment of significance, which will determine the need for a species impact statement.
- C3. New planting is to consist of species indigenous to the local vegetation community of the Cumberland Plain Woodland.
- C4. Select species that minimise water use and drought tolerant.
- C5. Preference is to be given to landscaping elements that provide/promote faunal habitat.
- C6. Pruning or removal of trees must be in accordance with Council's *Tree Management Plan* (Refer also to DCP Part G- Tree Management and Landscaping).
- C7. The Grey-headed Flying-Fox colony along Duck River, Clyde, is to be protected and preserved.
- C8. A buffer of at least 25m from the boundary of the Grey-headed Flying-fox camp excludes vertical structures over 2m being built.
- C9. An additional non-residential zoning buffer of at least 100m (from the Flying Fox Camp property boundary) exists on the land surrounding the camp (refer to Figure 1).



Figure 1: Suggested buffer (100m) non-residential. Source: Duck River Grey-Headed Flying-Fox Camp Management Plan

- C10. Development within these buffer zones should also make reference to the strategic guidance within the Duck River Grey-Headed Flying Fox Camp Management Plan. This document will be provided by Council upon request.

2.6 Energy efficiency and renewables

Objectives

- O1. Promote ecologically sustainable development principles to promote energy efficiency and minimise the use of non-renewable energy in the construction and ongoing use of buildings.
- O2. Ensure that development contributes to an overall reduction in energy consumption and greenhouse gas emissions.
- O3. Encourage site planning and building design that optimises site conditions to achieve energy efficiency.

Control

- C1. New development shall implement energy efficient design and promote renewable energy sources through the inclusion of solar panels, skylights, cross ventilation and other such measures.

Residential development

- C2. Where applicable, development is to demonstrate compliance with the design principles embodied in the Building Sustainability Index (BASIX).
- C3. The principles and properties of thermal mass, glazing, insulation and solar energy are to be recognised and incorporated into the design of residential development which are not subject to BASIX.

Non-residential development

- C4. Design heating/cooling systems to target only those spaces that require heating or cooling, not the whole building.
- C5. Improve the efficiency of hot water systems through:
 - the use of solar powered hot water systems. Solar and heat pump systems must be eligible for at least 24 Renewable Energy Certificates (RECs) and domestic type gas systems must have a minimum 3.5 star energy efficiency rating;
 - insulating hot water systems; and
 - installing water saving devices, such as flow regulators, 3 stars Water Efficiency Labelling and Standards Scheme (WELS Scheme) rated shower heads, dual flush toilets and tap aerators.
- C6. Reduce reliance on artificial lighting and design lighting systems to target only those spaces which require lighting at any particular 'off-peak' time, not the whole building. Incorporate a timing system to automatically control the use of lighting throughout the building.
- C7. All non-residential development Class 5-9 will need to comply with the Building Code of Australia energy efficiency provisions.
- C8. An Energy Efficiency Report from a suitably qualified consultant that demonstrates a commitment to achieve no less than 4 stars under the Australian Building Greenhouse Rating Scheme (or equivalent) must be provided for all commercial and industrial development with a construction cost of over \$5 million.

2.7 Protection of waterways

Objective

- O1. Ensure development contributes to the protection and rehabilitation of waterways in order to improve waterway health and to develop and maintain ecologically sustainable waterways.

Controls

- C1. Development is to make provision for buffer areas for the preservation and maintenance of floodway, riparian corridors and habitat protection. Refer to Clause 6.11 Foreshore Building Line and Clause 6.17 Riparian Land and Watercourse in the *Cumberland LEP 2021*.
- C2. Development on land subject to Clause 6.17 Riparian Land and Watercourse in the *Cumberland LEP 2021* or that abuts a waterway is to be landscaped with local indigenous species, to protect bushland and wildlife corridors and soften the interface between the natural landscape and the urban environment. Riparian vegetation also plays an important role in stabilising bed and banks and attenuating flood flows.
- C3. The piping, enclosing or artificial channelling of natural watercourses and drainage channels is not permitted. Consideration is to be given to re-opening piped or lined drainage systems wherever feasible.
- C4. Development is to ensure that natural channel design principles are incorporated in any works on or in waterways (refer to Figure 2).

- C5. Ongoing maintenance costs are to be considered in the design of any waterway protection features.

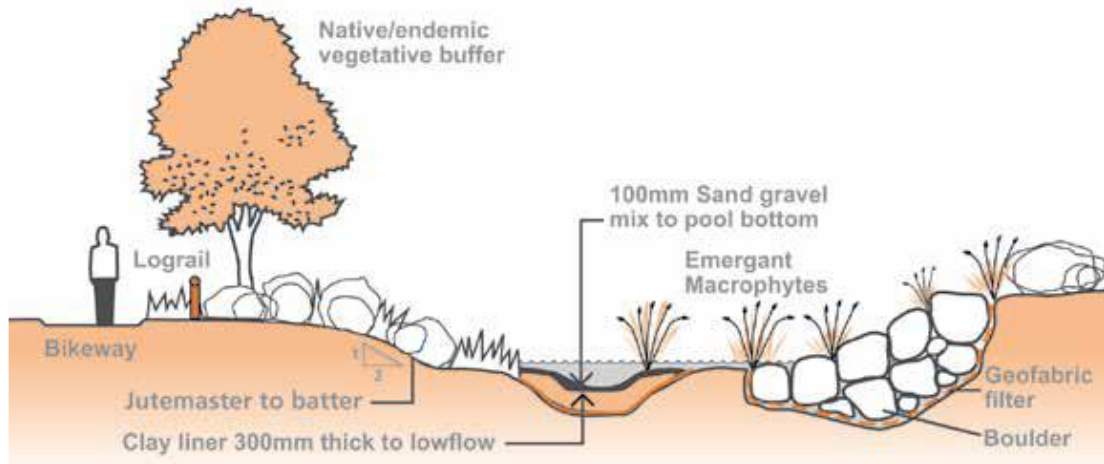


Figure 2: Elements of the Natural Drainage System. Sources: Stormwater outlets in parks and waterways (Brisbane City Council, 2001).

2.8 Development on land abutting the E2 Environmental Protection zone and W1 Natural Waterways zone

Objective

- O1. Protect and preserve bushland and ecological communities in the E2 Environmental Protection and W1 Natural Waterways zones.

Control

- C1. Development on land abutting land within the E2 Environmental Protection zone and W1 Natural Waterways zone must take into consideration all of the following:
- the need to retain any bushland on the land;
 - the effect of the proposed development on bushland within or adjacent to the land, including the erosion of soils, the siltation of streams and waterways and the spread of weeds and exotic plants within the bushland, overshadowing, overland flows and stormwater runoff, and the removal or degradation of existing vegetation;
 - the requirement for provision of a buffer zone on the abutting land to protect the bushland area;
 - the protection of endangered ecological communities and recovery plans prepared and approved under the Biodiversity Conservation Act 2016; and
 - any other matters which are relevant to the protection and preservation of the bushland area.

2.9 Prospect Creek

Prospect Creek – Land Fronting Pine Road, Dursey Road and Fairfield Road, Yennora with a Boundary to Prospect Creek.

The area occupied by and immediately adjoining Prospect Creek fulfils the role of a valuable open space and ecologically sensitive linkage. It benefits by supporting a fragile ecosystem as well as performing the role of a natural watercourse which requires regular maintenance. Within

Cumberland LEP 2021, this corridor has been zoned E2 Environmental Conservation, and where it forms part of the bank of Prospect Creek is identified on the Biodiversity map, the Endangered Ecological Communities map and the Riparian Land and Waterways map. Local clause 6.5 Biodiversity, and local clause 6.6 Riparian land and watercourses.

Control

- C1. In addition to the requirements for land within the Environmental Conservation zone and the local clauses of the *Cumberland LEP 2021*, such land shall not be used for the erection or use of any building or the carrying out or use of any work other than for landscaping, bush fire hazard reduction, subdivision, drainage or installation of underground utility services. Further details can be gained by contacting Council.

2.10 Urban heat management

Reference to the Green Star Design and As Built Submission Guidelines (V1.2) developed by Green Building Council of Australia and *WSROC Turn Down the Heat Strategy and Action Plan 2018*.

Objectives

- O1. Encourage residential development that is designed to reduce the 'heat island effect'.
- O2. Encourage developments to incorporate green infrastructure, water and cool materials to reduce urban heat.

Controls

General

- C1. Residential development is to include one or a combination of the following:
- vegetation and trees;
 - green roofs;
 - for roof pitched<15° - a three-year SRI of a minimum 64; or
 - for roof pitched>15° - a three-year SRI of minimum 34.
 - only where the three-year Solar Reflectance Index (SRI) of minimum 34 or an initial SRI of minimum 39;
 - for roof pitched<15° - an initial SRI of minimum 82; or
 - for roof pitched>15° - an initial SRI of minimum 39.
 - unshaded hard-scaping elements with a three year SRI of minimum 34 or an initial SRI of minimum 39;
 - hardscaping elements shaded by overhanging vegetation of roof structures, including solar hot water panels and photovoltaic panels;
 - water sensitive urban design, water bodies and/or water courses;
 - using cool materials in construction which have high solar reflectivity and high emissivity value e.g. in roofs, pavements and hard surfaces; or
 - areas directly to the south of vertical building elements, including green walls and areas shaded by these elements at the summer solstice.
- C2. A development application for new low-density development is to include evidence to demonstrate how the above urban heat management will be addressed.

Materials and finishes

Objective

O3. Mitigate the urban heat island effect through materiality and finishes.

Controls

C3. Roofs shall be constructed from high albedo, low solar absorptance or a high solar reflectance material.

Pavements shall be predominantly light colours and incorporate permeable paving where possible.

C4. Improvements to local green infrastructure (such as the urban tree canopy) on public or private land is encouraged.

C5. Water Sensitive Urban Design (WSUD) measures that are incorporated into dwelling, private open space and streetscape design are encouraged, and may include:

- water efficient fittings and appliances;
- rainwater tanks; and,
- bio-retention systems.

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PART G6

TELECOMMUNICATIONS FACILITIES

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1. Introduction

1.1 Land to which this Part applies

This Part applies to all development applications and all types of telecommunications facilities and equipment requiring development consent within Cumberland City.

1.2 Purpose of this Part

Council's telecommunications facilities provisions aim to ensure telecommunications infrastructure deemed to be 'not low-impact' is developed with appropriate consideration for public health and safety, siting, aesthetics and environment.

1.3 Relationship to other Parts

Where relevant, this Part of the DCP should be read in conjunction with the following Parts of the DCP:

- Part A - Introduction;
- Part B - Development in Residential Zones;
- Part C - Development in Business Zones;
- Part D - Development in Industrial Zones;
- Part E - Other Land Use Development Controls; and
- Part F - Precinct and Site Specific Development Controls.

2. Objectives and controls

Note: The NSW Telecommunications Facilities Guideline Including Broadband (Department of Planning 2010) provides principles and measures to control telecommunications facilities.

2.1 General

Objectives

- O1. Minimise the possible adverse public health effects of electromagnetic radiation emitted from telecommunications facilities and equipment.
- O2. Minimise the visibility and visual impact of telecommunication facilities and equipment.
- O3. Encourage the location of facilities and equipment emitting electro-magnetic radiation away from community sensitive locations.

Controls

Health and safety

- C1. Telecommunication carriers will be required to demonstrate that the development will not cause a level of electromagnetic radiation as measured cumulatively across all sources of more than the relevant Australian exposure standard at ground level within 300m of the proposed transmitting facility.
- C2. Comply with industry standards recognised by Australian Communications Authority (ACA) as a standard for use in that industry.

- C3. A telecommunications facility must be designed, installed and operated so that the maximum human exposure levels to radiofrequency emissions comply with Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields.
- C4. Submit an annual statement of compliance with the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Standard for radiation emissions from towers.
- C5. Take measures to ensure public safety for telecommunications facilities with respect to their structural and electrical safety. A certificate from a suitably qualified structural engineer showing conformity to the relevant Australian Standard is to be provided for soundness of roof top structures.

Siting

- C6. Take all reasonable steps to co-locate with existing facilities, while ensuring that the cumulative impact of electromagnetic radiation (EMR) remains safe, has minimal visual and noise impact, does not compromise the structural integrity of the facilities. Co-location is particularly favoured in industrial, business, recreational and special uses zones.
- C7. Where co-location is an option that has been rejected, the carrier must explain to Council the reason for that decision.
- C8. Avoid locations in which the facility visually dominates a visually sensitive landscape.
- C9. Give evidence of negotiation with stakeholders to find a mutually acceptable location.
- C10. Do not locate a tower on a streetscape within the same view as heritage buildings or where, in the opinion of Council, the tower would detract from the heritage significance or setting of an item of environmental heritage identified in Schedule 5 of Council's Local Environmental Plan.
- C11. Do not locate a tower within 6m of any property boundary within a residential zone, to minimise visual impact.
- C12. Do not locate a tower within 6m of any residential building, to minimise visual impact.
- C13. Do not erect communications dishes (radio and satellite) on the balconies of residential flat buildings and medium density developments where they will be visible from the street.
- C14. Do not erect more than one communications dish (radio and satellite) on the roof of residential flat buildings and medium density developments where they will be visible from the street.
- C15. A rooftop antenna or dish should only be located on a building within industrial, business, recreational and special uses zones.
- C16. Antennas and dishes, as defined in the above clause, should not be located on rooftops where:
 - the building is a heritage item as identified in Council's Local Environmental Plan;
 - the antennae and dishes are visible from the fronting road at pedestrian eye level;
 - the rooftop faces the street; and
 - within residential areas, the dishes must not be greater than 1.2m in diameter and/or 1.8m above the ridgeline.

- C17. Antennas and dishes should not be located in the front setback of a residential property, to minimise visibility and visual impact.

Aesthetics

- C18. Ensure the design, materials, and colour of telecommunications equipment are consistent with the surrounding architecture and environment. Where attached to a building, integrate equipment as far as possible into the overall architecture and colour of the host building. Visual clutter is to be reduced particularly on tops of buildings.
- C19. Physical dimensions (including support mounts) should be sympathetic to the scale and height of the building to which it is to be attached, and sympathetic to adjacent buildings.
- C20. Advertising signs or messages of any type, including corporate logos and night illumination, shall not be included on towers and associated facilities.
- C21. Landscape around towers, associated equipment and structures are to screen or soften the visual impact of the proposed tower when viewed from any public place.
- C22. Facilities and equipment must have no negative impact on the streetscape associated with a heritage item or conservation area. All cabling on or in the visual vicinity of a heritage item must be unobtrusive. Dishes should be ground mounted and not visible from the street.
- C23. Towers should be a self-supporting “slimline monopole” construction to minimise visual intrusion in the given locality or streetscape.

Environment

- C24. Undertake site analysis to respond to site conditions.
- C25. Minimise cut and fill and disturbance to natural topography and vegetation.
- C26. Minimise impacts on flora and fauna during construction, maintenance and operation of facilities and regenerate the understorey appropriately where disruption occurs.
- C27. A telecommunications facility that is no longer required is to be removed and the site restored, as far as practical, to its original state.
- C28. Locate microwave base stations and structures of similar bulk and scale, preferably above the 1% Annual Exceedance Probability flood level.
- C29. Where facilities are required to be located within the 1% AEP, do not locate base stations, towers and associated facilities within the floodway, or obstruct or reduce storage volume of waters in any flood plain. To this end, the floor level of any associated facility should not be less than 500mm above the 1% AEP flood level (known as the flood planning level), with a substructure that does not obstruct the flow of water through the site.
- C30. Any fencing to the periphery of the substation compound shall be of pool type fencing or similar impervious construction of a decorative nature that does not obstruct the flow of water through the site.
- C31. Noise levels should be consistent with acoustic requirements for day and night as measured by the NSW Noise Guide for Local Government.

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CUMBERLAND
CITY COUNCIL

PART G7

TREE MANAGEMENT AND LANDSCAPING

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1. Introduction

1.1 Land to which this Part applies

This Part applies to development applications on all land within Cumberland City.

1.2 Purpose of this Part

Council's tree management and landscaping provisions aim to protect the ecological and landscape values of the Cumberland City area.

1.3 Relationship to other Parts

Where relevant, this Part of the DCP should be read in conjunction with the following Parts of the DCP:

- Part A: Introduction;
- Part B: Development in Residential Zones;
- Part C: Development in Business Zones;
- Part D: Development in Industrial Zones;
- Part E: Other Land Use Development Controls; and
- Part F: Precinct and Site-Specific Development Controls.

2. Objectives and controls

2.1 Preservation of trees

Objectives

- O1. Guide the management of trees and conserve trees and vegetation where appropriate.
- O2. Provide and retain habitats for native wildlife.
- O3. Facilitate a high standard of environmental quality for developments and enhance the streetscape and amenity.

Controls

- C1. The following are not considered to be substantive criteria for tree removal:
 - flower, leaf or fruit fall causing nuisance;
 - to increase general natural light;
 - to enhance views;
 - to reduce shade created by a tree;
 - tree not suiting existing or proposed landscape;
 - unsubstantiated fear of tree failure;
 - a tree being too large or high; and
 - to increase direct sunlight onto solar panels or pool heating apparatus.
- C2. *SEPP (Vegetation in Non-Rural Areas) 2017* applies to all trees and vegetation defined as any woody perennial plant that is 4m or greater in height, measured from the base of the tree at ground level to the highest point of live foliage.

C3. SEPP (Vegetation in Non-Rural Areas) 2017 does not apply to:

- tree species and vegetation listed in Table 1 (except where located in Pemulwuy or within a heritage item).
- any tree located less than 2m from the external walls of an approved residential dwelling, as measured from the outside edge of the trunk at 1m above existing ground level.
- any Liquidambar styraciflua tree located less than 5m from the external walls of an approved residential dwelling, as measured from the outside edge of the trunk at 1m above existing ground level.
- any Ficus spp. tree located less than 5m from the external walls of an approved residential dwelling as measured from the outside edge of the trunk at 1m above existing ground level, or less than 3m from an adjoining property boundary, as measured from the outside edge of the trunk at 1m above existing ground level.
- to the removal of a completely dead tree on the basis that the dead tree is not providing habitat for native fauna. If any part of the tree is still alive, a permit from Council is required for its removal.

Table 1: Tree Species and Vegetation

Botanical Name	Common Name
Acacia baileyana	Cootamundra Wattle
Acacia decurrens	Green Wattle
Acacia saligna	W.A. Gold Wattle
Acer negundo	Box Elder
Albizia lophantha	Crested Wattle
Ailanthus altissima	Tree of Heaven
Alnus jorullensis	Evergreen Alder
Bambusa spp.	Bamboo
Cestrum parqui	Green Cestrum
Celtis spp.	Hackberry
Cinnamomum camphora	Camphor Laurel
Cotoneaster spp.	Cotoneaster
Diospyros spp.	Fruiting Persimmons
Eriobotrya spp.	Loquats
Erythrina spp.	Coral Tree
Ficus benjamina	Weeping Fig
Ficus elastica	Rubber Tree
Gleditsia triacanthos	Honey locust
Lagurnaria Patersonia	Norfolk Island Hibiscus
Ligustrum spp.	Privet
Malus spp.	Apples

Botanical Name	Common Name
Melia azedarach	White Cedar
Morus spp.	Mulberry
Nerium oleander	Oleander
Olea africana	African Olive
Olea spp.	Edible Olives
Populus spp.	Poplar
Prunus spp.	Peaches, Plums, Apricots etc
Pyracantha spp.	Pyracantha
*Pyrus spp.	Edible Pears
Ricinus communis	Castor Oil Plant
Robinia pseudocacia	Black Locust
Salix spp.	Willows
Schefflera actinophylla	Umbrella Tree
Schinus terebinthifolius	Brazilian Pepper Tree
Syagrus romanzoffianum	Cocos Palm
Toxicodendron succedaneum	Rhus Tree
Vachellia karoo	Sweet Thorn

2.2 Tree management and proposed development

Objectives

- O1. Preserve significant trees in the public and private domain and prevent harm or damage.
- O2. Ensure appropriate protection measures are in place during construction.

Controls

- C1. All proposals and development works shall comply with Australian Standard 4970-2009 'Protection of Trees on Development Sites'.
- C2. Development shall be designed to incorporate existing trees that are identified as being suitable for retention, with adequate setbacks to any works and protection measures stipulated in accordance with AS 4970-2009 to ensure their long-term survival.
- C3. Development proposals must consider existing trees situated on adjacent properties with adequate setbacks to any works and protection measures stipulated in accordance with AS4970-2009 to ensure their long-term survival.
- C4. The location of vehicular driveways in relation to existing trees is to consider impact on, and distance from, that tree.
- C5. Development shall not impact trees on public land.

- C6. Trees assessed as having medium or high landscape significance retention value should be retained, with adequate setbacks to any development works to ensure their long-term survival.
- C7. Council may require an Arborist Report and/or Tree Protection Plan, to be prepared in accordance with Council's Submission Requirements for Consulting Arborists' Impact Assessment Report document, and submitted with development applications when any existing trees are to be retained.
- C8. Applicants should be aware of the requirements set out under Section 2.1- Preservation of Trees of this Part.
- C9. A development application must be lodged for tree and vegetation works in relation to a heritage item.

2.3 Landscaping

Objectives

- O1. Maintain the character of place that trees and vegetation provide to the Cumberland City.
- O2. Reserve and protect the ecological and aesthetic value of quality landscaping in the Cumberland City.

Controls

- C1. Where a landscape plan is required, it shall be prepared by an appropriately qualified person such as an experienced Landscape Architect/Landscape Designer. The landscape plan shall be prepared at a minimum scale of 1:100, be fully documented with the inclusion of a plant schedule and show sufficient detail to enable construction.
- C2. For existing trees that are approved to be removed by Council as part of a proposed development, the following tree replacement offset planting is required:
 - for existing trees removed that are a height of between 4m-9m, a 1:1 replacement offset applies; and
 - for existing trees removed that are a height greater than 10m, a 2:1 replacement offset applies.

The preference is for offset planting to be undertaken on the property related to the development application. Any alternate locations are to be considered on merit by Council, with reference to applicable strategies and plans.

- C3. Tree species to be used for offset planting must be installed as minimum 45L container stock size and be of a species that is capable of reaching a height greater than 10m, given the proposed location and soil volume.
- C4. Landscaping shall be provided to enhance the streetscape and setting of development, incorporating a mix of trees, shrubs and ground covers planted appropriately and where necessary, providing essential screening or solar access roles.
- C5. Where trees are to be planted, consideration must be given to the species type, height and size of the tree at maturity and to the distance of the tree to any structure including stormwater pits and services such as overhead powerlines and underground pipework.

- C6. Proposed locations for tree species that reach a height of 10m or greater must maintain a minimum distance of 2m from all adjoining boundary fence lines at the time of planting.

2.4 Landscaping specification

Objective

- O1. Ensure landscaping encourages sustainability, through chosen materials and plant and soil types.

Controls

- C1. Proposed landscaping shall incorporate environmentally sustainable principles through species selection, minimal water usage, irrigation method schemes, and soil and mulch types.
- C2. Where land is affected or has high potential to be affected by salinity, proposed landscaping shall consider soil salinity through species selection and soil types.
- C3. Landscaping shall ensure that it is in keeping with the character of its locality, be aware of its function associated with the proposed land use, and the amenity of the site and streetscape.
- C4. All landscape works on structures including planter box and roof gardens shall provide the minimum soil depths as stated below:

Tree Size	Minimum Soil Depth
Small Trees (Canopy up to 5m)	800mm
Medium Trees (Canopy up to 10m)	1m
Large Tree (Canopy greater than 10m)	1.3m

2.5 Tree removal and/or pruning

Objectives

- O1. Ensure the retention of healthy and structurally sound trees.
- O2. Enhance the streetscape and amenity for the Cumberland City area.

Controls

Tree Removal

- C1. Council may refuse an application for tree removal, but provide either:
- where appropriate, consent for pruning works to a tree or vegetation; or
 - alternative solutions for the rectification of tree related issues in lieu of permitting removal.
- C2. In assessing a development application for the removal of a tree or vegetation that is subject to the provisions of *SEPP (Vegetation in Non-Rural Areas) 2017*, Council will consider but not limit its assessment to the following matters:
- health and structural condition of the tree or vegetation;
 - hazard and risk;

- significance in the surrounding landscape/streetscape;
- amenity provided by the tree or vegetation;
- suitability of the species and location of the tree or vegetation;
- ecological significance; and
- alternative planting.

If a tree is to be removed for these purposes, documentary evidence of the impact is to be provided for Council's consideration.

- C3. Where a tree is located between two properties, Council may consider its removal subject to the assessment of the application.

Pruning

- C4. The following pruning works are exempt from requiring consent:
- pruning of deadwood; dying, diseased or conflicting branches, or dead palm fronds;
 - pruning of any vegetation overhanging pedestrian walkways or driveways to a clearance height of 2.4m above existing ground level, as per clause 7.2.2 of AS4373-2007 – *Pruning of Amenity Trees*, to a maximum branch diameter of 150mm; and
 - pruning of branches that have been extensively damaged as a result of recent severe storms or lightning damage.
- C4. The following pruning works are exempt from requiring consent, where the branch size is no greater than 150mm in diameter at the branch union, and where pruned in compliance with AS 4373 – *Pruning of Amenity Trees*:
- pruning the lower lateral branches of a tree to 2.4m above existing ground level;
 - pruning of lateral branches of a tree to allow for a maximum clearance of 1m from the main electrical powerlines or other service lines to an approved building;
 - minor pruning of branches to remove maximum of 5% of live tree crown in one calendar year;
 - crown modification pruning of hedge that is 4m or greater in height, by no more than 20% of its height and or width in any one year; and
 - pruning of branches to provide adequate building clearance of 1.5m from all external walls and rooflines of residential dwellings, residential flats/units and commercial buildings.
- C5. Other than those exempt pruning works above, the following pruning works as defined under clauses 7.2 and 7.3 of AS 4373-2007 – *Pruning of Amenity Trees* and performed by a minimum AQF Level 3 Arborist, require a permit from Council:
- crown thinning and lifting, selective pruning, formative pruning, and remedial (restorative) pruning where the works require the removal of branches greater than 150mm in diameter and/or more than 5% of live crown is to be removed from the tree; and
 - pruning of trees located on neighbouring properties where branches overhang your property boundary, irrespective of branch diameter or the extent of live crown to be pruned. These works require the tree owner's written consent and the relevant permit from Council prior to undertaking such works.
- C6. The pruning of tree live tree roots greater than 30mm in diameter requires consent from Council, irrespective of where the base of the tree is located, and the species of tree proposed for pruning of its root(s).

- C7. Pruning of trees located on neighbouring properties that overhang your property boundary may be undertaken, provided that it can be carried out in accordance with AS 4373-2007 – ‘Pruning of Amenity Trees’ from within your property and the relevant consent has been obtained from Council prior to undertaking such works.

2.6 Storm damaged trees and natural disasters

Objective

- O1. Ensure public safety and reduce potential and actual damage to properties.

Controls

- C1. Where emergency tree work is required, such as due to storms or windy conditions, works to severely damaged trees or branches as assessed by an AQF Level 5 Consulting Arborist are exempt to ensure public safety and to minimise property damage.
- C2. Where the likelihood of tree/ tree branch failure has been identified by an AQF Level 5 Consulting Arborist, an emergency application to Council may be made by telephone to Council where property or pedestrian occupancy cannot be removed or redirected away from the fall zone of the tree/s.
- C3. On completion of the emergency works, the affected parties and/ or the assessing Consulting Arborist will be required to provide Council with a written and photographic record of the required tree works.
- C4. Where a natural disaster has been declared by the NSW Government, for all or part of the Cumberland City area, Council will notify residents through various channels of the media of the terms for permitting emergency tree works to ensure public safety and to minimise property damage.

2.7 Construction

Objectives

- O1. Encourage the retention of healthy and structurally sound trees.
- O2. Ensure appropriate protection measures are in place during construction.

Controls

During Construction

- C1. Council may require an independent consulting arborist (AQF Level 5) to supervise and certify all works adjacent to trees that are required to be retained.
- C2. A Tree Protection Zone (TPZ) must be established as per AS4970-2009 before the commencement of construction, for the protection of existing trees nominated for retention, and shall remain in place until the end of construction.
- C3. Unless specifically authorized by Council in writing by Council, no activities are permitted within the TPZ.

Post Construction

- C4. Council requires all landscape areas to be maintained to a professional standard to ensure the successful establishment of new plants and the ongoing appeal of the development. Council may require the provision of a maintenance schedule.



CUMBERLAND
CITY COUNCIL

PART G8

WASTE MANAGEMENT

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1. Introduction

1.1 Land to which the Part applies

This Part applies to all development applications on all land within Cumberland City.

1.2 Purpose of this Part

Council's waste management provisions aim to ensure appropriate management of waste and recycling and to minimise the generation of waste.

1.3 Relationship to other Parts

Where relevant, this Part of the DCP should be read in conjunction with the following Parts of the DCP:

- Part A - Introduction;
- Part B - Development in Residential Zones;
- Part C - Development in Business Zones;
- Part D - Development in Industrial Zones;
- Part E - Other Land Use Development Controls; and
- Part F - Precinct and Site Specific Development Controls.

2. General objectives

Objectives

- O1. Ensure waste minimisation through source separation, reuse and recycling.
- O2. Ensure efficient storage, access, collection of waste and quality design of facilities.
- O3. Implement the principles of the waste hierarchy of avoiding, reusing and recycling during the demolition, construction and ongoing use of premises through efficient resource recovery.
- O4. Promote the principles of ecologically sustainable development through waste avoidance, resource recovery and recycling to achieve improved environmental outcomes.

3. Objectives and controls

3.1 Demolition and construction

Objectives

- O1. Ensure the adoption of efficient waste management strategies which include waste minimisation, re-use and recycling for demolition materials and construction waste.
- O2. Encourage demolition, building design and construction techniques which will avoid and minimise waste generation.
- O3. Maximise reuse and recycling of building and construction materials and minimise disposal of materials to landfill.

Controls

- C1. All materials that arise from demolition and construction shall comply with a Waste Management Plan (WMP) before recycling or disposal.

Note: The WMP shall provide details of on-site storage, volume or area estimates and information about reuse, recycling and disposal options for all waste produced on-site, including excavation materials.

- C2. The WMP is a plan that provides Council with details of the following:
 - the volume and type of waste to be generated;
 - how the waste is to be stored and treated on-site;
 - how the waste is to be disposed of; and
 - how ongoing waste management will function.

The applicant should also consider the following additional criteria when planning and undertaking demolition:

- does the site require a contaminated land assessment?
- what type of waste is going to be produced from the site?
- is the waste to be produced hazardous (e.g. does it contain lead paint or asbestos)?
- will special arrangements need to be made for the removal and disposal of hazardous material and it will need to be separately handled and stored on-site?
- can packaging be reduced or recycled by:
 - returning packaging to the supplier?
 - seeking cardboard or metal drums instead of plastic?
 - seeking metal straps rather than shrink wrap?
 - returning packaging such as delivery storage pallets and reels?

3.2 Commercial development

Objectives

- O1. Encourage waste minimisation (source separation, reuse and recycling) and ensure efficient storage, access, collection of waste and quality design of facilities.
- O2. Achieve the design of waste and recycling storage/collection systems in buildings and land use activities which are: hygienic; accessible; safe to operate; quiet to operate; of an adequate size; and visually compatible with the surroundings.

- O3. Ensure that adequate and appropriate storage areas for recyclables and waste are designed to meet the objectives of ecologically sustainable development.

Controls

- C1. The number of bins required and size of storage area will be calculated against the current standard NSW commercial waste generation rates are those established by the Combined Sydney Region of Councils set out in Table 1 below.

Table 2: Indicative waste and recycling generation rates for various premises.

Type of Premises	Waste Generation	Recycling Generation
Accommodation facilities		
Backpacker hostel	40L/occupant/week	20L/occupant/week
Boarding house/guesthouse	60L/occupant/week	20L/occupant/week
Guest house	9L/100m ² floor area/day	3L/100m ² floor area/day
Education facilities		
Childcare	20L/child/week	10L/child/week
Primary/High School	1.5L/day/student	0.5L/day/student
Food premises		
Butcher	80L/100m ² floor area/day	Variable
Delicatessen	80L/100m ² floor area/day	Variable
Fish shop	80L/100m ² floor area/day	Variable
Greengrocer	240L/100m ² floor area/day	120L/100m ² floor area/day
Restaurants, Cafe	660L/100m ² floor area/day	130L/100m ² floor area/day
Supermarket	660L/100m ² floor area/day	240L/100m ² floor area/day
Takeaway	80L/100m ² floor area/day	Variable
Retail (non-food sales)		
Shops with less than 100m ² floor area	50L/100m ² floor area/day	25L/100m ² floor area/day
Shops with over 100m ² floor area	50L/100m ² floor area/day	50L/100m ² floor area/day
Showrooms	40L/100m ² floor area/day	10L/100m ² floor area/day
Offices	10L/100m ² /day	10L/100m ² /day
Hairdresser	60L/100m ² floor area/day	Variable

Type of Premises	Waste Generation	Recycling Generation
Hotels		
Hotel	5L/bed space/day 50L/100m ² floor area/day 660L/100m ² dining area/day	50L/100m ² of bar and dining areas/day
Licensed club	50L/100m ² floor area/day	50L/100m ² of bar and dining areas/day
Motel (without public restaurant)	5L/bed/day 660L/100m ² dining area/day	1L/bed/day
Others		
Warehouses	30L/100m ² floor area/day	30L/100m ² floor area/day
Car parks	2L/100m ² floor area/day	Variable
Assembly rooms: Social Recreational Religious Entertainment	50L/100m ² floor area/day 50L/100m ² floor area/day 50L/100m ² floor area/day 0.25L/seat/screening	10L/100m ² floor area/day 10L/100m ² floor area/day 10L/100m ² floor area/day 0.05L/seat/screening
Automotive repair and service	3350L/100m ² /floor area/day (combined garbage + recycling)	

3.3 Residential

Objectives

- O1. Ensure facilities are provided for efficient solid waste management.
- O2. Achieve the design of waste and recycling storage/collection systems in buildings and land use activities which are: hygienic; accessible; safe to operate; quiet to operate; of an adequate size; and visually compatible with their surroundings.
- O3. Reduce waste removed from residential sites.
- O4. Ensure that adequate and appropriate storage areas for recyclables and waste are designed to meet the objectives of ecologically sustainable development.

Controls

Bin requirements

C1. The waste service requirements for residential developments are outlined in Table 2:

Table 3: Waste service requirements for residential developments

Dwelling Type	Number of Garbage Bins	Number of Recycling Bins
Dwelling (single)	1 x 240L (or alternate smaller size as available from Council)	1 x 240L
Low rise medium density housing	1 x 240L (or alternate smaller size as available from Council)	1 x 240L
RFB 1-20 units	1 x 240L bin per 2 units plus (or alternative as provided by Council)	1 x 240L bin per 3 units
RFB 20+ units	1 x 1100L bin per 8 units Or 1 x 660L bin per 5 units	1 x 240L bin per 3 units Or 1 x 1100L bin per 14 units

- C2. Council will consider alternative options to the requirements outlined in Table 2 for developments exceeding 100 units.
- C3. When determining the number of bins required, bin numbers are to be rounded up.
- C4. Mobile Garbage Bins (MGBs) vary in sizes and ranges from 120 to 1100 litres.

Bin storage area requirements

- C5. Waste and recycling bin storage areas must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- C6. All developments must ensure separate residential and commercial bin storage areas, which shall be located behind the primary building line and adequately screened.

Storage spaces for individual dwelling houses

- C7. Each unit shall be provided with a waste cupboard or other suitable storage area to facilitate the holding of a bin containing two days of domestic waste. They should be at a minimum 20L for each waste and recycling container.
- C8. Space inside the unit must allow for separate storage of waste, recyclables and compostable waste.
- C9. The design of the dwelling shall allow residents to carry their waste to the correct bin from their dwelling.

Multi-dwelling housing and residential flat buildings

Size and layout of the bin storage area

- C10. Waste and recycling bin storage area must be of adequate size to comfortably accommodate all waste and recycling bins associated with the proposed development. There must be no stacking of bins in the bin room and all bins must be placed side-by-side with equal access to all bins. There shall be an additional 75mm gap between each bin to facilitate movability.
- C11. The minimum door width needs to be greater than 1.4 metres to allow movability of bins and disabled access.
- C12. Water supply for hot and cold water / mixed needs to be provided to the storage area for cleaning purposes.
- C13. The floor needs to be graded and drained to the sewer with consent of Sydney Water. The floor must be constructed of reinforced concrete at least 75mm thick and finished with a smooth, even, non-slip surface.
- C14. The walls of the bin storage area must be constructed of a solid impervious material.
- C15. The ceiling must be finished with a smooth faced non-absorbent material capable of being cleaned.
- C16. The gradient of the bin storage room's floor and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Optional Health and Safety requirements.
- C17. Waste and recycling bins must be kept separated in the bin storage room so that potential for contamination of recyclable materials is minimised. An aisle space needs to be provided that is a minimum of 1.5 metres wide.
- C18. The storage area needs to be designed for easy access and manoeuvring of bins to allow cleaning. Attention needs to be paid to ensure services such as electrical meter boards, gas meters and conduits are not located in the bin storage area as these may get damaged during collection or cleaning.
- C19. Consideration needs to be given to access for maintenance and servicing arrangements.
- C20. The bin storage area must be designed to prevent entry to vermin and birds.

Location and appearance

- C21. The bin storage area must be integrated into the overall design of the proposed development.
- C22. Bin storage areas must be located behind the front building line. Wherever possible, the storage area should be in the basement location within the main building.
- C23. The bin storage area must be located and designed to reduce adverse impacts upon the residents of any dwelling on the site and upon neighbouring properties.
- C24. The bin storage area should be located in a position that:

- permits direct, easy and convenient access to residents;
 - permits easy transfer of bins to the main collection point; and
 - permits easy, direct and convenient access for collection service providers.
- C25. The bin storage area should be in a high pedestrian traffic area, storage area is well screened and do not reduce amenity.
- C26. The bin storage area should be enclosed, secure and protected against vandalism.
- C27. Lighting and ventilation are to be integrated into the design of bin storage areas.

Bulk waste storage area requirements

- C28. Low rise medium density housing and residential flat building developments must provide a bulky household waste storage area and needs to be that is located adjacent to the communal bin storage area. The area must be designed to accommodate storage of unwanted bulky household waste such as mattresses, furniture, cardboards, appliances and other goods to be collected by Council's waste collection service.
- C29. Council provides bulky household waste collection service as requested by the residents. The space allocated for bulky household waste must consider the intended frequency of collection and number of units in the proposed development.

- C30. Bulky waste storage area needs to be designed based on the following calculation:
- 10m² of space for up to 40 units and then 2m² for every additional 10 units

All calculations need to be rounded to the next whole number (i.e. 9.1m² = 10m²)

- C31. Bulky household waste storage area must incorporate the following requirements:
- the storage area needs to be designed to ensure large items such as mattresses and appliances can be easily placed and moved, with a minimum floor width of 2m;
 - the storage area needs to be accessible to all residents and must have a service door for access;
 - the storage area needs to be in close proximity to the bin storage area and onsite collection area (if development has on-site collection);
 - lights and ventilation must be integrated into the design of the storage area;
 - water supply needs to be provided to the storage area for cleaning purposes;
 - the floor is to be graded and drained to the sewer with the consent of Sydney Water;
 - the floor must be non-slippery (finished) and uneven surfaces covered;
 - the storage area must be enclosed with minimum height requirements; and
 - where provided, space for a charity bin or other recycling collection should be provided at a minimum of 6m².

3.4 Waste chute and service room requirements

Objectives

- O1. Facilitate the convenient, effective and efficient transfer of waste and recycling between dwellings and waste and recycling collection facilities.
- O3. Ensure the high-quality design of waste and recycling collection facilities.

Controls

General

- C1. Residential flat buildings containing 4 or more storeys require a system for the transportation of waste from each floor level to the waste and recycling collection room(s). This is in the form of a waste chute system.

Waste chute operation and design

- C2. Chute must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- C3. Chute must be cylindrical and have a diameter of at least 500mm.
- C4. Chute must be located and insulated in a manner that reduces noise impacts.
- C5. Chute, service openings, charging device and hoppers must be constructed of materials including aluminium and other approved materials/metals that are smooth, durable, impervious, non-corrosive and fire resistant.
- C6. Chute, service opening and charging device must be capable of being easily cleaned.
- C7. Chute must extend without any bends (or sections of reduced diameter) in the main shaft of the chute and must terminate in the waste and recycling room(s).
- C8. Internal overlaps in the chute must follow the direction of waste flow.
- C9. The chute must deposit waste directly into the bins or compactor located within the waste and recycling collection room(s). This must happen in a manner that reduces spillages.
- C10. A cut off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or the compacting device at the bottom of the chute is withdrawn or being replaced.
- C11. There must be sufficient bin volume under the chute for a minimum of three days of waste generation. Where this cannot be provided, volume handling equipment is required to automatically change the bin under the chute when full.
- C12. When volume handling equipment is required, the service room must be of adequate size to accommodate all required equipment.
- C13. Resident access to the volume handling equipment must be restricted.
- C14. The upper end of the chute must extend above the roof line of the building and shall be weather protected in a manner that does not impede the upward movement of air out of the chute.
- C15. The charging device for each service opening must be self-closing and must not project into the main chute.
- C16. Branches connecting service opening to the main chute must not be more than 1m long.
- C17. Arrangements must always be made for regular maintenance and cleaning.

- C18. Waste bins on the volume handling equipment will not be serviced.

Waste chute termination area

- C19. A waste chute termination area is to be provided for the development directly under the chute within the basement footprint of the development.
- C20. The waste chute termination area is to be located where practical within or immediately adjacent to the waste storage area.

Waste chute service room

- C21. The waste chute service opening (hopper) must be provided on each habitable floor of the building and must be located in a designated enclosed service room.
- C22. Waste chutes must not be accessible to commercial or public spaces.
- C23. All waste chute service rooms must be located for convenient access by residents with no more than 20m travelling distance from any dwelling and must be ventilated and well lit.
- C24. The floor, walls and ceilings of the service room must be finished with smooth and durable material which is capable of being easily cleaned.
- C25. All service rooms must include signage which clearly demonstrates the type of materials that can be deposited in the waste chute and the type of materials to be deposited in the recycling bin.
- C26. All service rooms must be fitted with one hour fire doors, which can be opened from inside.

Recycling bins

- C27. If a waste chute system is to be used, then recycling bin(s) must be provided on each habitable floor of the building and must be located in an enclosed waste chute service room.
- C28. There must be sufficient recycling bins to accommodate up to three days of recycling generation.
- C29. A site caretaker will be required to rotate recycling bins from the waste chute service room to the bin storage area on a regular basis. A goods lift will need to be provided for this.
- C30. The doorways must be sufficiently wide enough to allow movement of bins in and out.
- C31. Signage regarding acceptable recyclable materials must be displayed near these bins.

3.5 Bin transfer requirements

Objective

- O1. Ensure the safe, direct and convenient transfer of waste and recycling bins to the collection point.

Controls

- C1. Waste and recycling bins shall be positioned in locations that permit easy, direct and convenient access for users of the facility and permit easy transfer of bins to the collection point.

Bin-carting route

- C2. The route between bin storage areas and the collection point is to be:
- a minimum of 2 metres wide;
 - free from steps or any obstruction, which may inhibit bins from being manoeuvred;
 - constructed from concrete or other similar hard, smooth, non-slip surfaces;
 - as short and direct as possible; and
 - wholly within the property boundary.

Work health and safety

- C3. Consideration needs to be given to WHS when designing the bin transfer distance of Mobile Garbage Bins (MGBs).
- C4. Where bins of up to 360 litres in capacity need to be wheeled to the collection point:
- the distance should not exceed 75m in all circumstances;
 - the distance should not exceed 50m to for aged persons or persons with disability;
 - the path of transferring bins from the bin storage area to the collection point shall be of adequate width of at least 2m, level, and free of obstacles and be direct, smooth and without steps; and
 - the bin transfer grade should not exceed 1:14.
- C5. For bins greater than 360 litres in capacity, if relocation of bins is required:
- bins should not be wheeled over steps (neither up nor down);
 - the bin transfer grade should not exceed 1:30; and
 - the path of transferring bins from the bin storage area to the collection point is to be a minimum of 2m wide.

Bin tug device

- C6. An electric portable bin tug device must be used for bin movement where the grade exceeds 1:14. Specifications for a typical portable bin tug device are provided as a guide in Table 3.

Table 3: Specifications for a typical portable bin tug device.

Bin Tug Classification	Dimensions
Length (m)	1.45
Width (m)	0.79
Height(m)	1.05
Wheelbase (m)	0.46
Powertrain (V)	24-Volt
Seating capacity (kg)	1 person
Unit weight (kg)	300

Aisle clearance (m)	1.80
Towing capacity (kg)	3000
Speed (km/h)	5

C7. Secure storage space must be allocated for this machinery.

3.6 Collection area requirements

Objectives

- O1. Ensure that an appropriately designed waste and recycling collection area is provided to all new development.
- O2. Ensure waste collection vehicles have safe, reliable access to all collection points and can manoeuvre to all waste collection points during construction and ongoing operation and use of the development.

Controls

General

- C1. All developments must allocate a suitable collection point for collection of waste and recycling bins from either inside the development (on-site) or from kerbside (off-site).

Onsite collection point

- C2. Council will only provide an on-site collection if an indemnity has been provided. Where an agreement for onsite collection is made, the on-site collection points should be located:
 - so that waste collection vehicles do not interfere with the use of access driveways, loading bays and car parking areas during collection;
 - so that waste collection vehicles do not impede or restrict other vehicles and pedestrian movements during collection times;
 - close to the waste storage area to permit easy transfer of bins to the collection point (if relocation of bins is required);
 - on a flat area that is on the same level as the waste collection vehicle;
 - in a position that provides collection vehicle safe access to the collection point with adequate clearance and space for manoeuvrability; and
 - so that ongoing traffic is visible as the waste collection vehicle exits the property.

Temporary bin holding area

- C3. The temporary bin holding area will be required to be of sufficient size to allow the temporary storage of all bins for the development. The holding area will only store the bins, so they can be serviced and must be returned to the development bin storage area once the service is complete.
- C4. Developments proposing a temporary bin holding area will require a caretaker to transfer all allocated bins from the bin storage area to the temporary bin holding area for servicing.
- C5. For a temporary bin holding area arrangement, the following requirements must be met:

- bins must be moved to the temporary bin holding area from the bin storage room the night before the collection day;
- lay back for bulk bins must be located within 2m of the temporary bin holding area to be provided and presented on a level surface;
- the temporary bin holding area must be accessible to Council collectors and require minimum manual handling;
- all bins must fit in the temporary holding area and have sufficient space for manoeuvrability; and
- the temporary bin holding area must be separated from car parking bays, footpaths and landscaped areas.

Kerbside collection point

- C6. For all kerbside collection of smaller residential housing developments that have kerb frontage, the following requirements must be met:
- bins may only be placed on the kerb for dwellings fronting the kerb and/ or where there is sufficient frontage to accommodate all allocated bins;
 - bins must not be placed on the road;
 - all allocated bins must be presented side-by-side with a 30cm gap between bins;
 - all allocated bins must be placed within the site's allocated frontage (not in the driveway nor in front of neighbouring properties);
 - bins are not to be placed near intersections, roundabouts, or slow-points.
 - bins are not to be placed along arterial points or in narrow lanes;
 - bins are not to be placed within 2m of street trees, bus stops, street furniture and road infrastructure such as speed humps and roundabouts; and
 - a minimum of 2m³ space per dwelling is required for bulky waste collection.
- C7. Where developments are required to have a bulk bin arrangement and are not proposing for on-site collection, a temporary bin holding area must be provided.

3.7 Collection vehicle requirements

Objectives

- O1. Provide for the adequate accessibility, manoeuvrability and operability of waste collection vehicles within all developments.

Controls

- C1. All proposed developments will need to accommodate a Heavy Rigid Vehicle (HRV) for all waste collection.
- C2. Proposed developments that require a waste collection vehicle to enter the site for the collection of waste, a swept path analysis for a 10.5m HRV with a height clearance of 4.5m must be clearly demonstrated in the Architectural Plans, Waste Management Plan, and Traffic and Transport Management Plan. If a hook lift bin is to be used, the height clearance will increase and greater height clearance will be required.
- C3. The bin lift arc will also need to be taken into consideration when designing the height for the area for bin collection.
- C4. The proposed development must have sufficient manoeuvring area on site to allow for a HRV to enter and leave the site in a forward direction and service the development with minimal or no need to reverse.

- C5. The grades of entry and exit routes must not exceed the capabilities of the waste collection vehicle and must comply with AS 2890.2.
- C6. Ensure the waste collection vehicle can park safely within a designated parking/ loading area on-site whilst servicing the bins. The truck loading area must be separated from car parking bays, footpaths and not block any driveways.
- C7. The truck loading area is to include an extra 2m length at the rear of the vehicle for bins to be loaded and emptied into the truck.
- C8. Standard HRV specifications as identified in Australian Standard 2890.2 Parking Facilities: Off Street Commercial Vehicle Facilities shall be complied with. This information is provided as a guide in Table 4.

Table 4: Standard specifications for a Heavy Rigid Vehicle sourced from AS2890.2 Parking Facilities: Off Street Commercial Vehicle Facilities

Vehicle Classification	Dimensions
Overall Height (m)	4.5
Operational Length (m)	12.5
Design Width (m)	2.8
Design Height (m)	3.7
Swept Circle (m)	27.8
Clearance - travel height (m)	4.5
Roadway/ramp grade (maximum)	1:6:5 (15.4%)
Rate of change of grade (max)	1:16 (6.25%) in 7m of travel
Weight Fully Loaded (tonnes)	22.5
Capacity (m ³)	24
Front Chassis Clearance	13°

- C9. Should there be a case for a smaller rigid garbage collection vehicle to be used consideration will be given to alternative building design requirements. In these circumstances, supporting documentation is to be provided with the development application.

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